Introduction

ix The water in the vat: The full account of the trial of Clement and Evrard appears in the memoirs of eleventh- and twelfth-century critic, theologian, and observer Guibert of Nogent. In reconstructing the events, I rely primarily on the translation of Guibert's autobiography by John F. Benton (based on an earlier translation by C. C. Swinton Bland). John F. Benton, ed., *Self and Society in Medieval France: The Memoirs of Abbot Guibert of Nogent (1064?–c. 1125)* (New York: Harper & Row, 1970), 214. I am also indebted to several other works. Jay Rubenstein, *Guibert of Nogent: Portrait of a Medieval Mind* (New York: Routledge, 2002); Joseph McAlhany, *Monodies and On the Relics of Saints: The Autobiography and a Manifesto of a French Monk from the Time of the Crusades* , trans. Jay Rubenstein (New York: Penguin Books, 2011); Margaret H. Kerr, Richard D. Forsyth, and Michael J. Plyley, "Cold Water and Hot Iron: Trial by Ordeal in England," *Journal of Interdisciplinary History* 22, no. 4 (1992): 582–83.

ix But they were still in the church: Benton, *Self and Society in Medieval France*, 213–14.

ix Clement and Evrard, who were peasants: Benton, *Self and Society in Medieval France*, 212.

ix The charge was heresy: Benton, *Self and Society in Medieval France*, 212.

ix That is why: Benton, *Self and Society in Medieval France*, 212.

ix But the brothers: Benton, *Self and Society in Medieval France*, 212.

ix No, they were emissaries: Benton, *Self and Society in Medieval France*, 212.

ix Into idle ears: Benton, *Self and Society in Medieval France*, 212.

ix And in the shadows: Benton, *Self and Society in Medieval France*, 212.

ix As Abbot Guibert recorded: Benton, *Self and Society in Medieval France*, 212–13.

ix Indeed, rumor had it: Benton, *Self and Society in Medieval France*, 212–13.

x Such were the men: Benton, *Self and Society in Medieval France*, 213.

x The brothers had been betrayed: Benton, *Self and Society in Medieval France*, 213–14.

x But these accusers: Benton, *Self and Society in Medieval France*, 214.

x And when questioned by the lord bishop: Benton, *Self and Society in Medieval France*, 213.

x Following the celebration of Mass: Benton, *Self and Society in Medieval France*, 214.

x As they appeared before the water: Benton, *Self and Society in Medieval France*, 214.

x Tears rolled down: Benton, *Self and Society in Medieval France*, 214.

x And Clement and Evrard: Benton, *Self and Society in Medieval France*, 214.

x It was at this moment: Benton, *Self and Society in Medieval France*, 214.

x This was the trial: Benton, *Self and Society in Medieval France*, 213.

x As the ninth-century theologian: Arthur C. Howland, ed., *Ordeals, Compurgation, Excommunication and Interdict* (Philadelphia: University of Pennsylvania, 1901), 11. Hincmar was Archbishop of Rheims and a leader in both ecclesiastical and secular affairs. James C. Prichard, *The Life and Times of Hincmar, Archbishop of Rheims* (London: A. A. Masson, 1849), 8–9.

x Baptismal water was pure: Howland, *Ordeals, Compurgation, Excommunication*, 11.

xi An accused person like Clement: Kerr, Forsyth, and Plyley, "Cold Water and Hot Iron," 582–83; Henry Charles Lea, *The Ordeal* (Philadelphia: University of Pennsylvania Press, 1973), 72.

xi According to Hincmar: Howland, *Ordeals, Compurgation, Excommunication*, 11.

xi In some versions of the trial: Kerr, Forsyth, and Plyley, "Cold Water and Hot Iron," 582–83; Rebecca V. Colman, "Reason and Unreason in Early Medieval Law," *Journal of Interdisciplinary History* 4, no. 4 (1974): 589; Lea, *The Ordeal*, 72.

xi He "floated like a stick": Benton, *Self and Society in Medieval France*, 214. As Abbot Guibert recorded later, "At this sight, the whole church was filled with unbounded joy. [The brothers'] notoriety had brought together such an assembly of both sexes that no one present could remember seeing one like it before." Benton, *Self and Society in Medieval France*, 214.

Evrard, watching his brother's fate, decided to confess his error, rather than undergo the submersion. Benton, *Self and Society in Medieval France*, 214. The blessed water that had rejected Clement must just as surely reject him, too. Peter Brown, "Society and the Supernatural: A Medieval Change," *Daedalus* 104, no. 2 (1975): 139.

With the trial complete, the brothers were brought directly to the prison, where they were joined by two other "established heretics from the village of Dormans" who had been foolish enough to come to watch the proceedings and were seized in short order. Benton, *Self and Society in Medieval France*, 214.

The matter, however, was not yet settled. Benton, *Self and Society in Medieval France*, 214. The ordeal provided the judgment of God, but not the sentence. Robert Bartlett, *Trial by Fire and Water: The Medieval Judicial Ordeal* (Oxford: Clarendon Press, 1986), 23. To determine the proper strategy for dealing with the heretics, Abbot Guibert and the lord bishop sought out the wisdom of the Council of Beauvais. Benton, *Self and Society in Medieval France*, 214.

However, with the guilt of the men determined, the townspeople had no interest in further deliberations and rushed upon the prison, seizing all four men. A great fire had been built outside the city and Clement and Evrard were "burned . . . to ashes." Benton, *Self and Society in Medieval France*, 214. In the closing line on the incident, Abbot Guibert offered his support for

the actions of the mob toward the brothers: "To prevent the spreading of the cancer, God's people showed a righteous zeal against them." Benton, *Self and Society in Medieval France*, 214.

xi Here were the most esteemed: Peter T. Leeson, "Ordeals," *Journal of Law and Economics* 55 (2012): 708.

xi And here was a neutral process: Colman, "Reason and Unreason in Early Medieval Law," 585–86.

xi Witnesses could lie and judges could bow: Colman, "Reason and Unreason in Early Medieval Law," 586.

xi In an era in which the divine: Ian C. Pilarczyk, "Between a Rock and a Hot Place: The Role of Subjectivity and Rationality in the Medieval Ordeal by Hot Iron," *Anglo-American Law Review* 25 (1996): 111; Peter Leeson, "Justice, Medieval Style: The Case that 'Trial by Ordeal' Actually Worked," *Boston Globe*, January 31, 2010, http://www.boston.com/bostonglobe/ideas/articles/2010/01/31/justice_medieval_style/; Colman, "Reason and Unreason in Early Medieval Law," 582 n. 34; Pilarczyk, "Between a Rock and a Hot Place," 111. For those undergoing a hot ordeal, the hand that had been exposed to the heat was then bound and inspected after three days for signs of guilt: severe damage, festering, and the like. Colman, "Reason and Unreason in Early Medieval Law," 582 n. 34.

xi To achieve the proper result: Pilarczyk, "Between a Rock and a Hot Place," 94; Robert C. Palmer, "Trial by Ordeal," *Michigan Law Review* 87 (1989): 1548.

xi With no dominant governmental authority: Pilarczyk, "Between a Rock and a Hot Place," 107-08.

xii But godly action: The pervasiveness of these beliefs may explain the numerous examples of individuals voluntarily undergoing trial by ordeal, in lieu of other means of proof. Colman, "Reason and Unreason in Early Medieval Law," 585.

xii Moreover, with an ordeal like Clement's: Brown, "Society and the Supernatural," 138.

xii How else might a community assess: Brown, "Society and the Supernatural," 137; Bartlett, *Trial by Fire and Water*, 22–23, 52; Leeson, "Ordeals," 695; Kerr, Forsyth, and Plyley, "Cold Water and Hot Iron," 574–75; Pilarczyk, "Between a Rock and a Hot Place," 93–94, 107; Colman, "Reason and Unreason in Early Medieval Law," 584; Palmer, "Trial by Ordeal," 1550.

The legitimacy of the ordeal was bolstered by the fact that it appeared to work so well. Some people floated and some did not—and those who floated were rarely in a position to offer counter evidence after the fact to prove that they were actually innocent. Leeson, "Ordeals," 705. Neither of the two types of cases that leant themselves to the ordeal posed much of a risk of subsequent developments contradicting or otherwise undermining the judgment. The first category involved crimes such as adultery, surreptitious murder, witchcraft, arson, housebreaking, and heresy, where there might not be explicit evidence or even a direct witness. Pilarczyk, "Between a Rock and a Hot Place," 93; Colman, "Reason and Unreason in Early Medieval Law," 583; Bartlett, *Trial by Fire and Water*, 30. Towns like Soissons faced invisible yet dangerous threats, and the normal judicial tools were simply not up to the task. Bartlett, *Trial by Fire and Water*, 22–23. By the twelfth century, particularly in areas of northern France and the Rhineland, heresy cases like Clement and Evrard's were regularly adjudicated through trial by ordeal. Bartlett, *Trial by Fire and Water*, 22–23, 52. The second set of cases were those in which the accused was disqualified from the normal procedures of swearing an oath or could not assemble others to attest to his innocence. Colman, "Reason and Unreason in Early Medieval

Law," 584. In other words, the people most likely to undergo the ordeal were those least likely to have the relevant connections or power to contest the validity of the proceedings or the final judgment: slaves or other unfree persons, outsiders (foreigners), and those who were of general ill-repute who could not get others to swear on their behalf. Colman, "Reason and Unreason in Early Medieval Law," 584; Palmer, "Trial by Ordeal," 1550; Kerr, Forsyth, and Plyley, "Cold Water and Hot Iron," 574–75.

xii There was no apparent alternative: Although European legal systems subjected men and women to physical tests of guilt for more than a thousand years, the heyday of the ordeal was between the ninth and thirteenth centuries. Leeson, "Justice, Medieval Style"; Bartlett, *Trial by Fire and Water*, 13.

xii Innocent men and women: Pilarczyk, "Between a Rock and a Hot Place," 106.

xii Women and heavyset men: Leeson, "Ordeals," 707. Although a few modern scholars have attempted to show that under certain circumstances, ordeals could have led to accurate outcomes, there is little evidence that they were able to accurately distinguish guilt and innocence—and much reason to surmise that they did not. Pilarczyk, "Between a Rock and a Hot Place," 110.

xii Even if the process had been valid: Pilarczyk, "Between a Rock and a Hot Place," 110.

xii What interest does society have: Benton, *Self and Society in Medieval France*, 212.

xiii In a scene from *Monty Python*: Radlegry Balko, "Trial by Ordeal: The Surprising Accuracy of the Dark Ages' Trial by Fire Rituals," Reason.com, February 1, 2010, http://reason.com/archives/2010/02/01/trial-by-ordeal; "Witch Village," *Monty Python and the Holy Grail*, Special Edition, Disc 1, directed by Terry Gilliam and Terry Jones (1975; Culver City, CA: Columbia TriStar Home Entertainment, 2001), DVD.

xiii The joyous crowd rushes off: Balko, “Trial by Ordeal”; “Witch Village,” *Monty Python and the Holy Grail*.

xiii They will examine our processes: Balko, “Trial by Ordeal”; “Witch Village,” *Monty Python and the Holy Grail*.

xiv In one study, researchers asked: Although I have focused on two sets of participants, there were seven groups in total who were each given an assessment of the mental patient with slightly different wording. Paul Slovic, John Monahan, and Donald G. MacGregor, “Violence Risk Assessment and Risk Communication: The Effects of Using Actual Cases, Providing Instruction, and Employing Probability Versus Frequency Formats,” *Law and Human Behavior* 24 (2000): 285–87.

xiv Both groups were provided with: Slovic, Monahan, and MacGregor, “Violence Risk Assessment,” 287.

xv The only difference was: Slovic, Monahan, and MacGregor, “Violence Risk Assessment,” 287.

xv Those who considered the risk: Forty-one percent of those who considered the risk of violence as a frequency determined that Mr. Jones should not be released versus 21 percent of those who considered the risk of violence as a probability. Slovic, Monahan, and MacGregor, “Violence Risk Assessment,” 288.

xv When the researchers probed more deeply: Paul Slovic and Ellen Peters, “Risk Perception and Affect,” *Current Directions in Psychological Science* 15 (2006): 324. Put differently, when considering the risk as a probability, people imagined a single individual who might or might not act violently in the future. By contrast, when considering the risk as a frequency, people imagined a set of offenders who would certainly commit horrible acts, which was more

evocative and frightening. Yuval Rottenstreich and Christopher K. Hsee, “Money, Kisses, and Electric Shocks: On the Affective Psychology of Risk,” *Psychological Science* 12 (2001): 188–89.

xv If we have strongly negative feelings: Slovic and Peters, “Risk Perception and Affect,” 324; Rottenstreich and Hsee, “Money, Kisses, and Electric Shocks,” 185; George F. Loewenstein, Elke U. Weber, Christopher K. Hsee, and Ned Welch, “Risk as Feelings,” *Psychological Bulletin* 2 (2001): 276–78.

xv A one-in-five-million chance: Cass Sunstein has termed this dynamic “probability neglect”: we can be so focused on certain negative consequences that we largely ignore the likelihood that those events will transpire. Cass R. Sunstein, “Terrorism and Probability Neglect,” *The Journal of Risk and Uncertainty* 26 (2003): 122.

xv Indeed, sometimes when more: Paul Slovic and Daniel Västfjäll, “The More Who Die, The Less We Care: Psychic Numbing and Genocide,” in *Behavioural Public Policy*, ed. Adam J. Oliver (Cambridge, UK: Cambridge University Press, 2013), 94–114.

xv Mother Teresa was right: Paul Slovic, “‘If I Look At the Mass I Will Never Act’: Psychic Numbing and Genocide,” *Judgment and Decision Making* 2 (2007): 80.

xv Research suggests that: Slovic, “‘If I Look At the Mass I Will Never Act,’” 88.

xv It’s no coincidence that: The 1994 federal law that requires convicted sex offenders to register with authorities was named after eleven-year-old Jacob Wetterling, who was abducted while riding bikes with his brother and a friend. Roger N. Lancaster, “Sex Offenders: The Last Pariahs,” *New York Times*, August 20, 2011, http://www.nytimes.com/2011/08/21/opinion/sunday/sex-offenders-the-last-pariahs.html?src=rechp; “Megan’s Law Website,” Pennsylvania State Police, accessed

November 2, 2014, http://www.pameganslaw.state.pa.us/History.aspx?dt=. A later amendment prompted state regulations that mandate that law enforcement notify members of the public about the presence of offenders in their neighborhoods. Lancaster, "Sex Offenders: The Last Pariahs." These statutes are known as Megan's Law—after Megan Kanka, who was raped and murdered by a known sex offender who lived across the street and invited her over to look at a puppy. William Glaberson, "Man at Heart of Megan's Law Convicted of Her Grisly Murder," *New York Times*, May 31, 1997, http://www.nytimes.com/1997/05/31/nyregion/man-at-heart-of-megan-s-law-convicted-of-her-grisly-murder.html?src=pm. In addition to increasing and expanding punishment for sex crimes against children, the 2006 Adam Walsh Act permits something that is almost always prohibited in criminal law: the retroactive application of the tougher regulations. Lancaster, "Sex Offenders: The Last Pariahs." It was signed on the anniversary of the date that Adam, the son of the host of America's Most Wanted, John Walsh, was kidnapped from a department store and murdered. Yolanne Almanzar, "27 Years Later, Case Is Closed in Slaying of Abducted Child," *New York Times*, December 16, 2008, http://www.nytimes.com/2008/12/17/us/17adam.html.

xvi We assume that assessing risk: Slovic and Peters, "Risk Perception and Affect," 322; Loewenstein, Weber, Hsee, and Welch, "Risk as Feelings," 267.

xvi And the problem is that: Cass R. Sunstein, "Book Review: Misfearing: A Reply," *Harvard Law Review* 119 (2006): 1110.

xvi Yet the risk that your child: Lancaster, "Sex Offenders: The Last Pariahs"; Centers for Disease Control and Prevention, *10 Leading Causes of Death by Age Group Highlighting Unintentional Injury Deaths, United States—2011*, accessed November 2, 2014, http://www.cdc.gov/injury/wisqars/pdf/leading_causes_of_injury_deaths_highlighting_unintenti

onal_injury_2011-a.pdf; U.S. Department of Transportation, *Traffic Safety Facts—2012 Data—Children* (Washington: National Highway Traffic Safety Administration, 2014), 1. In fact, contrary to popular perceptions, the incidence of various child abduction crimes have decreased—not increased—since the 1980s. Lancaster, "Sex Offenders: The Last Pariahs." And the statistics show that only a very small percentage of sexual crimes involve repeat offenders—indeed, Justice Department data indicates that reoffending rates for sex offenders are notably *lower* than for those convicted of robbery, burglary, and drug crimes. Lancaster, "Sex Offenders: The Last Pariahs"; Rachel Aviv, "The Science of Sex Abuse," *The New Yorker*, January 14, 2013, http://www.newyorker.com/reporting/2013/01/14/130114fa_fact_aviv?currentPage=all. Moreover, when it comes to sexual abuse, it is relatives, friends, and acquaintances who make up the vast majority of abusers, not strangers hiding in the bushes. Lancaster, "Sex Offenders: The Last Pariahs; Youth Villages, "In Child Sex Abuse, Strangers Aren't the Greatest Danger, Experts Say," *Science Daily*, April 13, 2014, http://www.sciencedaily.com/releases/2012/04/120413100854.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fmind_brain+%28ScienceDaily%3A+Mind+%26+Brain+News%29.

xvi The pedophile threat: Paul Slovic, "Perception of Risk," *Science* 236 (1987): 282–83; Paul Slovic, *The Perception of Risk* (London: Earthscan, 2000), 140; Timur Kuran and Cass R. Sunstein, "Availability Cascades and Risk Regulation," *Stanford Law Review* 51 (1999): 708–10; Jared Diamond, "That Daily Shower Can Be a Killer," *New York Times*, January 28, 2013, http://www.nytimes.com/2013/01/29/science/jared-diamonds-guide-to-reducing-lifes-risks.html?_r=0. Researchers have identified a number of other factors that prompt greater fear and an enhanced perception of risk, including whether the risk is perceived as involuntary,

irreversible, human-generated, and impacting children, among others. Kuran and Sunstein, "Availability Cascades and Risk Regulation," 701, 708–10. One of the intriguing things about our threat perceptions is how difficult they are to control: we may "know" that a risk is very unlikely to happen, but still see it as a major threat. Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 323. For many of us, a great example of this phenomenon comes when we fly in an airplane: we know that our chances of death are significantly less than if we completed the same journey by car; yet our automatic emotional response leaves us on edge for the flight. Likewise, we may be aware that we are far more likely to die of heart disease than Ebola, but be much more motivated to respond to the risk of Ebola.

xvi So we invest heavily: Today, you can search a free online database of registered sex offenders in every state. Lancaster, "Sex Offenders: The Last Pariahs." And the amount of oversight and punishment of sex offenders shows no sign of dissipating. Forty-four states, for example, have either enacted or are currently considering laws that require certain sexual predators to wear electronic monitoring devices for the rest of their lives. Lancaster, "Sex Offenders: The Last Pariahs"; National Conference of State Legislatures, *State Statutes Related to Jessica's Law*, accessed November 3, 2014, http://www.leg.state.vt.us/WorkGroups/sexoffenders/NCSLs_Jessicas_Law_Summary.pdf. At the federal level, in less than 20 years, the average sentence for possessing or distributing child pornography has more than quintupled to just under a decade in prison. U.S. Sentencing Commission, *Sentence Length in Each Primary Offense Category* (2011), Table 13, http://www.ussc.gov/sites/default/files/pdf/research-and-publications/annual-reports-and-sourcebooks/2011/Table13.pdf; Rachel Aviv, "The Science of Sex Abuse."

Unfortunately, research suggests that these types of laws are extremely costly and often ineffective. "Sex Laws Unjust and Ineffective," *The Economist*, August 6, 2009, http://www.economist.com/node/14164614. Indeed, a study of Megan's Law in New Jersey, funded by the federal government, showed no meaningful effect on recidivism rates. Kristen Zgoba, *Megan's Law: Assessing the Practical and Monetary Efficacy* (New Jersey Department of Corrections, 2008), 2; Lancaster, "Sex Offenders: The Last Pariahs." And these statutes can actually make matters worse. Once they are listed on a public registry, people are at serious risk of losing their jobs and struggle to find employment. Jill S. Levenson and Leo P. Cotter, "The Effect of Megan's Law on Sex Offender Reintegration," *Journal of Contemporary Criminal Justice* 21 no. 1 (2005): 49, doi: 10.1177/1043986204271676; "Sex Laws Unjust and Ineffective." Laws that bar offenders from living within a certain number of feet of parks or schools further marginalize these individuals, particularly in urban areas where most of the landscape ends up being off-limits "Sex Laws Unjust and Ineffective." Research shows that those without a stable place to live or a job are more likely to reoffend. Center for Sex Offender Management, *What You Need to Know About Sex Offenders* (Center for Effective Public Policy, 2008), 4-5, http://www.csom.org/pubs/needtoknow_fs.pdf; "Sex Laws Unjust and Ineffective."

Our registries also make those previously convicted of sex offenses targets for harassment and attacks. "Sex Laws Unjust and Ineffective"; Richard Tewksbury and Matthew Lees, "Perceptions of Sex Offender Registration: Collateral Consequences and Community Experiences," *Sociological Spectrum* 26 (2006): 329. That is, we facilitate serious crimes against people who have served their time and, in many cases, are simply trying to piece their lives back together.

Similarly, passing a bill allowing for the indefinite civil detention of sex offenders even after they have completed their sentences may seem like a sensible response to a particularly egregious crime against a child—a way to use the tragedy to enact change that will keep kids in the community safer. And, in fact, the Adam Walsh Act and more than twenty state sexually violent predator laws provide for the subsequent civil commitment of those prisoners assessed to have serious impulse control issues related to sexually assaulting children. Rachel Aviv, "The Science of Sex Abuse." But it seems extremely unjust to determine that a person has sufficient control over his actions to be found criminally blameworthy, have that person serve his time in prison, and then, just as he is about to regain his freedom, decide to lock him up in a mental-health facility on the grounds that he is dangerous because he does not have the ability to control his actions. A dirty trick like that would seem more at home in a Kafkaesque nightmare than present-day America.

xvi The news media further distorts: Kahneman, *Thinking, Fast and Slow*, 137–45.

xvi And how easily we can recall: Kahneman, *Thinking, Fast and Slow*, 142; Kuran and Sunstein, "Availability Cascades and Risk Regulation," 685–86.

xvi It makes a difference: It's easy to see how media coverage can engender a vicious cycle—what some scholars call an "availability cascade." Kuran and Sunstein, "Availability Cascades and Risk Regulation," 685; Daniel Kahneman, *Thinking, Fast and Slow*, 142. Horrible crimes are given prominence by the media, which causes private citizens and lawmakers to assess these crimes as more likely to occur than they actually are and to believe that addressing them is particularly important. This, in turn, means that the media focuses even more time on covering rapes, murders, and brutal assaults, which encourages the public to see them as even more important and dangerous.

xvi Likewise, the disproportionate number: Jerry Kang, "Trojan Horses of Race," *Harvard Law Review* 118 (2005): 1549–51.

xviii Many academics and journalists: Ian Sample, "US Court See Rise in Defendants Blaming Their Brains for Criminal Acts," *Guardian*, November 10, 2013, http://www.theguardian.com/world/2013/nov/10/us-rise-defendants-blame-brains-crimes-neuroscience; Jessica Hamzelou, "Brain Scans Reduce Murder Sentence in Italian Court," *New Scientist*, September 1, 2011, http://www.newscientist.com/blogs/shortsharpscience/2011/09/brain-scans-reduce-sentence-in.html; Emiliano Feresin, "Italian Court Reduces Murder Sentence Based on Neuroimaging Data," *Nature News Blog*, September 1, 2011, http://blogs.nature.com/news/2011/09/italian_court_reduces_murder_s.html.

xviii Stefania had pled guilty: Feresin, "Italian Court Reduces Murder Sentence."

xviii Critics of the reduced sentence: Hamzelou, "Brain Scans."

xviii Moreover, they noted, Stefania's brain: Feresin, "Italian Court Reduces Murder Sentence."

xviii It seems obvious that: Hamzelou, "Brain Scans."

xviii Our thoughts, beliefs, and actions: David Eagleman, "What Our Brains Can Teach Us," Op-Ed, *New York Times*, February 22, 2013, http://www.nytimes.com/2013/02/23/opinion/what-our-brains-can-teach-us.html?_r=0.

xviii If some of these electrochemical reactions: "Brain Tumor: Symptoms and Signs," Cancer.net, last modified June 2013, http://www.cancer.net/cancer-types/brain-tumor/symptoms-and-signs.

xix Be born with the wrong set: Alexia Cooper and Erica L. Smith, U.S. Department of Justice, *Homicide Trends in the United States, 1980–2008: Annual Rates for 2009 and 2010* (Washington, DC: Bureau of Justice Statistics, November 2011), 3, http://www.bjs.gov/content/pub/pdf/htus8008.pdf; Henry T. Greely, "Law and the Revolution in Neuroscience: An Early Look at the Field," *Akron Law Review* 42 (2009): 691–93.

xix How troubled are we: According to a recent analysis, 4.1 percent of death penalty convictions in the United States from 1973 to 2004 are estimated to be wrongful—and that is a conservative figure. Samuel R. Gross et al., "Rate of False Conviction of Criminal Defendants Who Are Sentenced to Death," *Proceedings of the National Academy of Sciences* (2014): 5, doi: 10.1073/pnas.1306417111.

xx The development of DNA testing: The first DNA exoneration occurred in 1989. Innocence Project, "DNA Exonerations Nationwide," accessed March 18, 2014, http://www.innocenceproject.org/Content/DNA_Exonerations_Nationwide.php.

xx The dim light: Innocence Project, "DNA Exoneree Case Profiles," accessed March 18, 2014, http://www.innocenceproject.org/know/; Innocence Project, *200 Exonerated: Too Many Wrongfully Convicted* (New York: Benjamin N. Cardozo School of Law, Yeshiva University), 14, http://www.innocenceproject.org/200/ip_200.pdf.

xx "The ghost of the innocent": United States v. Garsson, 291 F. 646, 649 (S.D.N.Y. 1923).

xx There are corridors of injustice: We could continue the tour, entering an entire wing with cases of people who actually committed their crimes, but who never received the honest, unbiased process or the fair treatment they were promised. And beyond that we could pass through a nursery with all of the botched juvenile cases that ended up sealed and near misses where someone was incorrectly identified and pursued as a prime suspect up through trial only

for the truth to be revealed by a bit of final luck. Innocence Project, “DNA Exonerations Nationwide”; Saul M. Kassin et al., “Police-Induced Confessions: Risk Factors and Recommendations,” *Law and Human Behavior*, 34 (2010): 3. And if we stopped we would hear the beams of the attic creak with the pressure of a mountain of plea bargains where no judge or jury ever weighed the evidence that would certainly have raised a reasonable doubt. Gross et al., “Rate of False Conviction,” 1.

1. The Labels We Live By ~ The Victim

3 Jerry Pritchett had stepped out: Charles J. Willoughby, Government of the District of Columbia, Office of the Inspector General, *Summary of Special Report: Emergency Response to the Assault on David E. Rosenbaum* (June 2006), 22.

3 There, between the bare ginkgo trees: Willoughby, *Summary of Special Report*, 18.

3 The sidewalk that lined: Selena Walker, OEA Matter No. 1601-0133-06, 4 (June 26, 2007), http://oea.dc.gov/sites/default/files/dc/sites/oea/publication/attachments/OEADecision_Walker_v_DCFEMS_06_26_07.pdf. Details about the house and neighborhood were collected using Google Maps.

3 As Jerry approached: Willoughby, *Summary of Special Report*, 18.

3 When Jerry asked him a question: Willoughby, *Summary of Special Report*, 18.

3 He wasn’t carrying a wallet: Willoughby, *Summary of Special Report*, 18.

3 She noticed that: Del Quentin Wilber and Debbi Wilgoren, “Medical Condition Suspected at First in Journalist’s Fall,” *Washington Post*, January 10, 2006, http://www.washingtonpost.com/wp-dyn/content/article/2006/01/09/AR2006010901245.html; Willoughby, *Summary of Special Report*, 18.

3 He was trying to move himself: Willoughby, *Summary of Special Report*, 18.

3 Jerry placed one of his slippered feet: Willoughby, *Summary of Special Report*, 18.

3 Less than ten minutes: Willoughby, *Summary of Special Report*, 21.

3 Almost as soon as they started: Willoughby, *Summary of Special Report*, 21.

4 Claude thought that: Wilber and Wilgoren, "Medical Condition Suspected."

4 This wasn't a stroke: Willoughby, *Summary of Special Report*, 27.

4 The engine driver found: Willoughby, *Summary of Special Report*, 25.

4 They decided not to perform: Willoughby, *Summary of Special Report*, 4.

4 When one of the responding: Willoughby, *Summary of Special Report*, 35.

4 As a result, the cops: The police admitted that, as a result, they "did not get a close look at the man." Willoughby, *Summary of Special Report*, 35.

4 According to protocol, they should: Willoughby, *Summary of Special Report*, 5.

4 The ambulance carrying emergency medical technicians: Willoughby, *Summary of Special Report*, 46.

4 "What we got?": Willoughby, *Summary of Special Report*, 22, 39.

4 She wasn't pleased: Willoughby, *Summary of Special Report*, 39.

4 The firefighters had noticed: Willoughby, *Summary of Special Report*, 4.

4 And neither of the EMTs asked: Willoughby, *Summary of Special Report*, 6.

4 Consequently, they loaded him: Willoughby, *Summary of Special Report*, 25.

4 Given her advanced training: D.C. Fire and Medical Services Department v. D.C. Office of Employee Appeals, 986 A.2d 419, 421 (D.C. 2010).

4 As the assistant EMT: Colbert I. King, "The Death of David Rosenbaum," *Washington Post*, February 25, 2006, http://www.washingtonpost.com/wp-

dyn/content/article/2006/02/24/AR2006022401676.html; Willoughby, *Summary of Special Report*, 43, 45; "What Is the Glasgow Coma Scale?," Brainline.org, accessed February 13, 2014, http://www.brainline.org/content/2010/10/what-is-the-glasgow-coma-scale.html. The Glasgow Coma Scale was developed to assess the consciousness of brain-trauma victims by assigning numerical values to the degree of eye opening (1–4), verbal response (1–5), and motor response (1–6). By adding up the three scores, clinicians arrive at a number that is used to classify the seriousness of the brain injury. In general, a total score of 3 to 8 is considered severe, 9 to 12 is considered moderate, and 13 to 15 is considered mild.

4 The assistant, though, classified him: *D.C. Fire and Medical*, 986 A.2d at 421.

4 The man's inability: Willoughby, *Summary of Special Report*, 8.

5 The assistant skipped: Willoughby, *Summary of Special Report*, 6; King, "The Death of David Rosenbaum."

5 Although Fire and Emergency Medical: *D.C. Fire and Medical*, 986 A.2d at 423 n. 1.

5 It was twice as far: Willoughby, *Summary of Special Report*, 8; *D.C. Fire and Medical*, 986 A.2d at 422.

5 The patient could sleep: *D.C. Fire and Medical*, 986 A.2d at 422.

5 When they arrived at Howard: Paul Duggan, "Report Scolds D.C. Agencies in Response to Assault," *Washington Post*, June 17, 2006, http://www.washingtonpost.com/wp-dyn/content/article/2006/06/16/AR2006061601096.html.

5 He was pushed into the hallway: Duggan, "Report Scolds D.C. Agencies."

5 The hospital staff didn't know: Willoughby, *Summary of Special Report*, 8.

5 As the triage nurse later explained: Willoughby, *Summary of Special Report*, 53.

5 No one at the hospital performed: Willoughby, *Summary of Special Report*, 7.

5 She didn't check his pupils: Willoughby, *Summary of Special Report*, 53.

5 Shining a light in his eyes: Willoughby, *Summary of Special Report*, 53.

5 "I saw he was not in distress": Willoughby, *Summary of Special Report*, 53.

5 When she passed the man off: Willoughby, *Summary of Special Report*, 54.

5 And when the team leader: Willoughby, *Summary of Special Report*, 15, 55.

5 He was not having respiratory problems: Willoughby, *Summary of Special Report*, 56.

5 With no reason to rush: Willoughby, *Summary of Special Report*, 57.

6 At around 11:30 p.m., another nurse: Willoughby, *Summary of Special Report*, 56.

6 As they were moving the gurney: Willoughby, *Summary of Special Report*, 56–57.

6 That was sometimes a bad sign: Willoughby, *Summary of Special Report*, 56.

6 They repeated the rub: Willoughby, *Summary of Special Report*, 56.

6 The nurses couldn't believe it: Willoughby, *Summary of Special Report*, 57.

6 The doctor saw the posturing: Willoughby, *Summary of Special Report*, 59–60.

6 What had seemed, a moment earlier: Willoughby, *Summary of Special Report*, 60.

6 They intubated the man: Willoughby, *Summary of Special Report*, 60.

6 His pupils were unequal: Willoughby, *Summary of Special Report*, 60.

6 The man was taken in: Complaint for Damages at 7, Rosenbaum v. District of Columbia, 2006 CA 008405 M (D.C. Super. Ct. dismissed Nov. 30, 2007).

6 It would be for naught: Complaint for Damages at 7, *Rosenbaum*.

6 David Rosenbaum, the award-winning: Todd S. Purdum, "David Rosenbaum, Reporter for Times Who Covered Politics, Dies at 63," *New York Times*, January 9, 2006, http://www.nytimes.com/2006/01/09/national/09rosenbaum.html; Willoughby, *Summary of Special Report*, 65; Jordan v. United States, 18 A.3d 703, 706 (D.C. 2011).

6 The sixty-three-year-old: Brief for Appellant, Jordan v. United States, 18 A.3d 703 (2011) (No. 07-CF-340), 2010 WL 7359337, at *2; Purdum, "David Rosenbaum"; Wilber and Wilgoren, "Medical Condition Suspected."

6 He had a wife: Purdum, "David Rosenbaum."

6 He lived right around the block: "3824 Harrison Street NW in Washington-Friendship Heights Sold for $1,000,000," Blockshopper.com, December 18, 2006, http://dc.blockshopper.com/sales/cities/washington-friendship_heights/property/18510064/3824_harrison_street_nw/1351355. Details about the house and neighborhood were collected using Google Maps.

7 The major breaks: Willoughby, *Summary of Special Report*, 37.

7 The lead officer: Willoughby, *Summary of Special Report*, 35.

7 When he visited the home: Willoughby, *Summary of Special Report*, 35.

7 However, it wasn't until: Willoughby, *Summary of Special Report*, 35–36.

7 This was a possible robbery: Willoughby, *Summary of Special Report*, 35–36.

7 After seeing coverage: Michael Janofsky, "Suspect Said to Confess Killing Times Reporter, *New York Times*, January 13, 2006, http://www.nytimes.com/2006/01/13/national/13david.html?ref=daviderosenbaum&_r=0; *Jordan*, 18 A.3d at 706; Janofsky, "Suspect Said to Confess."

7 Hamlin later claimed that: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *9, 24–25.

7 According to Hamlin: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *5.

7 He noticed the hard plastic pipe: Michael Janofsky, "Official Washington Pays Tribute to Reporter Who Was Killed," *New York Times*, January 14, 2006,

http://www.nytimes.com/2006/01/14/national/14david.html?ref=daviderosenbaum&pagewanted=print; Brief for Appellee, *Jordan*, 2010 WL 7359345, at *5–6.

7 As they drove: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *6.

7 After they parked: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *6.

7 When David passed by: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *6.

8 The force of the blows: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *10.

8 With David on the ground: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *6.

8 It was a good score: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *6–7.

8 Leaving the area: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *7.

8 They were back: Brief for Appellee, *Jordan*, 2010 WL 7359345, at *42.

8 Visit the Supreme Federal Court: Michael Allen Dean, "Images of the Goddess of Justice," last modified April 1, 2013, http://mdean.tripod.com/justice.html.

8 As the great champion: "Brief History of William Penn," USHistory.org, last accessed February 8, 2014, http://www.ushistory.org/penn/bio.htm; William Penn, *Some Fruits of Solitude in Reflections and Maxims* (London: Freemantle, 1901), 80.

8 Every man or woman: The promise of equal justice is broadly embraced. Geoffrey P. Goodwin and Justin F. Landy, "Valuing Different Human Lives," *Journal of Experimental Psychology: General* 143, no. 2 (2014): 778, doi: 10.1037/a0032796. The United States Declaration of Independence makes clear that "all men are created equal." Goodwin and Landy, "Valuing Different Human Lives," 778. And the point is echoed in numerous other sources, including the United Nations' Universal Declaration of Human Rights ("All human beings are born free and equal in dignity and rights."). Goodwin and Landy, "Valuing Different Human Lives," 778.

8 When seventeen-year-old Trayvon: Cindy Adams, "Trayvon Martin Killing to Be Investigated by Federal Authorities," Examiner.com, March 19, 2012, http://www.examiner.com/article/trayvon-martin-killing-to-be-investigated-by-federal-authorities; Suzanne Gamboa and Sonya Ross, "Prosecutor in FL Shooting Known as Victim Advocate," Foxnews.com, April 12, 2012, http://www.foxnews.com/us/2012/04/12/prosecutor-in-fl-shooting-known-as-victim-advocate/.

8 It seemed to be: Gamboa and Ross, "Prosecutor in FL."

8 But the special prosecutor: Corey was specifically responding to the claim that it was only the unexpected public furor that led to a charge of second-degree murder against Zimmerman. Susan Green, "George Zimmerman Makes First Court Appearance at Bond Hearing," Examiner.com, April 12, 2012, http://www.examiner.com/article/george-zimmerman-makes-first-court-appearance-at-bond-hearing.

9 When his nametag read: King, "The Death of David Rosenbaum."

9 The police, for their part: Duggan, "Report Scolds D.C. Agencies"; Willoughby, *Summary of Special Report*, 8.

9 The headphones that were found: Willoughby, *Summary of Special Report*, 25; Clarence Williams and Allan Lengel, "Report Faults Response to Assault," *Washington Post*, June 16, 2006, http://www.washingtonpost.com/wp-dyn/content/article/2006/06/16/AR2006061600009.html.

9 When the lead officer was asked: Willoughby, *Summary of Special Report*, 5, 34.

9 Once "the drunk" was identified: King, "The Death of David Rosenbaum."

9 When the media and the police: Janofsky, "Official Washington Pays Tribute." David served as the chief Congressional correspondent and chief domestic policy correspondent, earning a George Polk Award for national reporting. Purdum, "David Rosenbaum."

9 Indeed, with David: Leslie Milk and Ellen Ryan, "Washingtonians of the Year 2007: The Rosenbaums," *Washingtonian*, January 1, 2008, http://www.washingtonian.com/articles/people/washingtonians-of-the-year-2007-the-rosenbaums/.

9 And prosecutors, now under great pressure: Accuracy Project, "David Rosenbaum," last modified January 1, 2012, http://www.accuracyproject.org/cbe-Rosenbaum,David.html.

9 Hamlin was sentenced: Accuracy Project, "David Rosenbaum."

9 The problem is not: David Mamet, *Faustus* (New York: Dramatists Play Service, Inc. 2007), 18.

10 Recent research in psychology: Duggan, "Report Scolds D.C. Agencies."

10 In the words of the D.C. inspector: Duggan, "Report Scolds D.C. Agencies."

10 What propelled responders: Willoughby, *Summary of Special Report*, 67.

10 In fact, we are not: Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 86.

10 The automatic processes in our brain: Kahneman, *Thinking, Fast and Slow*, 85–86; Simone Schnall, Jonathan Haidt, Gerald L. Clore, and Alexander H. Jordan, "Disgust as Embodied Moral Judgment," *Personality and Social Psychology Bulletin* 34 (2008): 1096–97.

10 Ambiguity and doubt are: Kahneman, *Thinking, Fast and Slow*, 80, 87–88.

10 In certain circumstances: Kahneman, *Thinking, Fast and Slow*, 80, 85–86.

10 The less we know: Kahneman, *Thinking, Fast and Slow*, 87.

11 The unfortunate result: Kahneman, *Thinking, Fast and Slow*, 87–88.

12 When the *exact* same student: In the actual experiment, participants were also given a brief written background about the girl, which described her parents' levels of educational and occupations (in the negative-expectancy condition, they had high school educations and blue-collar jobs; in the positive-expectancy condition, they were college-educated professionals). John M. Darley and Paget H. Gross, "A Hypothesis-Confirming Bias in Labeling Effects," *Journal of Personality and Social Psychology* 44, no. 1 (1983): 20, 23–25.

12 Finding him lying: Willoughby, *Summary of Special Report*, 18.

12 Yet, three hours later: Willoughby, *Summary of Special Report*, 59; Marc Fisher, "Doctor's Deposition Details Fatal Night at Howard ER," *Washington Post*, April 6, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/04/05/AR2008040502056.html.

12 The patrol service area: Wilber and Wilgoren, "Medical Condition Suspected."

12 Although there were more: Wilber and Wilgoren, "Medical Condition Suspected."

12 When interviewed after the fact: Willoughby, *Summary of Special Report*.

12 And it seems to have had: Disgust—the repulsion we feel toward certain substances, entities, and behaviors—is one of the automatic gut responses that provide information about how we should understand and evaluate what we are seeing. Schnall et al., "Disgust Embodied as Moral Judgment," 1096–97; Yoel Inbar and David Pizarro, "Grime and Punishment: How Disgust Influences Moral, Social, and Legal Judgments," *Jury Expert* 21, no. 2 (March 2009), 13; Erik D'Amato, "Mystery of Disgust," *Psychology Today*, January 1, 1998, http://www.psychologytoday.com/articles/200909/mystery-disgust.

13 Disgust guides our lives: James Gorman, “Survival’s Ick Factor,” *New York Times*, January 23, 2012, http://www.nytimes.com/2012/01/24/science/disgusts-evolutionary-role-is-irresistible-to-researchers.html?hp.

13 While different people experience disgust: Inbar and Pizarro, “Grime and Punishment,” 13, 15.

13 Disgust a Kazakh: Dan Jones, “The Depths of Disgust,” *Nature* 447, no. 14 (June 2007): 768.

13 Disgust responses appear: Sam McNerney, “A Nauseating Corner of Psychology: Disgust,” *Big Think*, December 9, 2012, http://bigthink.com/insights-of-genius/a-nauseating-corner-of-psychology-disgust; Inbar and Pizarro, “Grime and Punishment,” 13.

13 In experiments, a two-year-old: Paul Rozin et al., “The Child’s Conception of Food: Differentiation of Categories of Rejected Substances in the 16 Months to 5 Year Age Range,” *Appetite* 7 (1986), 146; McNerney, “A Nauseating Corner of Psychology.”

13 We cringe at the thought: Dan Vergano, “Jamestown Cannibalism Confirmed by Skull from ‘Jane,’” *USA Today*, May 1, 2013, http://www.usatoday.com/story/news/nation/2013/05/01/jamestown-cannibalism/2126421/.

13 Many scientists believe that disgust: Schnall et al., “Disgust Embodied as Moral Judgment,” 1097.

13 But it also proved useful: Schnall et al., “Disgust Embodied as Moral Judgment,” 1097.

13 As a result, today we see: Jones, “The Depths of Disgust,” 769.

13 Both help us stay: Jones, “The Depths of Disgust,” 770. When something is disgusting, we seek to avoid it lest we be contaminated. This is true even when the item in question cannot actually taint us. Andrea C. Morales and Gavan J. Fitzsimons, “Product Contagion: Changing

Consumer Evaluations Through Physical Contact with 'Disgusting' Products," *Journal of Marketing Research* 44, no. 2, (May 2007): 275–78; Michael D. Lemonick, "Why We Get Disgusted," *Time*, May 24, 2007, http://content.time.com/time/magazine/article/0,9171,1625167,00.html. In one study, researchers looked at how people reacted to food that happened to be placed in a basket with things that are considered disgusting, like tampons and kitty litter. Morales and Fitzsimons, "Product Contagion," 275–78; Lemonick, "Why We Get Disgusted." What they found was that even when a package of cookies was unopened and did not actually touch the kitty litter, people would not eat them.

And moral disgust appears to operate in the same way: in a compelling demonstration, people were asked to consider wearing the sweater of someone they viewed to personify evil (e.g., Adolf Hitler). Carol Nemeroff and Paul Rozin, "The Contagion Concept in Adult Thinking in the United States: Transmission of Germs and Interpersonal Influence," *Ethos* 22, no. 2 (1994): 164, 166; Jones, "The Depths of Disgust," 769. Although it was specified that the garment had just been laundered and no one would observe the wearing, the vast majority of people were nonetheless repulsed by the idea. Nemeroff and Rozin, "The Contagion Concept," 169–70; Jones, "The Depths of Disgust," 769. For a broader discussion of these contagion dynamics, see Carol Nemeroff and Paul Rozin, "The Makings of the Magical Mind: The Nature and Function of Sympathetic Magical Thinking," in Karl S. Rosengren, Carl N. Johnson, and Paul L. Harris, *Imagining the Impossible: Magical, Scientific and Religious Thinking in Children* (Cambridge, UK: Cambridge University Press, 2000), 1–34; Paul Rozin and Carol Nemeroff, "The Laws of Sympathetic Magic: A Psychological Analysis of Similarity and Contagion," in *Cultural Psychology: Essays on Comparative Human Development*, edited by James W. Stigler,

Richard A. Shweder, and Gilbert Herdt (Cambridge, UK: Cambridge University Press, 1990), 205–33; Paul Rozin, Maureen Markwith, and Clark McCauley, “Sensitivity to Indirect Contacts With Other Persons: AIDS Aversion as a Composite of Aversion to Strangers, Infection, Moral Taint and Misfortune,” *Journal of Abnormal Psychology* 103 (1994): 495–504.

13 But because the same areas: Jones, “The Depths of Disgust,” 769–70; Inbar and Pizarro, “Grime and Punishment,” 14–15; Gary D. Sherman, Jonathan Haidt, and Gerald L. Clore, “The Faintest Speck of Dirt: Disgust Enhances the Detection of Impurity,” *Psychological Science* 23 (2012): 7.

14 Imagine walking into: Schnall et al., “Disgust Embodied as Moral Judgment,” 1100–01, 1107–08.

14 The desk you are asked: Schnall et al., “Disgust Embodied as Moral Judgment,” 1101.

14 Dirty tissues and greasy pizza: Schnall et al., “Disgust Embodied as Moral Judgment,” 1101.

14 Yet when scientists conducted: Schnall et al., “Disgust Embodied as Moral Judgment,” 1096.

14 Disgust at the lab conditions: Schnall et al., “Disgust Embodied as Moral Judgment,” 1105–07.

14 The disgust that people felt: Willoughby, *Summary of Special Report*, 35, 57.

14 The physical disgust they felt: Willoughby, *Summary of Special Report*, 4.

15 It matters every step: Data gleaned from police and court records suggests that different victims receive different justice (and, in some cases, injustice), depending on key identifiers like age, gender, and race. Marc Riedel, “Homicide Arrest Clearances: A Review of the Literature,” *Sociology Compass* 2, no. 4 (2008): 1150–59; Steven Briggs and Tara Opsal, “The Influence of

Victim Ethnicity on Arrest in Violent Crimes," *Criminal Justice Studies: A Critical Journal of Crime, Law and Society* 25, no. 2 (2012): 185–89; Aki Roberts, "The Influences of Incident and Contextual Characteristics on Crime Clearance of Nonlethal Violence: A Multilevel Event History Analysis," *Journal of Criminal Justice* 36 (2008): 65–69; Amanda L. Robinson and Meghan S. Chandek, "Differential Police Response to Black Battered Women," *Women and Criminal Justice* 12 (2000): 43–55; Douglas A. Smith, Christy A. Visher, and Laura A. Davidson, "Equity and Discretionary Justice: The Influence of Race on Police Arrest Decisions," *Journal of Criminal Law and Criminology* 75, no.1 (1984): 234, 246–49.

15 Despite what we say: Goodwin and Landy, "Valuing Different Human Lives," 778.

15 A ten-year-old is: Goodwin and Landy, "Valuing Different Human Lives," 796, 799.

15 Privileging the young: Goodwin and Landy, "Valuing Different Human Lives," 780.

15 But clearly there is a limit: Goodwin and Landy, "Valuing Different Human Lives," 778, 789.

15 When an older man: Goodwin and Landy, "Valuing Different Human Lives," 783, 785. A number of studies show that when an older person is killed, we do not feel the same sense of injustice as when a young person is killed. Mitchell J. Callan, Rael J. Dawtry, and James M. Olson, "Justice Motive Effects in Ageism: The Effects of a Victim's Age on Observer Perceptions of Injustice and Punishment Judgments," *Journal of Experimental Social Psychology* 48 (2012): 1343–44. For instance, when researchers looked into how members of the public felt about an accident in which a drunk driver ran a red light and hit an innocent victim, they found that people perceived less injustice when a seventy-four-year-old was the victim than when an eighteen-year-old was the victim. And they recommended lower sentences for the guilty driver who hit the older person. This enhanced indifference may affect our response, even when we

face no tragic tradeoff, when there is just one victim on the ground and plenty of opportunity to help save his life and catch his attacker. Callan, Dawtry, and Olson, “Justice Motive Effects in Ageism,” 1343.

16 When researchers had people: Pamela A. Dooley, “Perceptions of the Onset Controllability of AIDS and Helping Judgments: An Attributional Analysis,” *Journal of Applied Social Psychology* 25, no. 10 (1995): 862–63; Sam Sommers, *Situations Matter* (New York: Riverhead Books, 2011), 79. In the real world, addicts tend to receive neither sympathy nor respect. It seems revealing that in Ambulance 18’s official logbook, the EMTs describe another patient they picked up as “drunk and stupid.” Willoughby, *Summary of Special Report*, 50. People don’t feel any need to hide their disdain for alcoholics and drug addicts, and this powerful aversion is strong enough to overcome official protocol. Howard’s Emergency Department Triage Manual, for instance, explicitly states that an alcoholic who exhibits abnormal vital signs and altered mental state or is non-ambulatory must go to the main Emergency Department where staff members are advised to “urgently proceed.” Willoughby, *Summary of Special Report*, 16.

16 This is often the case: Inbar and Pizarro, “Grime and Punishment,” 16–17; McNerney, “A Nauseating Corner of Psychology.”

16 Such associations can be: Lasana T. Harris and Susan T. Fiske, “Dehumanizing the Lowest of the Low: Neuroimaging Responses to Extreme Out-Groups,” *Psychological Science* 17, no. 10 (2006): 847.

16 In one demonstration: Harris and Fiske, “Dehumanizing the Lowest of the Low,” 848–49, 852.

16 More interesting, though, was: Harris and Fiske, “Dehumanizing the Lowest of the Low,” 848–52.

16 It lit up when: Harris and Fiske, "Dehumanizing the Lowest of the Low," 848–52.

16 But for those viewed: Harris and Fiske, "Dehumanizing the Lowest of the Low," 848–52.

16 Passing a homeless drunk: Jones, "The Depths of Disgust," 769–70.

17 The dehumanization is all the easier: David's outgroup label was ultimately removed, but for many victims there is no opportuniuty to become "one of us." Most are who they appear to be: a transgender prostitute stabbed by a pimp; an untouchable woman robbed and beaten. There is no veil to pull back that will make them worthy of our justice.

17 In one classic experiment: Cathaleene Jones and Elliot Aronson, "Attribution of Fault to a Rape Victim as a Function of Respectability of the Victim," *Journal of Personality and Social Psychology* 26, no. 3 (1973): 415–19.

17 Take a moment to ponder: Jones and Aronson, "Attribution of Fault to a Rape Victim," 417–18.

17 To unlock the mystery: Callan, Dawtry, and Olson, "Justice Motive Effects in Ageism," 1343–44. Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19.

17 When confronted with: Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19.

17 And we eliminate that discomfort: Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19.

17 We trick ourselves: Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19.

17 She must have done something: Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19. The easier it is for us to see the implicated harm as resulting from the victim's free choice, the easier it is for us to blame her for what happened and maintain our belief in a just world. Looking into why certain tragedies, like the tsunami of 2004, spark significant charitable

giving, while others, like the crisis in Darfur, do not, a group of scientists had participants read about a fake famine and then asked them if they would like to make a donation to the victims. Hanna Zagefka et al., "Donating to Disaster Victims: Responses to Natural and Humanly Caused Events," *European Journal of Social Psychology* 41 (2011): 358, doi: 10.1002/ejsp.781; Situationist Staff, "The Situation of Donations," *Situationist*, May 29, 2011, http://thesituationist.wordpress.com/2011/05/29/the-situation-of-donations/. Some participants were told that the famine had arisen from "drought," while others were told that it had been sparked by "armed conflict." Could that small background fact make a difference? The answer was a clear yes: those who were starving because of a drought received significantly more donations, which the authors suggested arose because these people were seen as less implicated in causing their own suffering. Zagefka et al., "Donating to Disaster Victims," 358–59; Situationist Staff, "The Situation of Donations." Again, we want to believe that the world is a just place where individuals get their righteous deserts. Zagefka et al., "Donating to Disaster Victims," 361; Situationist Staff, "The Situation of Donations"; Callan, Dawtry, and Olson, "Justice Motive Effects in Ageism," 1343–44. Participants could maintain such a belief by assuming that those suffering as a result of an "armed conflict" must have been partially to blame—something they couldn't do when a natural disaster was behind the famine. Zagefka et al., "Donating to Disaster Victims," 361; Situationist Staff, "The Situation of Donations."

17 A former co-worker: "Suspect in Northern Liberties Shooting ID'd," 6ABC.com, November 18, 2011, http://abclocal.go.com/wpvi/story?section=news/crime&id=8437751.

18 Penn State students rioted: Eric Randall, "Bullies Force an Alleged Sandusky Victim to Leave His High School, *Wire*, November 21, 2011,

http://www.theatlanticwire.com/national/2011/11/bullies-forced-alleged-sandusky-victim-leave-his-high-school/45267/.

18 Another victim, who courageously came forward: Pennsylvania Attorney General, "Child Sex Charges Filed Against Jerry Sandusky; Two Top Penn State University Officials Charged with Perjury and Failure to Report Suspected Child Abuse," news release, November 5, 2011, http://www.attorneygeneral.gov/press.aspx?id=6270; Randall, "Bullies Force an Alleged Sandusky Victim to Leave"; Sara Ganim, "Alleged Jerry Sandusky Victim Leaves School Because of Bullying, Counselor Says," *Patriot-News*, November 20, 2011, http://www.pennlive.com/midstate/index.ssf/2011/11/alleged_jerry_sandusky_victim.html.

18 We may see child abuse: Participants in the study on rape and respectability sentenced the defendant to a *longer* term of imprisonment for raping a married woman than raping a divorcee. And the experimenters reasoned that this was because the social harm was seen as worse in the case of the rape of a married woman (e.g., her husband was harmed as well). Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19.

18 To do that, we may: Jones and Aronson, "Attribution of Fault to a Rape Victim," 418–19. This blame dynamic may help explain the seemingly unexplainable: the severe punishment of those who have *been raped*, including children and other innocents, in certain cultures around the world. In Somalia in 2008, for example, a thirteen-year-old girl was stoned to death in front of a thousand spectators after her father reported that she had been gang raped. Chris McGreal, "Somalian Rape Victim, 13, Stoned to Death," *Guardian*, November 2, 2008, http://www.theguardian.com/world/2008/nov/03/somalia-rape-amnesty. In Sudan in 2013, an eighteen-year-old pregnant woman who was raped by seven men was then charged with adultery, prostitution, and committing indecent acts, which carried the death penalty. "Sudan: Gang Rape

Victim Found Guilty of 'Indecent Acts,'" *Sudan Tribune*, February 21, 2014, http://www.sudantribune.com/spip.php?article50031.

18 Why, then, do most: Being able to rewrite our existing labels would certainly be beneficial, given that amending, reassessing, and sometimes rejecting our initial hypotheses in light of emerging facts is critical to reaching accurate conclusions. Dan Simon, *In Doubt: The Psychology of the Criminal Justice System* (Cambridge, MA: Harvard University Press, 2012), 22.

18 Research suggests that once we have: Simon, *In Doubt*, 23.

19 But really our minds are bending: Simon, *In Doubt*, 37–38.

19 Say you learn that: Claudia E. Cohen, "Person Categories and Social Perception; Testing Some Boundaries of the Processing Effects of Prior Knowledge," *Journal of Personality and Social Psychology* 40, no. 3 (1981): 446.

19 Without any conscious effort: Cohen, "Person Categories and Social Perception," 447.

19 And if you know: Nick D. Lange et al., "Contextual Biases in the Interpretation of Auditory Evidence," *Law and Human Behavior* 35 (2011): 180, 182–83.

19 In an experiment along these lines: Nick D. Lange et al., "Contextual Biases," 182–83.

19 In a great demonstration: Jennifer L. Eberhardt, Nilanjana Dasgupta, and Tracy L. Banaszynski, "Believing Is Seeing: The Effects of Racial Labels and Implicit Beliefs on Face Perception," *Personality and Social Psychology Bulletin* 29 (2003): 363–66; Adam Alter, "Why It's Dangerous to Label People," *Psychology Today*, May 17, 2010, http://www.psychologytoday.com/blog/alternative-truths/201005/why-its-dangerous-label-people.

19 What is incredible is that: Eberhardt, Dasgupta, and Banaszynski, "Believing Is Seeing," 367–68.

19 Medical research suggests: Simon, *In Doubt*, 23.

19 Unfortunately, the impact: Initial expectations can bias eyewitnesses and jurors, as well as interrogators, judges, and forensic scientists. Saul M. Kassin, Itiel E. Dror, and Jeff Kukucka, "The Forensic Confirmation Bias: Problems, Perspectives, and Proposed Solutions," *Journal of Applied Research in Memory and Cognition* 2 (2013): 45.

19 "Tunnel vision" is an endemic: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 45–47. In about half of the post-conviction DNA exoneration cases that we know about, flawed forensic science was an important contributor to the wrongful conviction. Innocence Project, "DNA Exonerations Nationwide," accessed February 15, 2014, http://www.innocenceproject.org/Content/DNA_Exonerations_Nationwide.php; Innocence Project, "51% of 300 DNA Exonerations Involved Use of Improper/Unvalidated Forensic Science: Breakdown by Discipline," accessed February 15, 2014, http://www.innocenceproject.org/docs/FSBreakdownDiscipline.pdf.

20 Faces image: Eberhardt, Dasgupta, and Banaszynski, "Believing Is Seeing," 368.

20 In fact, DNA testing: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 47.

20 You've got a feeling: "What is CODIS?," National Institute of Justice, July 16, 2010, http://nij.gov/journals/266/Pages/backlogs-codis.aspx; Joseph Goldstein, "F.B.I. Audit of Database That Indexes DNA Finds Errors in Profiles," *New York Times*, January 24, 2014, http://www.nytimes.com/2014/01/25/nyregion/fbi-audit-of-database-that-indexes-dna-finds-errors-in-profiles.html?hp&_r=1.

20 In one recent study, researchers gave: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 47.

21 They needed to confirm: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 47.

21 As expected, the experts found: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 47.

21 Only one of the seventeen: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 47.

21 Once David was labeled a drunk: This is what psychologists commonly refer to as a "positive test strategy" by which people search for evidence that confirms what is already believed to be true, rather than looking for evidence that contradicts it. Kahneman, *Thinking, Fast and Slow*, 81. When that supporting information is inevitably found, the existing hypothesis appears to be established.

21 Interestingly, the first people: Wilber and Wilgoren, "Medical Condition Suspected."

21 Well, perhaps because they weren't looking: Wilber and Wilgoren, "Medical Condition Suspected."

21 As one of the firefighters recounted: Willoughby, *Summary of Special Report*, 26.

21 According to the U.S. Department: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, "Appendix B: Tables of Model-Based Estimates (50 States and the District of Columbia)," accessed February 15, 2014, http://www.oas.samhsa.gov/2k8state/AppB.htm#TabB-9.

21 After dinner on a Friday night: Brief for Appellant, *Jordan*, 18 A.3d 703 (No. 07-CF-340), 2010 WL 7359337, at *2.

22 But the problem wasn't just that: Simon, *In Doubt*, 38.

22 For example, one of the firefighters: Willoughby, *Summary of Special Report*, 23.

22 The lack of a bracelet: Willoughby, *Summary of Special Report*, 23.

22 Likewise, the Pritchetts: Willoughby, *Summary of Special Report*, 18.

22 According to Commander Robert Contee: Wilber and Wilgoren, "Medical Condition Suspected."

22 With a different starting frame: Willoughby, *Summary of Special Report*, 56.

22 As it was, the first person: Willoughby, *Summary of Special Report*, 56.

23 There was actually plenty: Willoughby, *Summary of Special Report*, 8, 28, 47.

23 The failure to appreciate counterevidence: Kahneman, *Thinking, Fast and Slow*, 84.

23 The lack of independent assessment: Kahneman, *Thinking, Fast and Slow*, 85.

23 This is why when, say, six people: Kahneman, *Thinking, Fast and Slow*, 84.

24 They decided to offer: Milk and Ryan, "Washingtonians of the Year"; Elissa Silverman, "Don't Split Department, Task Force Tells Fenty," *Washington Post*, September 21, 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/09/20/AR2007092000900.html.

24 A number of these reforms: District of Columbia Task Force on Emergency Medical Services, *Report and Recommendations* (Washington, DC: January 27, 2007), 27–33. Unfortunately, there is some evidence that the D.C. government may already be backsliding on certain advances. Andrea Noble, "D.C. Fire Chief's Changes Ignore Earlier EMS Task Force Recommendation," *JEMS*, August, 28, 2013, http://www.jems.com/article/news/dc-fire-chief-s-changes-ignore-earlier-e; Tisha Thompson and Rick Yarborough, "I-Team: Seeing Through the Smoke," NBC Washington, August 27, 2013, http://www.nbcwashington.com/investigations/I-Team-Seeing-Through-the-Smoke-220734681.html.

24 We could start by: Our disgust reactions to certain groups can be amplified by those with an interest in doing so, as genocides throughout history make clear. Harris and Fiske, "Dehumanizing the Lowest of the Low," 852. One of the reasons that the Nazis were able to perpetrate the Final Solution was because of a powerful propaganda campaign aimed at depicting Jews as disgusting: diseased and akin to vermin. Sandra Kiume, "Disgust and Social Tolerance," *Psych Central*, accessed February 15, 2014, http://psychcentral.com/blog/archives/2007/01/04/disgust-and-social-tolerance/. Thankfully, education can also serve to reduce the disgust we may feel toward outgroups.

24 Perhaps most important: Kassin, Dror, and Kukucka, "The Forensic Confirmation Bias," 49.

25 He used a shortcut: Amanda Schaffer, "The Moral Dilemmas of Doctors During Disaster," *New Yorker*, September 13, 2013, http://www.newyorker.com/online/blogs/elements/2013/09/the-moral-dilemmas-of-doctors-during-disaster.html.

25 In that panicked moment: Schaffer, "The Moral Dilemmas of Doctors."

25 It did not help doctors: Schaffer, "The Moral Dilemmas of Doctors."

25 A DNR simply informs: "Do Not Resuscitate Orders," MedlinePlus, last modified February 3, 2014, http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000473.htm.

25 Moreover, a person may choose: "Do Not Resuscitate Orders," MedlinePlus, last modified February 3, 2014, http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000473.htm.

25 The patients abandoned: Schaffer, "The Moral Dilemmas of Doctors."

25 They carried an almost infinite array: Schaffer, "The Moral Dilemmas of Doctors."

2. Dangerous Confessions ~ The Detective

26 The back door of the apartment: Brief for Defendant at 3, State v. Rivera, 962 N.E. 2d 53 (Ill. App. Ct. 2011) (No. 2-09-1060), http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/documents/RIVERA_Brief.pdf.

26 Someone had washed: Brief for Defendant at 2, *Rivera* (No. 2-09-1060).

26 And if you walked right: Brief for Defendant at 2–3, *Rivera* (No. 2-09-1060).

26 Dawn Engelbrecht knew: Maurice Possley, "DNA Tests Give Hope to Convict in 1992 Murder," *Chicago Tribune*, March 26, 2005, http://articles.chicagotribune.com/2005-03-26/news/0503260252_1_dna-tests-test-results-crime-lab.

26 Holly Staker was supposed to be: Possley, "DNA Tests."

26 A neighbor had noticed him: Possley, "DNA Tests."

26 No one picked up: Possley, "DNA Tests"; Brief for Defendant at 3, *Rivera* (No. 2-09-1060). Details about the house and neighborhood were collected using Google Maps and Zillow.

26 It was locked: Andrew Martin, "Baby-sitter's Murder Victimizes 2 Families," *Chicago Tribune*, October 23, 1992, http://articles.chicagotribune.com/1992-10-23/news/9204050831_1_apartment-victims-dreams.

26 But when she finally turned: Martin, "Baby-sitter's Murder"; Phuong Le, "Testimony of Girl IDs Defendant in Slaying," *Chicago Tribune*, September 18, 1998, http://articles.chicagotribune.com/1998-09-18/news/9809180232_1_testimony-apartment-juan-rivera.

27 A single white tennis shoe: "Juan Rivera Exhibit 2," *Northwestern Law*, 39, accessed May 5, 2014,

http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/documents/RiveraPCExhibit2.pdf.

27 A chair in the dining room: Le, “Testimony”; “Juan Rivera Exhibit 2,” 39.

27 Taylor, the two-year-old: Le, “Testimony.”

27 It was not until the police arrived: Le, “Testimony.”

27 Eleven-year-old Holly: Le, “Testimony”; “Juan Rivera Exhibit 2,” 39.

27 She had been stabbed: Brief for Defendant at 3, *Rivera* (No. 2-09-1060).

27 A year later, twelve jurors: *Rivera*, 962 N.E. 2d at 55, http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/documents/Outright-Reversal.pdf.

27 Juan—a petty criminal: Andrew Martin, “The Prosecution’s Case Against DNA,” *New York Times,* November 25, 2011, http://www.nytimes.com/2011/11/27/magazine/dna-evidence-lake-county.html?pagewanted=all; “Juan Rivera,” *The National Registry of Exonerations*, accessed May 8, 2014, https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3850.

27 Guilty: *Rivera*, 962 N.E. 2d at 55.

27 And so it went at the second trial: *Rivera*, 962 N.E. 2d at 55–56.

27 It had always been there: Andrew Martin, “Illinois: Inmate Cleared by DNA Is Freed,” *New York Times,* January 6, 2012, http://www.nytimes.com/2012/01/07/us/illinois-inmate-cleared-by-dna-is-freed.html; Martin, “Prosecution’s Case.”

27 A vaginal swab had been collected: *Rivera*, 962 N.E. 2d at 60.

27 But after being labeled: *Rivera*, 962 N.E. 2d at 56.

27 The semen in the sample: *Rivera*, 962 N.E. 2d at 59.

28 It took four more years: Andrew Martin, "Court Reverses Conviction of Man Jailed for 19 Years in Rape and Murder," *New York Times*, December 10, 2011, http://www.nytimes.com/2011/12/11/us/illinois-court-reverses-conviction-of-man-jailed-in-rape-murder.html.

28 With the lab test: *Rivera*, 962 N.E. 2d at 62.

28 The prosecution didn't back away: Martin, "Court Reverses Conviction."

28 The problem for the prosecution: *Rivera*, 962 N.E. 2d at 63.

28 Semen tends to drain into underwear: *Rivera*, 962 N.E. 2d at 59.

28 That meant that the prosecution: *Rivera*, 962 N.E. 2d at 63.

28 The account seemed implausible: *Rivera*, 962 N.E. 2d at 63.

28 When they returned, they were met: Lisa Black and Ruth Fuller, "3rd Life Sentence for Girl's Murder," *Chicago Tribune*, June 26, 2009, http://www.chicagotribune.com/news/local/breaking/chi-090626juan-rivera,0,3431141.story.

28 Juan, on the threshold: Black and Fuller, "3rd life sentence."

28 It was a verdict that: Black and Fuller, "3rd Life Sentence."

28 It wasn't just that none: *Rivera*, 962 N.E. 2d at 59–60, 62; Brief for Defendant at 38, *Rivera* (No. 2-09-1060).

29 There were also phone records: Brief for Defendant at 22, 26, *Rivera* (No. 2-09-1060); Martin, "Prosecution's Case."

29 Yet, despite Juan's alibi: *Rivera*, 962 N.E. 2d at 57, 61-62; Brief for Defendant at 17, *Rivera* (No. 2-09-1060).

29 As Holly's sister later: Martin, "Prosecution's Case."

29 Indeed, the esteemed father: John Henry Wigmore, *A Treatise on the Anglo-American System of Evidence in Trials at Common Law*, 2nd ed., vol. 2 (Boston: Little, Brown, 1923), § 835.

29 The potency of this assumption: Experimental evidence shows that people place great weight on confessions. Saul M. Kassin and Gisli H. Gudjonsson, "The Psychology of Confessions: A Review of the Literature and Issues," *Psychological Science in the Public Interest* 5 (2004): 56–59; Saul M. Kassin, Christian A. Meissner, and Rebecca J. Norwick, "'I'd Know a False Confession If I Saw One': A Comparative Study of College Students and Police Investigators," *Law and Human Behavior* 34 (2005): 211–227; Kassin et al., "Police-Induced Confessions: Risk Factors and Recommendations," *Law and Human Behavior* 34 (2010): 24–25. For an overview of some of that research, see Dan Simon, *In Doubt: The Psychology of the Criminal Justice System* (Cambridge, MA: Harvard University Press, 2012), 160–62. The power of the confession is not lost on members of the judiciary. According to Supreme Court Justice Byron White, "the defendant's own confession is probably the most probative and damaging evidence that can be admitted against him. Though itself an out-of-court statement, it is admitted as reliable evidence because it is an admission of guilt by the defendant and constitutes direct evidence of the facts to which it relates. Even the testimony of an eyewitness may be less reliable than the defendant's own confession. An observer may not correctly perceive, understand, or remember the acts of another, but the admissions of a defendant come from the actor himself, the most knowledgeable and unimpeachable source of information about his past conduct. Certainly, confessions have profound impact on the jury, so much so that we may justifiably doubt its ability to put them out of mind even if told to do so." Bruton v. United States, 391 U.S. 123, 139–40 (1968) (White, J., dissenting).

29 We expect people to be consistent: Sam Sommers, *Situations Matter* (New York: Riverhead Books, 2011), 30.

29 In a famous study documenting: Edward Jones and Victor Harris, "The Attribution of Attitudes," *Journal of Experimental Social Psychology* 3 (1967): 1, 4.

29 Despite being told that: Jones and Harris, "Attribution of Attitudes," 1, 4–6.

30 As Supreme Court Justice Hugo Black: Chambers v. Florida, 309 U.S. 227, 237–38 (1940).

30 Indeed, before the 1930s: Simon, *In Doubt*, 132; Kassin et al., "Police-Induced Confessions," 6. For a review of the coercive police practices—from beating with a rubber hose and simulated suffocation to deprivation of sleep and food, see R. A. Leo, "The Third Degree and the Origins of Psychological Police Interrogation in the United States," in *Interrogations, Confessions, and Entrapment*, ed. G. Daniel Lassiter (New York: Kluwer Academic, 2004), 37–84.

30 But that has been abandoned: Simon, *In Doubt*, 134–35. Of course, it is worth noting that, well prior to the 1930s, the Supreme Court made clear that an admissible confession had to be "free and voluntary" and "must not be extracted by any sort of threats or violence." Bram v. United States, 168 U.S. 532, 542–43 (1897). It just took a few more decades for police practice to match the judicial rhetoric.

30 Juan Rivera, though, did falsely confess: Confessions, as a general matter, are fairly common, despite what we might imagine. It appears that there is a full confession or, at least, an incriminating statement made in about half of all interrogations. Simon, *In Doubt*, 120; Saul M. Kassin et al., "Police Interviewing and Interrogation: A Self-Report Survey of Police Practices and Beliefs," *Law and Human Behavior*, 31 (2007): 395.

One of the first American episodes of false confession came during the Salem witch trials in 1692, when dozens of women admitted to practicing witchcraft. Kassin et al., "Police-Induced Confessions," 4; Carol F. Karlsen, *The Devil in the Shape of a Woman: Witchcraft in Colonial New England* (New York: W.W. Norton & Company, 1998). However, false confessions are not an American phenomenon and have been documented in Germany, Canada, Ireland, China, Japan, and numerous other countries. Kassin et al., "Police-Induced Confessions," 5.

30 False confessions and incriminating statements: Innocence Project, "DNA Exonerations Nationwide," accessed May 6, 2014, http://www.innocenceproject.org/Content/DNA_Exonerations_Nationwide.php.

30 More broadly, they appear to have: "DNA Exonerations Nationwide."

30 These cases tend to confound: Simon, *In Doubt*, 134–36. In one sample, more than 30 percent of the reviewed cases of false confession involved more than one innocent person confessing. Steven A. Drizin and Richard A. Leo, "The Problem of False Confessions in the Post-DNA World," *North Carolina Law Review* 82 (2004): 972.

30 Indeed, in one of the most famous: The boys were subjected to lengthy interrogations and immediately retracted their statements after being arrested. However, they were all convicted and sent to prison, until the true rapist confessed and agreed to a DNA test. Brandon L. Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Cambridge, MA: Harvard University Press, 2011), 31; "Central Park Jogger (1989)," *New York Times*, October 3, 2012, http://topics.nytimes.com/top/reference/timestopics/subjects/c/central_park_jogger_case_1989/index.html; Kassin et al., "Police-Induced Confessions," 4.

30 While some who falsely confess: Simon, *In Doubt*, 121. For a discussion of the different types of confessions, see Lawrence S. Wrightsman and Saul M. Kassin, *Confessions in the*

Courtroom (Newbury Park, CA: Sage, 2003), 84–93. The focus in this chapter is on coerced confessions. There is an entirely separate category of truly voluntary false confessions, which may emerge particularly following highly publicized crimes. Two hundred people, for example, are known to have confessed to the kidnapping of Charles Lindbergh's infant son. Kassin et al., "Police-Induced Confessions," 14.

30 The generally accepted gold standard: Fred E. Inbau et al., *Criminal Interrogation and Confessions*, 5th ed. (Burlington, MA: Jones & Barlett Learning, 2013); Simon, *In Doubt*, 121–22; Garrett, *Convicting the Innocent*, 22. Hundreds of thousands of investigators in North America, Europe, and Asia have been trained in the Reid technique. Inbau et al., *Criminal Interrogation*, viii.

30 Using the Reid approach: Inbau et al., *Criminal Interrogation,* 3–7, 187. Investigators following the Reid technique may ask "behavior-provoking questions" (e.g., "Jim, under any circumstances do you think the person who started that fire should be given a second chance?") meant to induce revealing behavior, like fidgeting with one's hands, averting one's gaze, and freezing up. Inbau et al., *Criminal Interrogation*, 155, 161; Kassin et al., "Police-Induced Confessions," 6.

31 And far from correcting: Inbau et al., *Criminal Interrogation*, 101–37; Simon, *In Doubt*, 127–28.

31 Indeed, it is innocent people: Simon, *In Doubt*, 140.

31 They tend to assume: There is some evidence that being innocent may actually increase one's risk of falsely confessing. Kassin et al., "Police-Induced Confessions," 22–23.; Simon, *In Doubt*, 140.

31 Since they didn't commit the crime: Simon, *In Doubt*, 140.

31 But, in reality, once the interrogation: Inbau et al., *Criminal Interrogation*, 185–327; Simon, *In Doubt*, 133.

31 To this end, the Reid manual: Kassin et al., "Police-Induced Confessions," 12. The Reid manual, for instance, suggests bringing in a false evidence file into the interview room along with "other visual props, such as a DVD disc, CD-ROM, audio tape, a fingerprint card, an evidence bag containing hair or other fibers, spent shell casings, vials of colored liquid, and others." Inbau et al., *Criminal Interrogation*, 192.

31 As a result, the environment: Kassin et al., "Police-Induced Confessions," 7; Simon, *In Doubt*, 134.

31 Many who falsely confess later say: Simon, *In Doubt*, 134; Brandon Garrett, *Convicting the Innocent*, 18.

31 And experimental evidence suggests: It has been hypothesized that because resisting accusations during an interrogation appears to result in stress-related bodily changes, it may be that participants falsely confess simply to relieve heavy physiologic stress. Max Guyll et al., "Innocence and Resisting Confession During Interrogation: Effects on Physiologic Activity," *Law and Human Behavior* 37 (2013): 8, doi: 10.1037/lhb0000044.

31 When we have an opportunity: *Rivera*, 962 N.E. 2d at 65–66.

32 According to the nine steps: Kassin et al., "Police-Induced Confessions," 7.

32 The officer might suggest that: Inbau et al., *Criminal Interrogation*, 217–18; Kassin et al., "Police-Induced Confessions," 12.

32 Empirical evidence suggests that both of these: While the minimization technique appears to lead people to believe that they are being promised lenient treatment, maximization tends to be interpreted as a threat. Kassin and Gudjonsson, "The Psychology of Confessions," 53-55; Saul

M. Kassin and Karlyn McNall, "Police Interrogations and Confessions: Communicating Promises and Threats by Pragmatic Implication," *Law and Human Behavior*, 15 (1991): 233–51; Melissa B. Russano et al., "Investigating True and False Confessions Within a Novel Experimental Paradigm," *Psychological Science* 16 (2005): 481–86. For an overview of this literature, see Simon, *In Doubt*, 135–38; Kassin et al., "Police-Induced Confessions," 12.

32 And the effects are not small: Russano et al., "Investigating True and False Confessions," 483–84. The minimization prompt provided in the main text is just one example of those used in the experiment.

32 When the interrogator added: Russano et al., "Investigating True and False Confessions," 484. It should be noted that the fifth edition of the Reid manual contains numerous asides offering cautions and caveats, some of which nod to the concerns raised in this chapter. The problem is that, looking at the manual as a whole from a typical reader's perspective, it is hard to view them as anything but exceptions (e.g., gaze aversion is a good way to tell someone is lying, but there are a couple of exceptions). Inbau et al., *Criminal Interrogation*, 161. Indeed, the Reid manual may pose *more* of a threat now: while the problematic core has been preserved, the current edition contains sufficient hedges and scientific asides to convince judges that it is unlikely to encourage false confessions.

32 Despite these serious concerns: It is not as if the Supreme Court has failed to grasp the importance of a confession. In the case of *Colorado v. Connelly*, the Court explained that "the introduction of a confession makes the other aspects of a trial in a court superfluous, and the real trial, for all practical purposes, occurs when the confession is obtained." Colorado v. Connelly, 479 U.S. 157, 182 (1986). So, the failure of the Court to make changes to eliminate false

confessions likely reflects mistaken beliefs about the prevalence of such incidents and a fear of constraining police officers and prosecutors.

32 While the Supreme Court has formally: Bram v. United States, 168 U.S. 532, 542–43 (1897); Simon, *In Doubt*, 134–36. For instance, a review of cases revealed numerous instances where judges allowed confessions gained after interrogators offered what amounted to a prohibited "deal" (i.e., if you confess, we will make sure you get a lesser sentence). Welsh S. White, *Miranda's Waning Protections: Police Interrogation Practices after Dickerson* (Ann Arbor, MI: University of Michigan Press, 2006). Indeed, while the language that the Supreme Court used in *Bram v. United States* would suggest a firm ban on minimization techniques, the case has been a weak and often nonexistent constraint on such practices. Kassin et al., "Police-Induced Confessions," 12.

32 Further, the justices have explicitly sanctioned: Simon, *In Doubt*, 135; Garrett, *Convicting the Innocent*, 23; Kassin and Gudjonsson, "The Psychology of Confessions," 54. The Supreme Court has made it clear that deception by the police is not enough by itself to make a confession involuntary. Frazier v. Cupp, 394 U.S. 731 (1969); Kassin et al., "Police-Induced Confessions," 13. That said, some state courts have barred the actual construction of false evidence (e.g., fake crime lab reports), while continuing to allow the police to lie to the suspect about the existence of incriminating evidence. Kassin et al., "Police-Induced Confessions," 13.

32 In one of the most tragic cases: David K. Shipler, "Why Do Innocent People Confess?" *New York Times*, February 23, 2012, http://www.nytimes.com/2012/02/26/opinion/sunday/why-do-innocent-people-confess.html?pagewanted=all.

33 Investigators suspected that Martin: Shipler, "Innocent People Confess."

33 After the fake conversation: Shipler, "Innocent People Confess." The interrogator also lied and said that strands of Martin's hair were found in his mother's hand and that a "humidity test" had revealed that he had showered to remove the blood on his body. Kassin et al., "Police-Induced Confessions," 17.

33 The father, in fact, never came to: Shipler, "Innocent People Confess."

33 His case involved two: Simon, *In Doubt*, 140; Gross et al., "Exonerations in the United States 1989 Through 2003," *Journal of Criminal Law and Criminology* 95 (Winter 2005): 523–60.

33 A disproportionate number of verified: Those who are young, low in intelligence, or mentally disabled have demonstrated particular susceptibility to coercion and a strong desire to defer to or please interrogators. Garrett, *Convicting the Innocent*, 38; Simon, *In Doubt*, 140.

33 At the time of his arrest: *Rivera*, 962 N.E. 2d at 59–60; "Juan Rivera, Center on Wrongful Convictions," *Northwestern Law*, accessed May 6, 2014, http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/il/juan-rivera.html.

33 Among other mental illnesses: Brief for Defendant at 26, *Rivera* (No. 2-09-1060).

33 Despite these warning signs: "Juan Rivera, Center on Wrongful Convictions." His mental health conditions were disclosed to the police on a Mental Data Sheet before the first polygraph. Brief for Defendant at 5, *Rivera* (No. 2-09-1060).

33 It took four days: "Juan Rivera, Center on Wrongful Convictions."

33 But the police, as they often do: "Juan Rivera, Center on Wrongful Convictions."

34 Although the polygraphs administered: Brief for Defendant at 77, *Rivera* (No. 2-09-1060). It is worth noting that, in experiments, falsely telling participants that a polygraph shows that

they committed a violation increases the number of people who admit to that violation. Kassin et al., “Police-Induced Confessions,” 17.

34 **Rivera immediately became upset:** Brief for Defendant at 7–8, *Rivera* (No. 2-09-1060).

34 **At around midnight:** Brief for Defendant at 9, *Rivera* (No. 2-09-1060).

34 **He wasn’t able to get the words out:** Brief for Defendant at 9, *Rivera* (No. 2-09-1060).

34 **Over the next few hours:** Brief for Defendant at 9–10, *Rivera* (No. 2-09-1060).

34 **By 3 a.m., the officers had:** Brief for Defendant at 11, *Rivera* (No. 2-09-1060).

34 **Rivera, left on his own:** Brief for Defendant at 11, 27, *Rivera* (No. 2-09-1060).

34 **Moved to a padded cell:** Brief for Defendant at 11, 27, *Rivera* (No. 2-09-1060).

34 **The nurse on duty described him:** Brief for Defendant at 11–12, *Rivera* (No. 2-09-1060).

34 **When she checked back:** Brief for Defendant at 12, *Rivera* (No. 2-09-1060).

34 **Returning in the early morning:** Brief for Defendant at 12, *Rivera* (No. 2-09-1060).

34 **The document, though, was so inconsistent:** Brief for Defendant at 13, *Rivera* (No. 2-09-1060).

34 **The two detectives:** Brief for Defendant at 13, *Rivera* (No. 2-09-1060).

35 **These interrogators focused on:** Brief for Defendant at 15, *Rivera* (No. 2-09-1060).

35 **After a few more hours:** Brief for Defendant at 15, *Rivera* (No. 2-09-1060).

35 **Questions like:** Brief for Defendant at 15, *Rivera* (No. 2-09-1060); Simon, *In Doubt*, 136.

35 **Information that only the real perpetrator:** Simon, *In Doubt*, 136.

35 **Juan Rivera discussed the crime:** *Rivera*, 962 N.E. 2d at 67; Brief for Defendant at 5, *Rivera* (No. 2-09-1060); Brief for Respondent at 7, *Rivera* (No. 2-09-1060), http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/documents/Rivera_States2011Brief.pdf.

35 Moreover, at least fifteen: *Rivera*, 962 N.E. 2d at 65–66. It is notable that a significant number of false confessions cases have involved taking the suspect to the crime scene. Garrett, *Convicting the Innocent*, 33.

35 Lamentably, these are just the types: Simon, *In Doubt*, 136.

35 While a more rigorous interrogation protocol: A less error-prone interrogation approach would have involved eliminating suggestive questioning, contaminating information, and coercive pressures, among other things. Although the Reid manual explicitly bars contaminating confessions by providing relevant details to a suspect, it still occurs. Garrett, *Convicting the Innocent*, 23.

35 This can be problematic when it comes to: *In Doubt*, 126; Carol Toris and Bella M. DePaulo, "Effects of Actual Deception and Suspiciousness of Deception on Interpersonal Perceptions," *Journal of Personality and Social Psychology* 47 (1984): 1063–73.

35 Beginning the process with a theory: Simon, *In Doubt*, 126.

35 This, in turn, can lead them: Simon, *In Doubt*, 137.

35 One study found that mock interrogators: Simon, *In Doubt*, 137.

36 The results were stark: Simon, *In Doubt*, 137.

36 As is common in false confessions: Brief for Defendant at 9, 10, 42, *Rivera* (No. 2-09-1060). It is very common for suspects to provide facts that contradict what is known about the crime, appearing in at least 75 percent of known false confession exoneration cases. Garrett, *Convicting the Innocent*, 33.

36 And once a confession is extracted: Brandon L. Garrett, "Introduction: *New England Law Review* Symposium on 'Convicting the Innocent,'" *New England Law Review* 46 (2012): 680.

36 In turn, your defense attorney: Kassin et al., “Police-Induced Confessions,” 23. While prosecutors tend to maximize the charges they bring against confessing defendants and seek higher bails, defense attorneys tend to push plea bargains thinking they’ll lose at trial. Drizin and Leo, “The Problem of False Confessions,” 922.

36 Perhaps most important, a confession: Once they get a confession, the police wrap things up, which means that new evidence of innocence tends to be disregarded and leads focused on other suspects tend to be ignored. Kassin et al., “Police-Induced Confessions,” 23; Drizin and Leo, “The Problem of False Confessions,” 921–23; Garrett, *Convicting the Innocent*, 35.

36 In one particularly egregious case: Garrett, *Convicting the Innocent*, 35.

36 He was turned down, however: Garrett, *Convicting the Innocent*, 35.

37 In eight of the first 250: Garrett, *Convicting the Innocent*, 35.

37 The only reason these men: Garrett, *Convicting the Innocent*, 35.

37 As remarkable as it is: Garrett, *Convicting the Innocent*, 35.

37 Hard-nosed interrogations are particularly: Simon, *In Doubt*, 132; Garrett, *Convicting the Innocent*, 21.

37 Failing to gain a confession: Simon, *In Doubt*, 132.

37 By the time Juan was brought in: Martin, “Prosecution’s Case.”

37 In December 2011: Martin, “Illinois: Inmate Cleared.”

37 Juan Rivera spent half his life: Martin, “Prosecution’s Case”; Martin, “Illinois: Inmate Cleared.” Juan suffered, as the court put it, “the nightmare of wrongful incarceration.” *Rivera*, 962 N.E. at 67–68.

37 It took Juan keeping faith: Black and Fuller, “3rd Life Sentence.”

38 In a deeply troubling twist: Steve Mills and Dan Hinkel, "DNA Links Murder and Rape of Holly Staker, 11, to Second Murder 8 Years Later," *Chicago Tribune*, June 10, 2014, http://articles.chicagotribune.com/2014-06-10/news/chi-dna-links-murder-and-rape-of-holly-staker-11-to-second-murder-8-years-later-20140610_1_holly-staker-dna-evidence-dna-match.

38 During the closing argument: Martin, "Prosecution's Case."

39 Members of the media and others: Martin, "Prosecution's Case."

39 Ninety to ninety-five percent: Lindsey Devers, "Plea and Charge Bargaining," U.S. Department of Justice, January 24, 2011, 3, https://www.bja.gov/Publications/PleaBargainingResearchSummary.pdf; John H. Langbein, "Torture and Plea Bargaining," *University of Chicago Law Review* 46 (1978): 12.

39 Let that sink in: Langbein, "Torture and Plea Bargaining," 12; Devers, "Plea and Charge Bargaining," 3.

39 Suppose you were told that: Innocence Project, "James Ochoa," accessed May 6, 2014, http://www.innocenceproject.org/Content/James_Ochoa.php.

39 Twenty-year-old James Ochoa: "James Ochoa"; R. Scott Moxley, "CSI Games: If DNA Evidence Doesn't Fit in Orange County, Alter It?," *OC Weekly News*, March 13, 2008, http://www.ocweekly.com/2008-03-13/news/csi-games/.

39 He took the plea and spent: "James Ochoa." Thankfully, the stabbing was not fatal. Moxley, "CSI Games."

39 The Supreme Court believes that: Lucian E. Dervan and Vanessa A. Edkins, "The Innocent Defendant's Dilemma: An Innovative Empirical Study of Plea Bargaining's Innocence Problem," *Journal of Criminal Law and Criminology* 103 (2013): 12, 46–47.

40 In one recent study extending: Dervan and Edkins, “The Innocent Defendant’s Dilemma,” 1, 3.

40 Over half of innocent participants: Dervan and Edkins, “The Innocent Defendant’s Dilemma,” 1, 3.

40 If we really believe in transparency: Langbein, “Torture and Plea Bargaining,” 18.

40 Despite the bluster of the prosecutors: R. Scott Moxley, “The Case of the Dog That Couldn’t Sniff Straight,” *OC Weekly News*, November 5, 2005, http://www.ocweekly.com/2005-11-03/news/the-case-of-the-dog-that-couldn-t-sniff-straight/2/.

40 Most critically, the sheriff’s crime lab: The perpetrator’s gun and hat both had DNA matching the same person, but not Ochoa’s. R. Scott Moxley, “Oops,” *OC Weekly News*, October 26, 2006, http://www.ocweekly.com/2006-10-26/news/oops/.

40 But the real cards were: R. Scott Moxley, “The Case of the Dog That Couldn’t Sniff Straight,” *OC Weekly News*, November 5, 2005, http://www.ocweekly.com/2005-11-03/news/the-case-of-the-dog-that-couldn-t-sniff-straight/2/.

3. The Criminal Mind ~ The Suspect

41 Mug shot photographs: *Frank Masters*, photograph, 1890 (New Zealand Police Museum, Porirua); *John Powell*, photograph, 1889 (New Zealand Police Museum, Porirua); *Alick Evan McGregor*, photograph, 1887 (New Zealand Police Museum, Porirua); *William Johnston*, photograph, 1887 (New Zealand Police Museum, Porirua).

41 Which one was convicted of raping: “Frank Masters,” New Zealand Police Museum, accessed May 13, 2014, https://sites.google.com/site/newzealandpolicemuseum/home/online-exhibitions/mug-shots/selectedbiographies/frankmasters.

41 Which one was a tightrope walker: "William Johnston," New Zealand Police Museum, accessed May 13, 2014, https://plus.google.com/photos/105144845743264611130/albums/5450146114861830929/5450149070403000498?banner=pwa&pid=5450149070403000498&oid=105144845743264611130.

41 Which one was sentenced: "John Powell," New Zealand Police Museum, accessed May 13, 2014, https://plus.google.com/photos/105144845743264611130/albums/5450146114861830929/5450148046638424946?banner=pwa&pid=5450148046638424946&oid=105144845743264611130.

41 When a suspect was recently apprehended: Michael Muskal, "Exterminator Charged with Murder in Death of Philadelphia Doctor," *Los Angeles Times*, January 24, 2013, http://articles.latimes.com/2013/jan/24/nation/la-na-nn-philadelphia-exterminator-murder-20130124.

42 And as I began writing: *Frank Masters*; *John Powell*; *Alick Evan McGregor*; *William Johnston*.

42 The Internet provides a titillating: "Celebrity Mugshots," CNN.com, last updated March 20, 2013, http://www.cnn.com/2013/03/19/showbiz/celebrity-news-gossip/bruno-mars-mugshot-smile-gq; http://www.bing.com/search?q=hot+mug+shots&qs=n&form=QBRE&pq=hot+mug+shots&sc=1-12&sp=-1&sk=.

42 The rapist was the man: "Frank Masters."

42 The others in the lineup: "John Powell"; "Alick Evan McGregor"; "William Johnston."

42 Masters was a serial sex offender: "This Day: An Extraordinary Scene," *Evening Post*, December 4, 1889, http://paperspast.natlib.govt.nz/cgi-

bin/paperspast?a=d&cl=search&d=EP18891204.2.45&srpos=58&e=-------10--51-byDA---2%22frank+masters%22-all; "Urgent Private Affairs," *Evening Post*, June 10, 1886, http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&d=EP18860610.2.11.

42 Though all of those affected: "Frank Masters"

43 Even if we could trade: "This Day."

43 During his fourth trial: "Criminal Sittings," *Evening Post*, October 5, 1888, http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&cl=search&d=EP18881005.2.54&srpos=20&e=-------10--11-byDA---2%22frank+masters%22-all.

43 And at the suggestion of his lawyer: "Criminal Sittings."

43 Nonetheless, Dr. Johnston: "Criminal Sittings."

43 So, despite Masters' pleas: "Criminal Sittings."

43 At his sentencing for that crime: "This Day."

43 "He couldn't help himself": "This Day."

43 In addition to "suggesting that he should": "This Day."

43 He wanted to do good: "This Day."

43 The reporter who recounted: "This Day."

43 But the judge was less sure: "This Day."

44 We all have intuitions: Sharrona Pearl, *About Faces: Physiognomy in Nineteenth-Century Britain* (Cambridge, MA: Harvard University Press, 2010), 1, 38.

44 The idea that a person's facial traits: Pearl, *About Faces*, 1, 11.

44 The message in the wind: Pearl, *About Faces*, 186.

44 Darwin, Edison, and Daguerre: "Victorian Science: An Introduction," Victorian Web, last modified December 6, 2008, http://www.victorianweb.org/science/intro.html.

45 One of those swept up: *Encyclopedia Britannica Online*, s.v. "Cesare Lombroso," accessed May 18, 2014, http://www.britannica.com/EBchecked/topic/346759/Cesare-Lombroso.

45 The Lombrosians were convinced: Simon A. Cole, *Suspect Identities: A History of Fingerprinting and Criminal Identification* (London: Harvard University Press, 2001), 23.

45 They were particularly interested: Cole, *Suspect Identities*, 23.

45 One of Lombroso's epiphanies: Gina Lombroso-Ferrero, *Criminal Man According to the Classification of Cesare Lombroso* (New York: The Knickerbocker Press, 1911), xv.

45 Those among us who seemed: Lombroso, *Criminal Man*, xv.

45 They were "born criminals": Jonathan Finn, *Capturing the Criminal Image: From Mug Shot to Surveillance Society* (Minneapolis: University of Minnesota Press, 2009), 14; Lombroso, *Criminal Man*, xv.

45 In order to identify those "degenerates": Cole, *Suspect Identities*, 23; Finn, *Capturing the Criminal Image*, 15; Encyclopedia Britannica, "Cesare Lombroso."

45 He and his followers set about: Cole, *Suspect Identities*, 23.

45 These were all on: Cole, *Suspect Identities*, 24.

46 Man and cow image: "File: De Humana Physiognomia-Kuh und Mann.jpg," *Wikimedia Commons*, last modified August 1, 2008, http://commons.wikimedia.org/wiki/File:De_Humana_Physiognomia_-_Kuh_und_Mann.jpg/.

46 Lombroso's project was greatly: Finn, *Capturing the Criminal Image*, 15–16.

46 There were devices to record: Finn, *Capturing the Criminal Image*, 15–16.

46 Perhaps my favorite invention: Cole, *Suspect Identities*, 58; Robert Fletcher, "The New School of Criminal Anthropology" (Washington, DC: The Anthropological Society of Washington, April 21, 1861), 24–25.

46 Frigerio claimed that criminals: Fletcher, "The New School of Criminal Anthropology," 24–25.

46 In the quest to record: Cole, *Suspect Identities*, 22.

46 Although mug shots were initially used: The first use of photography in fighting crime was a simple means of making manifest a person's otherwise hidden criminal past. Cole, *Suspect Identities*, 20–22. And, in that sense, it paralleled earlier practices of altering the body of the criminal to signal his evil nature. Cole, *Suspect Identities*, 7. In preceding centuries, ne'er-do-wells had been literally marked. Cole, *Suspect Identities*, 7.

Medieval Europeans, for example, commonly resorted to branding and mutilation, and there are recorded examples in the American colonies as well. Cole, *Suspect Identities*, 7. Many readers will be familiar with Hester Prynne's scarlet letter *A*, but an alphabet soup of marks existed to convey to any onlooker the particular criminal character of the man or woman in question. Cole, *Suspect Identities*, 7; James A. Cox, "Bilboes, Brands, and Branks: Colonial Crimes and Punishments," *Colonial Williamsburg Journal*, Spring 2003, http://www.history.org/foundation/journal/spring03/branks.cfm. In Maryland, each county had an array of branding irons: *F* for forgery, *H* for stealer of hogs, *M* for manslaughter, *SL* for seditious libel, *R* for rogue, and *T* for thief. Cox, "Bilboes, Brands, and Branks." The camera rendered such markings unnecessary—with a photographic record linking a man to his bad act, a preexisting mole or crooked nose could provide the same information.

The British and French recorded images of prisoners as early as the 1840s. Cole, *Suspect Identities*, 20. And, in the subsequent decades in the United States, police departments began to assemble “rogues’ galleries” that could be displayed for members of the police—and sometimes the public—to view hundreds of photographs of known criminals in order to be able to note them later. Cole, *Suspect Identities*, 20-21. By comparing and cataloguing these photos, physiognomists hoped to capture the signs of criminal nature in the body with great accuracy. Cole, *Suspect Identities*, 24.

46 One British innovator, Francis Galton: Wayne A. Logan, “Policing Identity,” *Boston University Law Review* 92 (2012): 1573; Cole, *Suspect Identities*, 24.

46 What does a hotel thief: Cole, *Suspect Identities*, 24.

46 Galton would take the pictures: Cole, *Suspect Identities*, 24.

47 Conceivably, a person could then: Cole, *Suspect Identities*, 26.

47 The work of Galton: People had devoted their professional lives to devising complex classification systems, writing books, creating journals, circulating pamphlets, and holding society conferences, and it was mostly all bogus. Pearl, *About Faces*, 189.

47 And far worse, their crackpot: Finn, *Capturing the Criminal Image*, 16–17, 20.

47 It seems we have come: “Dachau Liberated: April 29, 1945,” This Day in History, History.com, accessed May 19, 2014, http://www.history.com/this-day-in-history/dachau-liberated.

47 We teach the forcible sterilizations: John Kitzhaber, “Proclamation of Human Rights Day, and Apology for Oregon’s Forced Sterilization of Institutionalized Patients” (speech, Salem, OR, December 2, 2002); Elizabeth Cohen, “North Carolina Lawmakers OK Payments for Victims of

Forced Sterlization," CNN.com, July 28, 2013, http://www.cnn.com/2013/07/26/us/north-carolina-sterilization-payments.

47 Those, like Sylvester Stallone's mother: Hope Reeves, "I See . . . Hemorrhoids in Your Future," *New York Times*, March 10, 2013, http://www.nytimes.com/interactive/2013/03/10/magazine/one-page-magazine.html?_r=0 .

47 Working toward an objective: And, indeed, both men's work was the target of significant contemporary criticism from other criminologists. Neil Davie, "Lombroso and the 'Men of Real Science': British Reactions, 1886–1918," in *The Cesare Lombroso Handbook*, eds. Paul Knepper and P.J. Ystehede (New York: Routledge, 2013), 344–47; Neil Davie, *Tracing the Criminal: The Rise of Scientific Criminology in Britain, 1860–1918* (Oxford: The Bardwell Press, 2005), 21–22, 105–06, 257–59. Galton was even able to admit that his initial theory that criminals could be identified based on their fingerprints turned out to be false. Pearl, *About Faces*, 207.

47 Just as problematic, in considering: Adam Benforado, "The Geography of Criminal Law," *Cardozo Law Review* 31, no. 3 (2010): 825–27 nn. 6–12.

47 As a general matter, we're inclined: Lee Ross and Donna Shestowsky, "Contemporary Psychology's Challenges to Legal Theory and Practice," *Northwestern University Law Review* 97, no. 3 (2003): 1092–93; Alan Page Fiske et al., "The Cultural Matrix of Social Psychology," in *The Handbook of Social Psychology*, 4th ed., vol. 2 , eds. Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey (New York: Oxford University Press, 1998), 920.

47 And when we hear about some: Arthur G. Miller, ed., *The Social Psychology of Good and Evil* (New York: Guilford Press, 2004), 2–3.

48 We tend not to pay much attention: Ross and Shestowsky, "Contemporary Psychology's Challenges to Legal Theory and Practice," 1092–93; Fiske et al., "The Cultural Matrix of Social

Psychology," 920; Benforado, "The Geography of Criminal Law," 826–27. This is particularly true for those of us who live in Western individualistic cultures. Miller, *The Social Psychology of Good and Evil*, 24; Ross and Shestowsky, "Contemporary Psychology's Challenges to Legal Theory and Practice," 1093.

48 Normally, we stick with our simple: Ross and Shestowsky, "Contemporary Psychology's Challenges to Legal Theory and Practice," 1092–93; Fiske et al., "The Cultural Matrix of Social Psychology," 920.

48 Sometimes that turns out to be right: One fifteen-state study by the U.S. Bureau of Justice Statistics showed that only 1.2 percent of those released after being convicted of murder were rearrested for homicide within three years. Patrick A. Langan and David J. Levin, U.S. Department of Justice, *Recidivism of Prisoners Released in 1994* (Washington, DC: Bureau of Justice Statistics, June 2, 2002), 1, http://www.bjs.gov/content/pub/pdf/rpr94.pdf. More broadly, approximately half of all of those convicted of homicide have no arrests for any crimes in the five years after being released. Matthew R. Durose, Alexia D. Cooper, and Howard N. Snyder, U.S. Department of Justice, *Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010* (Washington, DC: Bureau of Justice Statistics, April 2014), 8, http://www.bjs.gov/content/pub/pdf/rprts05p0510.pdf. Counterintuitively, violent offenders appear significantly less likely to reoffend than those convicted of property or drug offenses. Approximately three out of four state prisoners are rearrested within five years of being released. Durose, Cooper, and Snyder, *Recidivism of Prisoners*, 7.

48 Our "mug shot" approach: Miller, *The Social Psychology of Good and Evil*, 2.

48 By imagining most criminals as: Ross and Shestowsky, "Contemporary Psychology's Challenges to Legal Theory and Practice," 1092–93; Fiske et al., "The Cultural Matrix of Social Psychology," 920.

48 The answer is nothing more: Henry T. Greely, "Law and the Revolution in Neuroscience: An Early Look at the Field," *Akron Law Review* 42 (2009): 687–88.

48 Take away these electrochemical interactions: Greely, "Law and the Revolution in Neuroscience," 688.

48 How could that *thing* be nothing more: David Eagleman, "What Our Brains Can Teach Us," *New York Times*, February 22, 2013, http://www.nytimes.com/2013/02/23/opinion/what-our-brains-can-teach-us.html?_r=1&.

49 There wasn't some villainous spirit: "Brain Facts and Figures," University of Washington, accessed May 20, 2014, http://faculty.washington.edu/chudler/facts.html.

49 Even back in Masters' time: Shelley Batts, "Brain Lesions and their Implications in Criminal Responsibility," *Behavioral Sciences and the Law* 27 (2009): 266–67, doi: 10.1002/bsl.

49 Perhaps the most famous example: Mark Wheeler, "UCLA Researchers Map Damaged Connections in Phineas Gage's Brain," *UCLA Newsroom*, May 16, 2012, http://newsroom.ucla.edu/releases/embargoed-for-release-until-wednesday-233846; Dean Mobbs et al., "Law, Responsibility, and the Brain," *PLOS Biology* 5, no. 4 (April 2007): 693, doi: 10.1371/journal.pbio.0050103.

49 Gage's fame all came down: Wheeler, "UCLA Researchers Map Damaged Connections in Phineas Gage's Brain."

49 His actions (perhaps not unexpectedly): Wheeler, "UCLA Researchers Map Damaged Connections in Phineas Gage's Brain."

49 In an amazing bit of luck: Mobbs et al., “Law, Responsibility, and the Brain,” 693.

49 But as his friends quickly noticed: Mobbs et al., “Law, Responsibility, and the Brain,” 693.

49 Respectful, pleasant, and dutiful: Mobbs et al., “Law, Responsibility, and the Brain,” 693; Martha J. Farah, “Neuroethics: The Practical and Philosophical,” *TRENDS in Cognitive Science* 9, no. 1 (2005): 37–38; Wheeler, “UCLA Researchers Map Damaged Connections in Phineas Gage’s Brain.”

49 The injury to particular parts: Batts, “Brain Lesions and their Implications in Criminal Responsibility,” 266–67.

49 But there is no evidence that: Sam Kean, “Phineas Gage: Neuroscience’s Most Famous Patient,” *Slate*, May 6, 2014, http://www.slate.com/articles/health_and_science/science/2014/05/phineas_gage_neuroscience_case_true_story_of_famous_frontal_lobe_patient.html; Jeffrey M. Burns and Russell Swerdlow, “Right Orbitofrontal Tumor with Pedophilia Symptom and Constructional Apraxia Sign,” *Archives of Neurology* 60 (2003): 437.

49 In 2000, a married forty-year-old: Stephen J. Morse, “Neuroimaging Evidence in Law: A Plea for Modesty and Relevance,” in *Neuroimaging in Forensic Psychiatry*, ed. Joseph Simpson, (Oxford: John Wiley & Sons, 2012), 353; Burns and Swerdlow, “Right Orbitofrontal Tumor,” 437. The name “Mr. Oft” is a pseudonym.

50 As a first-time offender: Burns and Swerdlow, “Right Orbitofrontal Tumor,” 437; Greely, “Law and the Revolution in Neuroscience,” 700.

50 Even though he understood that: Burns and Swerdlow, “Right Orbitofrontal Tumor,” 437.

50 Oft was kicked out: Burns and Swerdlow, “Right Orbitofrontal Tumor,” 437; Greely, “Law and the Revolution in Neuroscience,” 700.

50 It was so bad that he: Burns and Swerdlow, "Right Orbitofrontal Tumor," 437; Greely, "Law and the Revolution in Neuroscience," 700.

50 But no sooner had his: Burns and Swerdlow, "Right Orbitofrontal Tumor," 438. He also urinated on himself, had trouble walking, and struggled on certain neurological tests, including being unable to draw a clock and write legibly. Morse, "Neuroimaging Evidence in Law," 353.

50 What they found was staggering: Greely, "Law and the Revolution in Neuroscience," 700; Tom Valeo, "Legal-Ease: Is Neuroimaging a Valid Biomarker in Legal Cases?" *Neurology Today* 12, no. 8 (April 19, 2012): 39, doi: 10.1097/01.NT.0000414615.73995.c8.

50 The surgery to remove it provided: Burns and Swerdlow, "Right Orbitofrontal Tumor," 438; Greely, "Law and the Revolution in Neuroscience," 700–01.

50 Seven months later: Burns and Swerdlow, "Right Orbitofrontal Tumor," 438.

50 By October 2001, his headache: Burns and Swerdlow, "Right Orbitofrontal Tumor," 438; Greely, "Law and the Revolution in Neuroscience," 701.

50 Sure enough, when doctors ordered: Greely, "Law and the Revolution in Neuroscience," 701.

50 And with a second surgery: Burns and Swerdlow, "Right Orbitofrontal Tumor," 438; Greely, "Law and the Revolution in Neuroscience," 701; The Royal Society, "Brain Waves Module 4: Neuroscience and the Law," *Brain Waves 4* (December 2011): 15, https://royalsociety.org/~/media/Royal_Society_Content/policy/projects/brain-waves/Brain-Waves-4.pdf.

50 But it is important to understand: Morse, "Neuroimaging Evidence in Law," 352; Greely, "Law and the Revolution in Neuroscience," 699–701. For instance, we do not know for certain

how much Gage and Oft could actually control their antisocial behavior. Morse, “Neuroimaging Evidence in Law,” 353.

51 A better approach for revealing: Phillip M. Boffey, “The Next Frontier Is Inside Your Brain,” *New York Times*, February 23, 2013, http://www.nytimes.com/2013/02/24/opinion/sunday/the-next-frontier-is-in-your-brain.html. In particular, neuroscientists have focused on known offenders, individuals who have experienced particular brain traumas or who were born with certain identifiable brain deficiencies, and non-criminals who appear to have no brain anomalies. Boffey, “The Next Frontier Is Inside Your Brain.” As with the case of Mr. Oft, we also sometimes compare people to themselves at different ages. Susan E. Rushing, Daniel A. Pryma, and Daniel D. Langleben, “PET and SPECT,” in *Neuroimaging in Forensic Psychiatry*, ed. Joseph Simpson (Oxford: John Wiley & Sons, 2012), 17.

51 Our prisons, for example, contain: Mobbs et al., “Law, Responsibility, and the Brain,” 695; “Mental Illness Not Linked to Crime, Research Finds,” American Psychological Association, last modified April 21, 2014, http://www.apa.org/news/press/releases/2014/04/mental-illness-crime.aspx. Moreover, illnesses tend to cluster together. As one example, it is estimated that between 75 percent and 93 percent of pedophiles also have other mental disorders, like depression or anxiety. Christine Wiebking et al., “Pedophilia,” in *Neuroimaging in Forensic Psychiatry*, ed. Joseph Simpson (Oxford: John Wiley & Sons, 2012), 102. And 60 percent have been shown to have personality disorders. Wiebking et al., “Pedophilia,” 102.

However, it is important to note that although those with mental illness are incarcerated at much higher rates than those without mental illness, criminal behavior may not be directly

related to the *symptoms* of mental illness. That is, the crimes committed by those with schizophrenia, for example, appear to only rarely result directly from hallucinations and delusions. Jillian K. Peterson et al., “How Often and How Consistently Do Symptoms Directly Precede Criminal Behavior Among Offenders with Mental Illness?” *Law and Human Behavior* 38, no. 5 (2014): 439–49, doi: 10.1037/lhb0000075.

Although both are correlated with criminality, psychopathy and antisocial personality disorder are overlapping but distinct conditions. Jeremy Coid et al., “Psychopathy Among Prisoners in England and Wales,” *International Journal of Law and Psychology* 32, no. 3 (2009): 134–41, doi: 10.1016/j.ijlp.2009.02.008. The DSM-5 only recognizes antisocial personality disorder and classifies it as “a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood.” Unfortunately, the DSM-5 introduces some confusion into the area by suggesting that “this pattern has also been referred to as psychopathy, sociopathy, or dissocial personality disorder.” American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. (Arlington, VA: American Psychiatric Publishing, Incorporated, 2013), 659.

51 Psychopaths have just the traits: Greely, “Law and the Revolution in Neuroscience,” 692; Kent A. Kiehl and Joshua W. Buckholtz, “Inside the Mind of a Psychopath,” *Scientific American Mind* (September/October 2010): 22–29, http://cicn.vanderbilt.edu/images/news/psycho.pdf; Scott O. Lilienfeld and Hal Arkowitz, “What ‘Psychopath’ Means,” *Scientific American*, November 28, 2007, http://www.scientificamerican.com/article/what-psychopath-means/; William Hirstein, “What Is a Psychopath?” *Psychology Today*, January 30, 2013, http://www.psychologytoday.com/blog/mindmelding/201301/what-is-psychopath-0. The leading measure of psychopathy is the Psychopathy Checklist-Revised (PCL-R), which uses twenty

criteria (scored at 0, 1, or 2) to determine whether someone meets the diagnosis (a total score of 30 or higher). Some of the criteria relate to antisocial behavior, while others relate to emotional and interpersonal traits. Kiehl and Buckholtz, "Inside the Mind of a Psychopath," 28.

51 And though they make up only: Greely, "Law and the Revolution in Neuroscience," 692; The Royal Society, "Brain Waves Module 4," 23. In addition, a prisoner appears to be about ten times more likely to be classified as suffering from antisocial personality disorder—characterized by a long-term pattern of disregarding moral norms and the rights and feelings of others—than a member of the general public. Mayo Clinic, "Antisocial Personality Disorder," accessed May 21, 2014, http://www.mayoclinic.org/diseases-conditions/antisocial-personality-disorder/basics/definition/con-20027920; Medline Plus, "Antisocial Personality Disorder," accessed May 21, 2014, http://www.nlm.nih.gov/medlineplus/ency/article/000921.htm; Psych Central Staff, "Antisocial Personality Disorder Symptoms," *Psych Central*, accessed May 21, 2014, http://psychcentral.com/disorders/antisocial-personality-disorder-symptoms/; Mobbs et al., "Law, Responsibility, and the Brain," 695.

51 The evidence related to traumatic brain injuries: Katherine Harmon, "Brain Injury Rate 7 Times Greater among U.S. Prisoners," *Scientific American*, February 4, 2012, http://www.scientificamerican.com/article/traumatic-brain-injury-prison/.

51 Computed tomography (CT) and magnetic resonance: Medline Plus, "Brain PET Scan," accessed May 21, 2014, http://www.nlm.nih.gov/medlineplus/ency/article/007341.htm.

51 Their primary value comes in: Erin D. Bigler, Mark Allen, and Gary K. Stimac, "MRI and Functional MRI," in *Neuroimaging in Forensic Psychiatry*, ed. Joseph Simpson, (Oxford: John Wiley & Sons, 2012), 27–28; Bigler, Allen, and Stimac, "MRI and Functional MRI," 27–28.

51 A functional magnetic resonance imaging: Bigler, Allen, and Stimac, "MRI and Functional MRI," 32–35. A positron emission tomography (PET) scan also captures how the brain is working, but employs a radioactive substance (i.e., a tracer) to look at blood flow to different areas of the brain, with higher radioactivity understood to associate with higher brain activity. Medline Plus, "PET Scan," accessed May 21, 2014, http://www.nlm.nih.gov/medlineplus/ency/article/003827.htm; Mayo Clinic, "Position Emission Tomography (PET) Scan," accessed May 21, 2014, http://www.mayoclinic.org/tests-procedures/pet-scan/basics/definition/prc-20014301.

51 This neuroimaging technology has allowed: Morse, "Neuroimaging Evidence in Law," 344. It is important to grasp how difficult it is to connect the brain to the mind to behavior. Morse, "Neuroimaging Evidence in Law," 343. The brain is our most complex organ. Boffey, "The Next Frontier Is Inside Your Brain." Each of our brains contains some 100 billion neurons, each of which is connected to thousands of other neurons. Eagleman, "What Our Brains Can Teach Us." With a single neuron potentially firing multiple times each second and perhaps 1,000 trillion neural connections in each of our brains, neuroscientists face an immense challenge. Eagleman, "What Our Brains Can Teach Us"; Boffey, "The Next Frontier is Inside Your Brain."

52 Pathological liars, highly aggressive people: Mobbs et al., "Law, Responsibility, and the Brain," 694.

52 There are also links: Mobbs et al., "Law, Responsibility, and the Brain," 693–94.

52 This aligns with other research: Mobbs et al., "Law, Responsibility, and the Brain," 694; Batts, "Brain Lesions," 268.

52 One of the strangest aspects: Mobbs et al., "Law, Responsibility, and the Brain," 697.

52 Mr. Oft's case would seem: Michael Kalichman, Dena Plemmons, and Stephanie J. Bird, "Editor's Overview: Neuroethics: Many Voices and Many Sources," *Science and Engineering Ethics* 18, no. 3 (2012): 424; Burns and Swerdlow, "Right Orbitofrontal Tumor," 440.

52 Given the complexities of antisocial behavior: Mobbs et al., "Law, Responsibility, and the Brain," 694.

52 The amygdala, for instance: Mobbs et al., "Law, Responsibility, and the Brain," 694.

52 Neuroscientists have identified this: Mobbs et al., "Law, Responsibility, and the Brain," 694–95.

52 When it is not functioning properly: Mobbs et al., "Law, Responsibility, and the Brain," 694.

52 We have known for a long time: Mobbs et al., "Law, Responsibility, and the Brain," 693–94.

52 Although we've been considering: Batts, "Brain Lesions," 269–70.

52 Pedophilia, for example, seems to: Wiebking et al., "Pedophilia," 108.

53 But the location of the abnormality: Mobbs et al., "Law, Responsibility, and the Brain," 695.

53 Those who have deficiencies in: Mobbs et al., "Law, Responsibility, and the Brain," 695.

53 By contrast, those with demonstrated abnormal: Mobbs et al., "Law, Responsibility, and the Brain," 695.

53 Some researchers have argued that: Developmental psychopathy may involve some reactive aggression as well. D.V.B. Mitchell, S.B. Anvy, and R.J.R. Blair, "Divergent Patterns of Aggressive and Neurocognitive Characteristics in Acquired Versus Developmental Psychopathy," *Neurocase* 12, no. 3 (2006): 164, http://dx.doi.org/10.1080/13554790600611288.

53 Those with acquired psychopathy have suffered: Mitchell, Anvy, and Blair, "Divergent Patterns," 173–74.

53 Television shows and movies lead us: For an interesting discussion of the depictions of psychopaths in movies, see Samuel J. Leistedt and Paul Linkowski, "Psychopathy and the Cinema: Fact or Fiction?" *Journal of Forensic Sciences* 59 (2014): 167–74, doi: 10.1111/1556-4029.12359.

53 And the case against our simplistic: Adult experiential and other factors can obviously also play a role.

54 Some scientists have claimed that: Gareth Cook, "Secrets of the Criminal Mind," *Scientific American*, May 7, 2013, http://www.scientificamerican.com/article/secrets-criminal-mind-adrian-raine/; Kiehl and Buckholtz, "Inside the Mind of a Psychopath," 28. Of course, we cannot look at the human genome and say, here is the gene for aggression or psychopathy or general criminality. Valeo, "Legal-Ease," 39; The Royal Society, "Brain Waves Module 4," v. However, we know genes can matter a lot. Greely, "Law and the Revolution in Neuroscience," 691.

54 All things being equal: Greely, "Law and the Revolution in Neuroscience," 691.

54 And psychopaths and pedophiles: Kiehl and Buckholtz, "Inside the Mind of a Psychopath," 28; Wiebking et al., "Pedophilia," 102.

54 A good example of the interplay: "'Warrior Gene' Predicts Aggressive Behavior after Provocation," Brown University, last modified January 19, 2009, http://news.brown.edu/pressreleases/2009/01/hotsauce.

54 Scientists have suggested that: It is important to note that we are still learning about the effects of this genetic condition and the research remains controversial. S.Z. Sabol, Stella Hu, and D. Hamer, "A Functional Polymorphism in the Monoamine Oxidase A Gene Promoter,"

Human Genetics 103, no. 3 (1998): 273–79, doi: 10.1007/s004390050816; Thomas Nadelhoffer and Walter Sinnot-Armstrong, "Neurolaw and Neuroprediction: Potential Promises and Perils," *Philosophy Compass* 7, no. 9 (2012): 636, doi: 0.1111/j.1747-9991.2012.00494.x.

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54 Some of those experiences have to: Adrian Raine, *The Anatomy of Violence: The Biological Roots of Crime* (Toronto: Random House, 2013), 207.

54 A wealth of evidence: Raine, *The Anatomy of Violence*, 207.

54 Even micronutrients appear to matter: Raine, *The Anatomy of Violence*, 218.

55 If your mother smokes: Raine, *The Anatomy of Violence*, 277.

55 And similar patterns emerge: Raine, *The Anatomy of Violence*, 277.

55 Particularly disturbing are the elements: Raine, *The Anatomy of Violence*, 223–29.

55 There is growing evidence: The evidence has come from efforts combining neuroscientific evidence with econometric studies correlating regional exposure levels and later crime statistics. Alex Knapp, "How Lead Caused America's Violent Crime Epidemic," *Forbes*, January 3, 2013, http://www.forbes.com/sites/alexknapp/2013/01/03/how-lead-caused-americas-violent-crime-epidemic/.

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55 Having a mother and father: Shader, "Risk Factors for Delinquency," 4–8.

55 And many of these risk factors: Shader, "Risk Factors for Delinquency," 3.

55 We know that people in: Mobbs et al., "Law, Responsibility, and the Brain," 698.

55–56 A recent survey from: Mobbs et al., "Law, Responsibility, and the Brain," 698.

56 The frontal lobes, particularly: Mobbs et al., "Law, Responsibility, and the Brain," 698; The Royal Society, "Brain Waves Module 4," 13–14; John Monterosso and Barry Schwartz, "Did Your Brain Make You Do It?," *New York Times*, July 27, 2012, http://www.nytimes.com/2012/07/29/opinion/sunday/neuroscience-and-moral-responsibility.html?_r=2&hp&.

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56 Lacking the fully formed quick-decision-making: Mobbs et al., "Law, Responsibility, and the Brain," 698. For more on gist-based decision-making and adolescents, see Abigail A. Baird and Jonathan A. Fugelsang, "The Emergence of Consequential Thought: Evidence from Neuroscience," *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences* 359, no. 1451 (2004): 1797–1804; Valerie F. Reyna, "How People Make Decisions That Involve Risk: A Dual-Processes Approach," *Current Directions in Psychological Science*, 13, no. 2 (2004): 60–66; Valerie F. Reyna and Frank Farley, "Risk and Rationality in Adolescent Decision Making," *Psychological Science in the Public Interest*, 7, no. 1 (2006): 1–44.

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57 The elder James had lost: Chinlund, Lehr, and Cullen, "Senate President."

57 Whitey and Bill shared a room: Chinlund, Lehr, and Cullen, "Senate President."

57 Though the project has since: Chinlund, Lehr, and Cullen, "Senate President."

58 The Bulgers did not have much: Chinlund, Lehr, and Cullen, "Senate President."

58 Whitey stayed local and fell: Chinlund, Lehr, and Cullen, "Senate President."

58 The boys he hung out with: Chinlund, Lehr, and Cullen, "Senate President."

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58 Age fourteen was similarly pivotal: Chinlund, Lehr, and Cullen, “Senate President.”

58 While Whitey was brawling: Chinlund, Lehr, and Cullen, “Senate President.”

58 Later, while Bill was immersing: Chinlund, Lehr, and Cullen, “Senate President.”

58 Bill went off to law school: Chinlund, Lehr, and Cullen, “Senate President.”

58 As a legislator, he fought: “UMass Presidents: William M. Bulger,” University of Massachusetts, last modified June 30, 2011, http://www.massachusetts.edu/presidents/bulger.html.

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58 After he was released: Helen Kennedy, “Notorious Gangster Whitey Bulger Was Inspiration for Jack Nicholson’s Character in ‘The Departed,’” *NY Daily News*, June 23, 2011, http://www.nydailynews.com/news/national/notorious-gangster-whitey-bulger-inspiration-jack-nicholson-character-departed-article-1.131159.Drugs, bookmaking, loan sharking—Whitey controlled it all. “Whitey Bulger Biography.”

58 When Osama bin Laden was killed: Dick Lehr and Girard O’Neill, “Whitey Bulger: Secrets behind the Capture of the FBI’s Most Wanted Man,” *Salon*, February 24, 2013, http://www.salon.com/2013/02/24/whitey_bulger_secrets_behind_the_capture_of_the_fbis_most

_wanted_man/. At one point, he had a $2 million price on his head, the largest ever for a nonforeign target, and his own dedicated Bulger Task Force. Lehr and O'Neill, "Whitey Bulger"; "James 'Whitey' Bulger Captured: Media Campaign Leads to Top Ten Arrest," FBI, last modified June 23, 2011, http://www.fbi.gov/news/stories/2011/june/bulger_062311/bulger_062311.

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59 Our surroundings often exert: Miller, *The Social Psychology of Good and Evil*, 2.

60 That seems uncontroversial enough: Miller, *The Social Psychology of Good and Evil*, 30-31; Shankar Vedantam, "Behind a Halloween Mask, Even 'Good' Kids Can Turn into Candy Thieves," NPR, October 31, 2012, http://www.npr.org/blogs/thesalt/2012/10/31/164030718/behind-a-halloween-mask-even-good-kids-can-turn-into-candythieves.

60 In one experiment, a group: Miller, *The Social Psychology of Good and Evil*, 30. Some of the games were benign in nature and some required physical confrontation in order to win. Miller, *The Social Psychology of Good and Evil*, 30.

60 In the "anonymous" second set: Miller, *The Social Psychology of Good and Evil*, 30.

60 It seemed to be the costumes: Miller, *The Social Psychology of Good and Evil*, 30–31.

60 As a follow-up, the researchers decided: Vedantam, "Behind a Halloween Mask."

60 In the experiment, young trick-or-treaters: Vedantam, "Behind a Halloween Mask."

60 The person who greeted the children: Vedantam, "Behind a Halloween Mask."

60 So what did the kids do: Vedantam, "Behind a Halloween Mask."

60 Well, lots of them stole: Vedantam, "Behind a Halloween Mask."

60 Some groups took the entire: Vedantam, "Behind a Halloween Mask."

60 But there was an interesting twist: Vedantam, "Behind a Halloween Mask."

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61 In one set of studies: Witt and Brockmole, "Action Alters Object Identification," 1159.

61 Participants were told that: Witt and Brockmole, "Action Alters Object Identification," 1160.

61 With a gun in hand: Witt and Brockmole, "Action Alters Object Identification," 1165.

61 Moreover, simply having a gun: Witt and Brockmole, "Action Alters Object Identification," 1164.

61 The best explanation is that: Witt and Brockmole, "Action Alters Object Identification," 1159–60; 1166.

61 And that suggests that having: Witt and Brockmole, "Action Alters Object Identification," 1166.

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62 In one set of experiments: Keizer, Lindenberg, and Steg, "The Spreading of Disorder," 1681–85.

62 When there was more graffiti: Keizer, Lindenberg, and Steg, "The Spreading of Disorder," 1684.

62 When the experimenters illegally locked: Keizer, Lindenberg, and Steg, "The Spreading of Disorder," 1683–84.

62 On a positive note: Irus Braverman, "Governing Certain Things: The Regulation of Street Trees in Four North American Cities," *Tulane Environmental Law Journal* 22, no. 1 (2008): 47; Frances E. Kuo and William C. Sullivan, "Environment and Crime in the Inner City: Does Vegetation Reduce Crime?," *Environment and Behavior* 33, no. 3 (May 2001): 343–64.

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62 Although logic suggested that: The 63 percent figure is from the participants in Milgram's first experiment, which is similar to the level observed in follow-up work. Zimbardo and Leippe, *The Psychology of Attitude Change and Social Influence*, 68.

62 What was even more interesting: Milgram, *Obedience to Authority*, 35, 60–61, 94–95, 119.

62 If so, obedience plunged: Milgram, *Obedience to Authority*, 116–21.

63 With a scientist: Milgram, *Obedience to Authority*, 16, 95, 99–105.

63 In the Bridgeport lab: Milgram, *Obedience to Authority*, 60–70.

63 We want to believe that: Miller, *The Social Psychology of Good and Evil*, 8, 26.

63 But that is simply: As the psychologist Phil Zimbardo has written, "While a few bad apples might spoil the barrel (filled with good fruit/people), a barrel filled with vinegar will *always* transform sweet cucumbers into sour pickles—regardless of the best intentions, resilience, and genetic nature of those cucumbers." Miller, *The Social Psychology of Good and Evil*, 47.

63 There is psychological truth behind: Miller, *The Social Psychology of Good and Evil*, 3.

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4. Breaking the Rules ~ The Lawyer

67 Gerry Deegan was dying: Connick v. Thompson, 131 S. Ct. 1350, 1374–75 (2011) (Ginsburg, J., dissenting); Dahlia Lithwick, "Cruel but Not Unusual: Clarence Thomas Writes

One of the Meanest Supreme Court Decisions Ever," *Slate*, April 11, 2011, http://www.slate.com/articles/news_and_politics/jurisprudence/2011/04/cruel_but_not_unusual.single.html.

67 He had worked for: James Ridgeway and Jean Casella, "14 Years on Death Row. $14 Million in Damages?" *Mother Jones*, October 6, 2010, http://www.motherjones.com/politics/2010/09/connick-v-thompson.

67 Now his number had come up: *Connick*, 131 S. Ct. at 1374–75 (Ginsburg, J., dissenting).

67 Riehlmann was a former prosecutor: *Connick*, 131 S. Ct. at 1374–75 (Ginsburg, J., dissenting).

67 It all started with: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

67 The only witness to the shooting: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

67 But that didn't narrow things: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

67 The money lured Richard Perkins: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

67 According to Perkins: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

68 The police snagged Freeman: John Thompson, "The Prosecution Rests, but I Can't," *New York Times*, April 9, 2009, http://www.nytimes.com/2011/04/10/opinion/10thompson.html?pagewanted=all; *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting); Thompson, "The Prosecution Rests."

68 Thompson's two sons were there: Thompson, "The Prosecution Rests."

68 They watched as the police: Thompson, "The Prosecution Rests."

68 He was twenty-two: Thompson, "The Prosecution Rests."

68 Freeman matched the description: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

68 But it was Thompson: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

68 His photo in the paper: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 Now, looking at the Afro: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 And when they went down: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 What's more, Freeman had turned: *Connick*, 131 S. Ct. at 1371–72 (Ginsburg, J., dissenting).

68 All they had to do: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 The opening move was to try: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 If he chose to testify: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

68 And without Thompson's testimony: *Connick*, 131 S. Ct. at 1374 (Ginsburg, J., dissenting).

68 Just as important, a prior: Susan Bandes, "The Lone Miscreant, The Self-Training Prosecutor, and Other Fictions: A Comment on Connick v. Thompson," *Fordham Law Review* 715 (2012): 722.

69 Deegan was enlisted to assist: *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

69 Thompson was going: *Connick*, 131 S. Ct. at 1356.

69 Harry F. Connick Sr., the district attorney: "Harry Connick Jr.," Biography.com, accessed May 13, 2014, http://www.biography.com/people/harry-connick-jr-5542; *Connick*, 131 S. Ct. at 1372 (Ginsburg, J., dissenting).

69 John Thompson was sent to prison: *Connick*, 131 S. Ct. at 1370 (Ginsburg, J., dissenting); Thompson, "The Prosecution Rests"; Marianne Fisher-Giorlando, "Louisiana," in *The Social History of Crime and Punishment in America: An Encyclopedia*, ed. Wilbur R. Miller (Los Angeles: SAGE Publications, 2012), 1041.

69 He was sitting there now: *Connick*, 131 S. Ct. at 1370 (Ginsburg, J., dissenting).

69 During the carjacking, the eldest: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

69 A crime-scene investigator had: *Connick*, 131 S. Ct. at 1371 (Ginsburg, J., dissenting).

69 But Thompson's lawyer never knew: *Connick*, 131 S. Ct. at 1373 (Ginsburg, J., dissenting).

69 He had kept all of this: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

69 Back in 1963, in the case: Brady v. Maryland, 373 U.S. 83, 87 (1963); *Connick*, 131 S. Ct. at 1370 (Ginsburg, J., dissenting); Maurice Possley and Ken Armstrong, "The Flip Side of a Fair Trial," *Chicago Tribune*, January 11, 1999, http://articles.chicagotribune.com/1999-01-11/news/9905150172_1_prosecutors-courtroom-recalls.

69 Failing to do so: *Connick*, 131 S. Ct. at 1370 (Ginsburg, J., dissenting).

70 Riehlmann suggested that Deegan reveal: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 But when Deegan elected: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 For five more years: *Connick*, 131 S. Ct. at 1374 (Ginsburg, J., dissenting).

70 Each time it was delayed: Thompson, "The Prosecution Rests."

70 His seventh and final date: Thompson, "The Prosecution Rests."

70 In a last-ditch effort: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 It was less than a month: Bandes, "The Lone Miscreant," 715.

70 And then there it was: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 B, it said: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 Thompson had type O blood: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 He was innocent: *Connick*, 131 S. Ct. at 1375 (Ginsburg, J., dissenting).

70 Thompson was finally able: Bandes, "The Lone Miscreant," 722–23.

70 At the new trial: *Connick*, 131 S. Ct. at 1357 n. 2.

70 It took the jurors only: *Connick*, 131 S. Ct. at 1376 (Ginsburg, J., dissenting).

70 After more than eighteen years: *Connick*, 131 S. Ct. at 1376 (Ginsburg, J., dissenting). During his time in prison, Thompson spent fourteen years on death row. *Connick*, 131 S. Ct. 1350 at 1370 (Ginsburg, J., dissenting).

70 Prosecutors are mostly upstanding: *Connick*, 131 S. Ct. at 1366.

70 Prosecutors know their: *Connick*, 131 S. Ct. at 1362–63, 1365–66.

71 And in the Court's view: *Connick*, 131 S. Ct. at 1362–63, 1366.

71 After being released: Keenan, "The Myth of Prosecutorial Accountability," 207.

71 But when the case made it: Thompson, "The Prosecution Rests."

71 In the majority's opinion: *Connick*, 131 S. Ct. at 1362–63, 1366.

71 Similarly, Justice Scalia, in a concurrence: *Connick*, 131 S. Ct. at 1368–69 (Scalia, J., concurring).

71 Deegan, in this framing: *Connick*, 131 S. Ct. at 1368 (Scalia, J., concurring).

71 If you had a large barrel: *Connick*, 131 S. Ct. at 1366 (Scalia, J., concurring). When news of the Supreme Court's dismissal of Thompson's case reached the current district attorney in New Orleans, Leon A. Cannizzaro, Jr., he offered a similar assessment that this was nothing more than "the intentional, unethical and illegal acts of a rogue prosecutor." Adam Liptak, "$14 Million Jury Award to Ex-Inmate Is Dismissed," *New York Times*, March 29, 2011, accessed April 21, 2014, http://www.nytimes.com/2011/03/30/us/30scotus.html?_r=0; "Orleans Parish District Attorney," accessed April 21, 2014, http://orleansda.com/the-d-a/.

71 Yes, we should expect: The Nazis at Nuremberg had lawyers."Nuremberg Trials," History.com, accessed April 21, 2014, http://www.history.com/topics/world-war-ii/nuremberg-

trials. So did McVeigh and Madoff. "McVeigh's Former Lawyer Speaks Out," CBS News, June 11, 2001, http://www.cbsnews.com/news/mcveighs-former-lawyer-speaks-out/; "Ira Sorkin, Lawyer for Bernie Madoff, Leaves Dickstein Shapiro," *JD Journal*, November 3, 2010, http://www.jdjournal.com/2010/11/03/ira-sorkin-lawyer-for-bernie-madoff-leaves-dickstein-shapiro/. One of O.J.'s attorneys, Harvard Law professor Alan Dershowitz has said that he would represent "a worthless son of a bitch on their way to hell." Walter Stern, "Dershowitz Defends His Defense of Bad People," *Yale Herald*, February 5, 1999, http://www.yaleherald.com/archive/xxvii/1999.02.05/news/dersg.html. And these jackals seem more than happy to use any trick or lie in the book to pull the wool over the eyes of the judge, jury, and public.

A slight variation on this common conception of the lawyer is that it is not so much that he is *immoral* than that he is *amoral*. And this amorality leads lawyers to willingly act dishonestly when it is in their interests to do so (i.e., when the benefits outweigh the costs). Lawyers look at (1) what is to be gained and (2) the likelihood of being caught and do a simple calculation.

These notions of the character of the attorney are ever-present in our culture. If you look at depictions of lawyers in films, television series, and popular fiction, you will generally find two stock characters. The first is the good lawyer: the selfless hero, true to his principles, defending the disenfranchised and the downtrodden and fighting for justice. Carrie Menkel-Meadow, "Can They Do That? Legal Ethics in Popular Culture," 48 *UCLA Law Review* 1305, 1315 (2001). Atticus Finch, Clarence Darrow, and Perry Mason are all in this mold. Menkel-Meadow, "Can They Do That?" 1315. The second is the bad lawyer: the greedy and unethical predator, manipulative, back-stabbing, and vicious. Michael Asimow, "Embodiment of Evil:

Law Firms in the Movies," 48 *UCLA Law Review* 1339, 1341 (2001). Here, we have law firm associate Fletcher Reed, Jim Carrey's character in *Liar Liar*, who revels in his mendacity, until his son casts a spell that compels him to speak only the truth, seriously endangering his job at the firm where lying is a way of life. Asimow, "Embodiment of Evil," 1356–57. Or we have managing partner John Milton, played by Al Pacino in *The Devil's Advocate* who is actually (spoiler alert) Satan. Asimow, "Embodiment of Evil," 1357–58. John Grisham's books and the resultant slew of movie adaptations are filled with these despicable characters ready to break the rules whenever they have a chance. Asimow, "Embodiment of Evil," 1352–54. Dishonesty seems to infect even the more sympathetic of Grisham's lawyers, including Rudy—the fresh-faced attorney (played by a young, fresh-faced Matt Damon) going up against an evil insurance company—in *The Rainmaker* who explains, "each time you try a case, you step over the line. You do it enough times and you forget where the line is." Asimow, "Embodiment of Evil," 1354.

Grisham's oeuvre embodies what some researchers believe has been a shift toward more negative depictions of lawyers, particularly in the last three or four decades, which may be tied to a loss of faith in lawyers generally during this time period. Asimow, "Embodiment of Evil," 1371. The dishonest lawyer is now *all* lawyers: a stock character in late-night stand-up routines, *New Yorker* cartoons, and, if my life has been any guidance, the jokes of older family friends upon hearing that you are in law school or have been admitted to the bar.

"How does an attorney sleep? First he lies on one side, then he lies on the other." "Lawyer Joke Collection," last modified October 31, 2010, http://www.iciclesoftware.com/LawJokes/IcicleLawJokes.html.

"How many lawyers does it take to screw in a lightbulb? Three. One to climb the ladder. One to shake it. And one to sue the ladder company." "Lawyer Joke Collection."

Today, when I tell people I'm a lawyer, I expect about half the time, I'll get a groan and good-natured cut down. And unsurprisingly, in polls measuring confidence in public institutions, law firms rank at the bottom. Harris Interactive, "Confidence in Congress Stays at Lowest Point In Almost Fifty Years," May 21, 2012, http://www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/447/ctl/ReadCustom%20Default/mid/1508/ArticleId/1068/Default.aspx. In 2012, only 12 percent of the public expressed that they had a great deal of confidence in the leadership of law firms. Harris Interactive, "Confidence in Congress."

72 When Deegan failed to turn: Lithwick, "Cruel but Not Unusual."

72 At this very moment: Lauren Indvik, "U.S. Internet Piracy Is on the Decline," *USA Today*, March 25, 2011, http://content.usatoday.com/communities/technologylive/post/2011/03/us-internet-piracy-is-on-the-decline/1#.UISdzlGzmCI; Recording Industry Association of America, "Student FAQ," accessed April 21, 2014, http://www.riaa.com/toolsforparents.php?content_selector=resources-for-students; Stephen E. Siwek, "The True Cost of Sound Recording Piracy to the U.S. Economy," August 21, 2007, http://www.ipi.org/ipi_issues/detail/the-true-cost-of-sound-recording-piracy-to-the-us-economy. According to a recent estimate by the Association of Certified Fraud Examiners, unethical actions cost businesses in the United States about 7 percent of their annual revenues—a mindboggling $1 trillion hit to our economy. Francesca Gino et al., "Unable to Resist Temptation: How Self-Control Depletion Promotes Unethical Behavior," *Organizational Behavior and Human Decision Processes* 115 (2011): 191–92.

73 Cheating by students is rampant: "A Cheating Crisis in America's Schools," ABC News, April 29, 2012, http://abcnews.go.com/Primetime/story?id=132376&page=1; Richard Pérez-

Peña, "Studies Find More Students Cheating, With High Achievers No Exception," *New York Times*, September 7, 2012, http://www.nytimes.com/2012/09/08/education/studies-show-more-students-cheat-even-high-achievers.html; Amy Novotney, "Beat the Cheat," *Monitor on Psychology* 42 (2011): 54, http://www.apa.org/monitor/2011/06/cheat.aspx. An analysis of 14,000 undergraduates found that two-thirds admitted to cheating on various tests and assignments. Novotney, "Beat the Cheat," 54.

73 Graduate students cheat, too: Researchers conducted a survey of 5,331 students at thirty-two graduate schools. Donald L. McCabe, Kenneth D. Butterfield, and Linda Klebe Treviño, "Academic Dishonesty in Graduate Business Programs: Prevalence, Causes, and Proposed Action," *Academy of Management Learning and Education* 5 (2006): 299; Lucia Graves, "Which Types of Students Cheat Most?," *U.S. News and World Report*, October 3, 2008, http://www.usnews.com/education/articles/2008/10/03/which-types-of-students-cheat-most?s_cid=related-links:TOP. It is possible that the lower percentage for law students may partially reflect the fact that law school exams are often essay exams that may be more difficult to cheat on. That said, there is no evidence to suggest that law students are somehow more ethically challenged than their peers in other disciplines.

73 What's more, top students appear: Pérez-Peña, "Studies Find More Students Cheating."

73 In recent years, significant cheating: Pérez-Peña, "Studies Find More Students Cheating."

73 If dishonesty doesn't come down to: Dan Ariely, *The (Honest) Truth About Dishonesty* (New York: Harper Collins, 2012), 4, 14.

73 Making it less likely that: Ariely, *The (Honest) Truth About Dishonesty,* 20–21.

73 Indeed, when the researchers increased: Ariely, *The (Honest) Truth About Dishonesty,* 19–20.

74 Lots and lots of people: The empirical research backs up the data from the real world on this point. Nina Mazar, O. Amir, and Dan Ariely, "The Dishonesty of Honest People: A Theory of Self-Concept Maintenance," *Journal of Marketing Research* 45 (2008): 642.

74 In one study documenting this: Nina Mazar and Dan Ariely, "Dishonesty in Everyday Life and Its Policy Implications," *Journal of Public Policy and Marketing* 25, vol. 1 (2006): 7.

74 And sure enough, a very large: Mazar and Ariely, "Dishonesty in Everyday Life," 7.

74 But each person cheated by: Mazar and Ariely, "Dishonesty in Everyday Life," 7.

74 According to researchers, that mechanism: Ariely, *The (Honest) Truth About Dishonesty,* 26–27.

74 We are each strongly motivated: Lisa L. Shu, Francesca Gino, and Max H. Bazerman, "Dishonest Deeds, Clear Conscience: When Cheating Leads to Moral Diengagement and Motivated Forgetting," *Personality and Social Psychology Bulletin* 37 (2001): 331.

74 We want to believe that: Shu, Gino, Bazerman, "Dishonest Deeds, Clear Conscience," 331.

74 The more an instance of cheating: Christopher J. Bryan, Gabrielle S. Adams, and Benoît Monin, "When Cheating Would Make You a Cheater: Implicating the Self Prevents Unethical Behavior," *Journal of Experimental Psychology: General* 142, no. 4 (2013): 1, doi: 10.1037/a0030655.

74 In an interesting demonstration of this: Bryan, Adams, and Monin, "When Cheating Would Make You a Cheater," 3–4.

74 Although all participants were aware: Bryan, Adams, and Monin, "When Cheating Would Make You a Cheater," 3–4.

74 It's hard to imagine that: Bryan, Adams, and Monin, "When Cheating Would Make You a Cheater," 3–4.

74 When the verb "cheat" was used: Bryan, Adams, and Monin, "When Cheating Would Make You a Cheater," 4.

75 To feel good about ourselves: Ariely, *The (Honest) Truth About Dishonesty,* 26–27.

75 Cheating on a few questions: Mazar, Amir, and Ariely, "The Dishonesty of Honest People," 635–42.

75 But there's another way: Shu, Gino, and Bazerman, "Dishonest Deed, Clear Conscience," 330–31; Ariely, *The (Honest) Truth About Dishonesty,* 26–27.

75 So, although 51 percent: Josephson Institute of Ethics, "For the First Time in a Decade, Lying, Cheating and Stealing Among American Students Drops," *The Ethics of American Youth: 2012*, November 20, 2012, http://charactercounts.org/programs/reportcard/2012/index.html; Josephson Institute of Ethics, "2012 Report Card on the Ethics of American Youth," November 20, 2012, http://charactercounts.org/pdf/reportcard/2012/ReportCard-2012-DataTables-HonestyIntegrityCheating.pdf. In addition, 99 percent of students agreed that "it is important for me to be a person with good character," 92 percent agreed that "people should play by the rules even if it means they lose," and 81 percent agreed that "when it comes to doing right, I am better than most people I know." Josephson Institute of Ethics, "2012 Report Card."

75 Likewise, while taxpayers end up: Put differently, the government collects only about 83 percent of what it is owed each year, despite widespread disapproval of tax evasion. IRS Oversight Board, *2011 Taxpayer Attitude Survey* (Washington, DC: IRS Oversight Board, 2012): 3, http://www.treasury.gov/irsob/reports/2012/IRSOB~Taxpayer%20Attitude%20Survey%202012.pdf; Internal Revenue Service, "Tax Gap"; Rebecca Jarvis, "America at Tax Time: What Cheaters Cost Us," CBS News, April 16, 2012, http://www.cbsnews.com/8301-3445_162-

57414288/america-at-tax-time-what-cheaters-cost-us/; Kevin McCoy, "IRS Struggling to Combat Rise in Tax Fraud," *USA Today*, April 15, 2012; Adam Davidson et al., "What's the Easiest Way to Cheat on Your Taxes," *New York Times*, April 3, 2012, http://www.nytimes.com/2012/04/08/magazine/whats-the-easiest-way-to-cheat-on-your-taxes.html?pagewanted=all&_r=0. When the IRS Oversight Board conducted a survey in 2011, 84 percent of participants reported that it was "not at all acceptable to cheat on one's income taxes." Jarvis, "What Cheaters Cost Us." Tax cheating is so widespread that even those who are most likely to get caught and have the most to lose seem unable to resist. Right after President Obama first took office in 2009, for example, he immediately had to deal with the controversy related to three of his high-profile nominees acknowledging that they failed to pay certain income taxes. Jeff Zeleny, "Daschle Ends Bid for Post, Obama Concedes Mistake," *New York Times*, February 3, 2009, http://www.nytimes.com/2009/02/04/us/politics/04obama.html?adxnnl=1&adxnnlx=1358357494-69yNRPiCWFllvL3DdUjLxA.

75 If we want to understand why: Ariely, *The (Honest) Truth About Dishonesty,* 39.

75 When justifying our actions: Ariely, *The (Honest) Truth About Dishonesty,* 53.

75 And therein lies the key: Some experts have theorized that deceiving ourselves is beneficial because it means that we are less likely to manifest to others that we are dishonest. Ariely, *The (Honest) Truth About Dishonesty,* 142.

75 One of the most promising strategies: Ariely, *The (Honest) Truth About Dishonesty,* 184.

75 And the greater the distance: Ariely, *The (Honest) Truth About Dishonesty,* 59.

76 For example, scientists have found: Ariely, *The (Honest) Truth About Dishonesty,* 33–34. The experiment parallels the experience of the worker who steals office supplies but not cash, or

the shopper who receives an unexpected “discount”: it’s easy to justify not returning to a department store to remedy a $20 undercharge on our credit card but very difficult to rationalize taking a $20 bill out of the cash register—despite the fact that the ultimate harm to the store is the same. In another study of this dynamic, when researchers asked golfers about how comfortable the average golfer would be cheating in different ways, participants reported that moving the ball with the club would be most comfortable, followed by kicking it with a shoe, followed by picking it up with the hand. Ariely, *The (Honest) Truth About Dishonesty,* 58–59. The more distance between the golfer (or customer, student, or employee) and the clearly impermissible act or undeniable harm, the easier to act dishonestly and maintain a positive self-view. Ariely, *The (Honest) Truth About Dishonesty,* 59.

77 Since Thompson was on death row: *Connick*, 131 S. Ct. at 1374 (Ginsburg, J., dissenting); Lithwick, “Cruel but Not Unusual.”

77 Indeed, it was possible that: This aligns with one of Williams’s claims that the lab report did not qualify as *Brady* material ”because [he] didn’t know what the blood type of Mr. Thompson was.” *Connick*, 131 S. Ct. at 1379 (Ginsburg, J., dissenting). The District Court, however, instructed the jury that the report did qualify as *Brady* material. *Connick*, 131 S. Ct. at 1379 (Ginsburg, J., dissenting).

77 Although we can’t know for sure: Lithwick, “Cruel but Not Unusual.”

78 Other common types of prosecutorial misconduct: Possley and Armstrong, “The Flip Side of a Fair Trial.”

78 It can also feel like: Shu, Gino, and Bazerman, “Dishonest Deed, Clear Conscience,” 331.

78 Researchers have begun to look more: Ariely, *The (Honest) Truth About Dishonesty,* 197–201; Francesca Gino, Shahar Ayal, and Dan Ariely, “Contagion and Differentiation in Unethical Behavior,” *Psychological Science* 20, no. 3 (2009): 393–98.

78 In a recent study, psychologists had: Gino, Ayal, and Ariely, “Contagion and Differentiation,” 395.

79 One of the “test-takers,” who was: Gino, Ayal, and Ariely, “Contagion and Differentiation,” 395.

79 The question was whether: Ariely, *The (Honest) Truth About Dishonesty,* 197, 199; Gino, Ayal, and Ariely, “Contagion and Differentiation,” 395–96.

79 It did, but only when: Ariely, *The (Honest) Truth About Dishonesty,* 204–06; Gino, Ayal, and Ariely, “Contagion and Differentiation,” 396.

79 When he was wearing a rival: Ariely, *The (Honest) Truth About Dishonesty,* 204–06; Gino, Ayal, and Ariely, “Contagion and Differentiation,” 396.

79 Responding to Justice Scalia’s characterization: *Connick*, 131 S. Ct. at 1366 (Scalia, J., concurring); Liptak, “$14 Million Jury Award to Ex-Inmate Is Dismissed.”

79 As she described: *Connick*, 131 S. Ct. at 1370 (Ginsberg, J, dissenting).

79 Bruce Whittaker, the prosecutor who had: *Connick*, 131 S. Ct. at 1372 (Ginsberg, J, dissenting); *Connick*, 131 S. Ct. at 1356.

80 But neither man turned it over: *Connick*, 131 S. Ct. at 1356; *Connick*, 131 S. Ct. at 1372 (Ginsberg, J, dissenting).

80 Then Deegan, who was working: *Connick*, 131 S. Ct. at 1356.

80 Neither Williams nor Deegan mentioned: *Connick*, 131 S. Ct. at 1356.

80 There were other critical materials: *Connick*, 131 S. Ct. at 1372 (Ginsberg, J, dissenting).

80 Thompson's attorneys might have seriously: *Connick*, 131 S. Ct. at 1374 (Ginsberg, J, dissenting).

80 Likewise, the defense team might have: *Connick*, 131 S. Ct. at 1374 (Ginsberg, J, dissenting).

80 And, critically, Thompson's attorneys: *Connick*, 131 S. Ct. at 1374 (Ginsberg, J, dissenting).

80 All of this suggests a *culture*: "Failure of Empathy and Justice," *New York Times*, March 31, 2011, http://www.nytimes.com/2011/04/01/opinion/01fri2.html?_r=0.

80 As Justice Ginsburg put it: *Connick*, 131 S. Ct. at 1370 (Ginsberg, J, dissenting).

80 District Attorney Connick himself: *Connick*, 131 S. Ct. at 1378 (Ginsberg, J, dissenting); Emily Bazelon, "Playing Dirty in the Big Easy," *Slate*, April 18, 2012, http://www.slate.com/articles/news_and_politics/crime/2012/04/new_orleans_district_attorney_leon_cannizzaro_is_being_questioned_for_his_ethics_in_pursuing_convictions_.html.

81 But we also take cues: Ariely, *The (Honest) Truth About Dishonesty,* 122.

81 This explains, in part, how: Ariely, *The (Honest) Truth About Dishonesty*, 137.

81 Take a few steps down: Ariely, *The (Honest) Truth About Dishonesty*, 130–31.

81 It is not just that small infractions: Ariely, *The (Honest) Truth About Dishonesty*, 123–30.

81 In one of my favorite experiments: Ariely, *The (Honest) Truth About Dishonesty,* 123–24.

81 You might expect that the fake: Ariely, *The (Honest) Truth About Dishonesty,* 125.

81 According to the researchers: Ariely, *The (Honest) Truth About Dishonesty*, 126.

81–82 And they also viewed: Ariely, *The (Honest) Truth About Dishonesty,* 132–34.

82 It is easy to see how: Ariely, *The (Honest) Truth About Dishonesty,* 136.

82 Initially, a colleague or superior: Ariely, *The (Honest) Truth About Dishonesty,* 136.

82 Awareness of that transgression may: Ariely, *The (Honest) Truth About Dishonesty*, 136.

82 After the initial breach of ethics: Ariely, *The (Honest) Truth About Dishonesty*, 136.

82 Making matters worse, the research predicts: Ariely, *The (Honest) Truth About Dishonesty,* 132–34.

82 As improbable as it sounds: Shu, Gino, and Bazerman, "Dishonest Deed, Clear Conscience," 331.

82 Indeed, research suggests that a major: Ariely, *The (Honest) Truth About Dishonesty,* 177–78.

82 In one experiment, scientists looked: Ariely, *The (Honest) Truth About Dishonesty,* 177–78.

82 Customers on the receiving end: Ariely, *The (Honest) Truth About Dishonesty,* 177–78.

83 We might also imagine a new attorney: Ariely, *The (Honest) Truth About Dishonesty*, 136–37.

83 Deegan was the least experienced: *Connick*, 131 S. Ct. at 1372 n. 3 (Ginsberg, J, dissenting).

83 Along similar lines, one way: Shu, Gino, and Bazerman, "Dishonest Deed, Clear Conscience," 331.

84 If you speak with prosecutors candidly: Abbe Smith, "Can You Be a Good Person and a Good Prosecutor?," *Georgetown Journal of Legal Ethics* 14 (2001): 376.

84 In a startling finding: Ariely, *The (Honest) Truth About Dishonesty,* 232.

84 If we are acting solely: Ariely, *The (Honest) Truth About Dishonesty,* 232.

84 People who work for nonprofit: Ariely, *The (Honest) Truth About Dishonesty,* 232.

84 Ironically, then, it is caring deeply: Ariely, *The (Honest) Truth About Dishonesty*, 232.

84 Guilt-prone people, for example: Taya R. Cohen, A. T. Panter, and Nazli Turan, "Guilt Proneness and Moral Character," *Current Directions in Psychological Science* 21 (2012): 355, doi: 10.1177/0963721412454874.

85 Sparked by intriguing findings: David Salisbury, "Breakdown of White-Matter Pathways Affects Decisionmaking As We Age," *Research News @ Vanderbilt*, April 11, 2012, http://news.vanderbilt.edu/2012/04/declining-decisionmaking/; Hikaru Takeuchi et al., "White Matter Structures Associated With Creativity: Evidence From Diffusion Tensor Imaging," *NeuroImage* 51 (2010): 11–18; Ariely, *The (Honest) Truth About Dishonesty*, 170.

85 Their hypothesis was that people: Ariely, *The (Honest) Truth About Dishonesty*, 172.

85 Sure enough, in their experiments: Francesca Gino and Dan Ariely, "The Dark Side of Creativity: Original Thinkers Can Be More Dishonest," *Journal of Personality and Social Psychology* 102 (2011): 449, doi: 10.1037/a0026406; Ariely, *The (Honest) Truth About Dishonesty*, 176.

85 Moreover, the researchers found that: Ariely, *The (Honest) Truth About Dishonesty,* 184–85; Gino and Ariely, "The Dark Side of Creativity," 450–51.

85 Interestingly, general intelligence doesn't appear: Ariely, *The (Honest) Truth About Dishonesty*, 176.

85 And with frequently vague: Ariely, *The (Honest) Truth About Dishonesty,* 172.

85 Almost all of the most common: Dan Simon, *In Doubt: The Psychology of the Criminal Justice System* (Cambridge, MA: Harvard University Press, 2012), 231–32 n. 39.

86 It made a difference that Deegan: *Connick*, 131 S. Ct. at 1356.

86 It also mattered that the blood: *Connick*, 131 S. Ct. at 1356.

86 We should worry, then: Possley and Armstrong, "The Flip Side of a Fair Trial."

86 In addition, research suggests that: Gino et al., "Unable to Resist Temptation," 192.

86 According to some psychologists: Ariely, *The (Honest) Truth About Dishonesty*, 101; Isaiah M. Zimmerman, "Stress and the Trial Lawyer," *Litigation* 9 (1983): 37. For an overview of the more general research on "ego depletion," see Steven Pinker, "The Sugary Secret of Self-Control," review of *Willpower: Rediscovering the Greatest Human Strength*, by Roy F. Baumeister and John Tierney, *New York Times*, September 2, 2011, http://www.nytimes.com/2011/09/04/books/review/willpower-by-roy-f-baumeister-and-john-tierney-book-review.html?pagewanted=all; John Tierney, "Be It Resolved," *New York Times*, January 5, 2012, http://www.nytimes.com/2012/01/08/sunday-review/new-years-resolutions-stick-when-willpower-is-reinforced.html?pagewanted=all&_r=0. Outside of the dishonesty context, this depletion account of self-control is controversial and some researchers have offered evidence that contests it. See, e.g., Xiaomeng Xu et al., "Failure to Replicate Depletion of Self-Control," *PLOS ONE* 9, no. 10 (2014): 1.

86 But he may face other stresses: Zimmerman, "Stress and the Trial Lawyer," 37.

86 Figuring out how to please: Worse still, researchers have documented that the very act of refraining from engaging in unethical behavior may itself deplete self-regulatory resources—making even the most ethical of us more likely to subsequently engage in dishonest action. Ariely, *The (Honest) Truth About Dishonesty*, 101.

87 Given the likely frequency: Brandon Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Cambridge, MA: Harvard University Press, 2011), 168; Adam Liptak, "THE NATION; Prosecutor Becomes Prosecuted," *New York Times*, June 24, 2007, http://query.nytimes.com/gst/fullpage.html?res=9900E1DC1E3FF937A15755C0A9619C8B63#h; Bazelon, "Playing Dirty in the Big Easy."

87 Many of the cases over: Simon, *In Doubt*, 231–32 n. 39. Out of the first seventy-four exoneration cases involving DNA, there were thirty-three instances of prosecutorial misconduct. Simon, *In Doubt*, 231–32 n. 39.

87 Concealing evidence, one of the most: Garrett, *Convicting the Innocent*, 168.

87 Deegan eventually came to: Zoë Chance et al., "Temporal View of the Costs and Benefits of Self-Deception," *Proceedings of the National Academy of Sciences* 108 (2011): 15657.

87 In one set of experiments: Chance, "Temporal View," 15657.

87 Winning effectively wipes: Ariely, *The (Honest) Truth About Dishonesty,* 154.

87 Our moral flexibility: Novotney, "Beat the Cheat," 54.

87 Research suggests that the more: Novotney, "Beat the Cheat," 54.

87–88 In one notorious example: Possley and Armstrong, "The Flip Side of a Fair Trial."

88 Growing experimental evidence suggests: Ariely, *The (Honest) Truth About Dishonesty*, 224, 227. The social aspects of dishonesty are so potent that only certain monitoring approaches appear to be effective. Ariely, *The (Honest) Truth About Dishonesty,* 231. In particular, the most promising approach is likely to be continual external reviews of district attorneys' offices. For the best results, these monitors should be outsiders (experiments suggest that monitors with whom we are friendly are significantly less effective). Ariely, *The (Honest) Truth About Dishonesty*, 231–34. But they may not actually need to do much intervention, as long as prosecutors believe their work is being monitored. Ariely, *The (Honest) Truth About Dishonesty*, 231–34.

88 We know such a cultural shift: Innocence Project, "Conviction Integrity Unit Reviews Possible Wrongful Convictions," *Innocence Blog*, March 26, 2013, http://www.innocenceproject.org/Content/Conviction_Integrity_Unit_Reviews_Possible_Wrongf

ul_Convictions.php; Dallas County District Attorney's Office, "Conviction Integrity Unit," accessed April 26, 2014, http://www.dallasda.com/division/conviction-integrity-unit/.

88 In 2006, Dallas County District Attorney: Michael McLaughlin, "National Registry of Exonerations: More Than 2,000 People Freed After Wrongful Convictions," last modified May 22, 2012, http://www.huffingtonpost.com/2012/05/21/national-registry-of-exonerations_n_1534030.html; Terri Moore, "Prosecutors Reinvestigate Questionable Evidence: Dallas Establishes 'Conviction Integrity Unit,'" *Criminal Justice* 26 (2011): 1, http://www.americanbar.org/content/dam/aba/publications/criminal_justice_magazine/fa11_Moore.authcheckdam.pdf.

88 Watkins argued that prosecutors: Innocence Project, "The Exonerator," *Innocence Blog*, November 17, 2008, http://www.innocenceproject.org/Content/The_Exonerator.php.

88 The initiative has been: Elizabeth Barber, "Dallas Targets Wrongful Convictions, and Revolution Starts to Spread," *Christian Science Monitor*, May 25, 2014, http://www.csmonitor.com/USA/Justice/2014/0525/Dallas-targets-wrongful-convictions-and-revolution-starts-to-spread.

88 Its accomplishments have prompted: Florida Innocence Project, "Conviction Integrity Units: Righting the Wrongs Or a Waste of Time?," *Plain Error*, September 18, 2012, http://floridainnocence.org/content/?tag=conviction-integrity-units; Innocence Project, "Conviction Integrity Unit Reviews Possible Wrongful Convictions"; Innocence Project, "Conviction Integrity Unit to Review 50 Brooklyn Murder Cases," *Innocence Blog*, May 13, 2013, http://www.innocenceproject.org/Content/Conviction_Integrity_Unit_to_Review_50_Brooklyn_Murder_Cases.php.

89 For instance, asking individuals: Mazar and Ariely, “Dishonesty in Everyday Life,” 9.

89 More astonishing, the benefits: Ariely, *The (Honest) Truth About Dishonesty*, 42–43.

89 MIT, for instance, doesn’t: Ariely, *The (Honest) Truth About Dishonesty*, 42.

89 This research suggests that we ought: Ariely, *The (Honest) Truth About Dishonesty*, 253, 52.

89 One idea might be: Ariely, *The (Honest) Truth About Dishonesty,* 250.

89 Likewise, to encourage attorneys to turn: Ariely, *The (Honest) Truth About Dishonesty,* 44.

89 Look again at the miracles: John Hollway and Ronald M. Gauthier, *Killing Time: An 18-Year Odyssey from Death Row to Freedom* (New York: Skyhorse Publishing, 2010), 108–116, 140, 247.

5. In the Eye of the Beholder ~ The Jury

92 Deputy Clinton Reynolds was sitting: Scott v. Harris, 550 U.S. 372 (2007); Brief for Respondent at 3, Scott v. Harris, 550 U.S. 372 (2007) (No. 05-1631). This chapter draws on ideas explored in more detail in Adam Benforado, “Frames of Injustice: The Bias We Overlook,” *Indiana Law Journal* 85 (2010).

92 A Cadillac came up: *Scott*, 550 U.S. at 374.

92 He wasn’t even going to: Brief for Respondent at 4, *Scott* (No. 05-1631).

92 But the Cadillac didn’t slow: *Scott*, 550 U.S. at 374–75; Brief for Respondent at 4, *Scott* (No. 05-1631).

92 Reynolds radioed in the license plate: *Scott*, 550 U.S. at 375.

92 He didn’t request assistance: *Scott*, 550 U.S. at 375.

92 When the Cadillac turned: “Why I ran,” YouTube video, 9:38, posted by “vic2k3,” December 8, 2009, http://www.youtube.com/watch?v=JATVLUOjzvM&feature=related.

92 He thought he’d boxed the driver: *Scott*, 550 U.S. at 375; Brief for Respondent at 9, *Scott* (No. 05-1631).

92 Rejoining the chase: *Scott*, 550 U.S. at 375; Brief for Respondent at 7, *Scott* (No. 05-1631).

92 The six-minute pursuit had covered: *Scott*, 550 U.S. at 375.

92 He radioed in for permission: *Scott*, 550 U.S. at 375.

92 A Precision Intervention Technique: *Scott*, 550 U.S. at 375.

92 And though it’s known to be: *Scott*, 550 U.S. at 375.

92 The cars had reached a narrow stretch: Brief for Respondent at 9, *Scott* (No. 05-1631).

92 He hit the gas: “Police Chase—Scott v. Harris,” YouTube video, 6:00, posted by “Donald Braman,” July 19, 2007, http://www.youtube.com/watch?v=DBY2y2YsmN0.

93 The result was dramatic: YouTube, “Police Chase—Scott v. Harris.”

93 Scott yelled into his radio: YouTube, “Why I ran.”

93 White smoke poured: YouTube, “Police Chase—Scott v. Harris.”

93 The officers ran down: YouTube, “Police Chase—Scott v. Harris.”

93 Scott looked through the window: YouTube, “Why I ran.”

93 One of the officers said what: YouTube, “Police Chase—Scott v. Harris.”

93 Victor Harris, nineteen: YouTube, “Why I ran.”

93 But the cost of the accident: YouTube, “Why I ran.” Note that Victor does not appear to have complete paralysis in his arms.

93 Taking stock of the events: *Scott*, 550 U.S. at 375–76.

93 Victor’s argument was that: *Scott*, 550 U.S. at 382–83.

93 Perhaps chief among them: *Scott*, 550 U.S. at 381, 383.

93 But in 2001, Coweta County: Sean Alfano, "Court Sides with Cops on High-Speed Chase," CBS News, April 30, 2007, http://www.cbsnews.com/stories/2007/04/30/supremecourt/main2743124.shtml.

93 To determine whether Victor created: *Scott*, 550 U.S. at 386.

94 As Justice Scalia explained: Oral Argument Transcript at 24, *Scott* (No. 05-1631).

94 The Supreme Court majority found: *Scott*, 550 U.S. at 378–81.

94 According to the Court, after watching: *Scott*, 550 U.S. at 395.

94 As Justice Scalia wrote: *Scott*, 550 U.S. at 380–81.

94 The Court was so sure of itself: *Scott*, 550 U.S. at 378.

94 Each of us believes that we see: Lee Ross and Andrew Ward, "Naïve Realism in Everyday Life: Implications for Social Conflict and Misunderstanding," in *Values and Knowledge*, eds. Edward S. Reed, Elliot Turiel, and Terrance Brown (Mahwah, NJ: Lawrence Erlbaum, 1996): 110.

95 When we watch a video: Ross and Ward, "Naïve Realism."

95 When we come across those: Ross and Ward, "Naïve Realism."

95 One option would be to reassess: Ross and Ward, "Naïve Realism."

95 Rather, we look to dismiss: Ross and Ward, "Naïve Realism."

95 Those with conflicting viewpoints: Ross and Ward, "Naïve Realism."

96 Rather, they reflect the realities: Dan M. Kahan, "Culture, Cognition, and Consent: Who Perceives What, and Why, in Acquaintance-Rape Cases," *University of Pennsylvania Law Review* 158 (2010): 755–56.

96 At any given moment: Dan M. Kahan, David A. Hoffman, and Donald Braman, "Whose Eyes Are You Going to Believe? *Scott v. Harris* and the Perils of Cognitive Illiberalism," *Harvard Law Review* 122 (2009): 872–79.

96 In a powerful demonstration of this: *Scott*, 550 U.S. at 380–81, 395; Kahan, Hoffman, and Braman, "Whose Eyes?," 841.

96 Did "the videotape . . . speak for itself": Kahan, Hoffman, and Braman, "Whose Eyes?," 841.

96 The researchers asked a diverse group: Kahan, Hoffman, and Braman, "Whose Eyes?," 841.

96 What they found were clear rifts: Kahan, Hoffman, and Braman, "Whose Eyes?," 872–79.

96 A less affluent, liberal, highly educated: Kahan, Hoffman, and Braman, "Whose Eyes?," 879. The researchers found that characteristics such as race, gender, wealth, politicial orientation, and place of residence were each linked to people's perceptions of the tape. Kahan, Hoffman, and Braman, "Whose Eyes?," 870. But they also found that combinations of these characteristics mattered. Kahan, Hoffman, and Braman, "Whose Eyes?," 870–79.

97 And the fact that the true source: Kahan, Hoffman, and Braman, "Whose Eyes?," 838.

97 As the research team pointed out: Kahan, Hoffman, and Braman, "Whose Eyes?," 838, 887.

97 According to the Supreme Court: Kahan, Hoffman, and Braman, "Whose Eyes?," 842.

97 As jurors, we are often oblivious: Kahan, Hoffman, and Braman, "Whose Eyes?," 885–90.

97 In the play (and 1957 film): Reginald Rose, *12 Angry Men*, directed by Sidney Lumet (Beverly Hills, CA: Metro-Goldwyn-Mayer, 1957), 96 min.

97 "Most of 'em," he explains: Rose, *12 Angry Men*.

97 And, yet, after saying many: Rose, *12 Angry Men*.

98 In *12 Angry Men,* Juror #8: Rose, *12 Angry Men*.

98 Recent research suggests as much: Brian H. Bornstein and Edie Greene, "Jury Decision Making: Implications For and From Psychology," *Current Directions in Psychological Science* 20, no. 1 (2011): 65, doi: 10.1177/0963721410397282.

98 When O.J. Simpson was acquitted: Jewelle Taylor Gibbs, *Race and Justice: Rodney King and O.J. Simpson in a House Divided* (San Francisco: Jossey-Bass, 1996), 140–41, 149, 217–24.

98 Well, nine out of the twelve: Gibbs, *Race and Justice*, 218–19.

98 Or maybe it had to do with intelligence: Gibbs, *Race and Justice*, 219–20; Timothy Egan, "Not Guilty: The Jury," *New York Times*, October 4, 1995, http://www.nytimes.com/1995/10/04/us/not-guilty-the-jury-one-juror-smiled-then-they-knew.html.

99 As Justice Scalia explained: *Scott*, 550 U.S. at 381.

99 And the dawn of the "video age": The desire for "clear and indisputable records" was one of the motivations for a 2014 policy directive from the U.S. Department of Justice requiring federal law enforcement agencies to begin videotaping most interviews with suspects. Michael S. Schmidt, "In Policy Change, Justice Dept. to Require Recordings of Interrogations," *New York Times*, May 22, 2014, http://www.nytimes.com/2014/05/23/us/politics/justice-dept-to-reverse-ban-on-recording-interrogations.html?_r=0.

99 Even Marge Simpson has weighed in: "Homer Badman," *The Simpsons*, season 6, episode 112, directed by David Mirkin (Los Angeles, CA: Fox), aired November 27, 1994.

99 But all of our seemingly neutral: Benforado, "Frames of Injustice," 1347–51.

100 Over the last few decades: See, e.g., Michael D. Storms, "Videotape and the Attribution Process: Reversing Actors' and Observers' Points of View," *Journal of Personality and Social Psychology* 27 (1973): 165–75; G. Daniel Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," *Journal of Applied Sociology* 3 (1986): 268–76; G. Daniel Lassiter et al., "Videotaped Interrogations and Confessions: A Simple Change in Camera Perspective Alters Verdicts in Simulated Trials," *Journal of Applied Psychology* 87 (2002): 868–74; G. Lassiter, "Illusory Causation in the Courtroom," *Current Directions in Psychological Science* 11 (2002): 204–08; Jennifer J. Ratcliff et al., "Camera Perspective Bias in Videotaped Confessions: Experimental Evidence of Its Perceptual Basis," *Journal of Experimental Psychology* 12 (2006): 197–206; G. Daniel Lassiter et al., "Evaluating Videotaped Confessions: Expertise Provides No Defense Against the Camera Perspective Effect," *Psychological Science* 18 (2007): 224–26; G. Daniel Lassiter and Andrew L. Geers, "Bias and Accuracy in the Evaluation of Confession Evidence," in *Interrogations, Confessions, and Entrapment*, ed. G. Daniel Lassiter (New York: Spring, 2004): 197–214; G. Daniel Lassiter et al., "Videotaped Confessions: Is Guilt in the Eye of the Camera?," *Advances in Experimental Social Psychology* 33 (2001): 189–254.

100 When we view events as if standing: Lassiter et al., "Videotaped Confessions: Is Guilt in the Eye of the Camera?," 197. The source of the difference in attributions between actors and observers appears to be the different elements that draw our attention when we view events from these two perspectives. Emily Pronin and Lee Ross, "Temporal Differences in Trait Self-Ascription: When the Self Is Seen as an Other," *Journal of Personality and Social Psychology* 90 (2006): 197. We tend to give unwarranted weight to the factors that are more salient to us. Lassiter, "Illusory Causation," 204.

100 Imagine that you are impaneled: Ratcliff et al., "Camera Perspective Bias," 197; Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268.

100 As luck would have it: Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268.

100 When scientists conducted a number: Ratcliff et al., "Camera Perspective Bias," 197; Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268.

100 By simply shifting the point: Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268.

100 Watching the interrogator through the eyes: Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268.

100 Those who watched the videotape: Lassiter, "Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion," 268. Reading a traditional transcript of the interrogation, without seeing any video footage, led to voluntariness judgments that were closest to assessments made by those who viewed the interrogation from the perspective of the suspect. Lassiter et al., "Videotaped Interrogations and Confessions," 868.

100 Camera perspective bias can also influence: Lassiter, "Illusory Causation," 206; Ratcliff et al., "Camera Perspective Bias," 197.

100 In one experiment, moving from: Lassiter, "Illusory Causation," 206.

100 What's more, the bias seems to occur: Lassiter, "Illusory Causation," 206.

101 And it's surprisingly sticky: See, e.g., Lassiter et al., "Evaluating Videotaped Confessions," 224–25; Lassiter and Geers, "Bias and Accuracy," 207; G. Daniel Lassiter et al.,

"Accountability and the Camera Perspective Bias in Videotaped Confessions," *Analysis of Sociological Issues and Public Policy* 1 (2001): 53, 63; Ratcliff et al., "Camera Perspective Bias," 203; Lassiter, "Illusory Causation," 206.

101 Justice Scalia thought: *Scott*, 550 U.S. at 378.

101 But it didn't just record: Benforado, "Frames of Injustice," 1353; Kahan, Hoffman, and Braman, "Whose Eyes?," 855.

101 Watching the tape, we sit where he sat: YouTube, "Why I ran"; Kahan, Hoffman, and Braman, "Whose Eyes?," 855.

101 Having adopted the officer's: Benforado, "Frames of Injustice," 1353.

101 What if the Supreme Court had: Benforado, "Frames of Injustice," 1353.

101 What if there had been: Benforado, "Frames of Injustice," 1353.

101 Each of these tapes would be: *Scott*, 550 U.S. at 372, 373; Benforado, "Frames of Injustice," 1353–55.

102 Viewers might have considered: Benforado, "Frames of Injustice," 1354; *Scott*, 550 U.S. at 372, 384, 389, 396.

102 It might have triggered feelings: Benforado, "Frames of Injustice," 1354.

102 At the time of the accident: YouTube, "Why I ran."

102 He had left home: YouTube, "Why I ran."

102 By 11 p.m. he was completely: YouTube, "Why I ran."

102 When he suddenly saw: YouTube, "Why I ran."

102 His license had been suspended: YouTube, "Why I ran."

102 Running from the police: For an interesting and revealing (if controversial) sociological perspective on the threat of capture and confinement that characterizes the lives of many young

urban black men, see Alice Goffman, *On the Run: Fugitive Life in an American City* (Chicago: University of Chicago Press, 2014).

102 There is no expectation: Goffman, *On the Run*, 23–53, 195–201. Survey data shows that only 44.2 percent of black people between the ages of eighteen and twenty-nine trust the police, as compared to 71.5 percent of whites. "Young People of Color Mistrust Police, Legal System, Report Finds," *ScienceDaily*, August 16, 2014, www.sciencedaily.com/releases/2014/08/140816204417.htm. And 54.5 percent of black youths have been harassed by the police—almost twice the rate of non-blacks. "Young People of Color Mistrust Police."

102 For many black teens: Goffman, *On the Run*, 23–53; Alex Kotlowitz, "Deep Cover: Alice Goffman's 'On the Run,'" *New York Times*, June 26, 2014, http://www.nytimes.com/2014/06/29/books/review/alice-goffmans-on-the-run.html?_r=0.

102 In a fateful instant: YouTube, "Why I ran."

102 As he explained later: YouTube, "Why I ran."

103 We see, in the words: Matt. 7:3.

103 Every year, more squad cars: "Should Police Wear Cameras?" *New York Times,* October 22, 2013, http://www.nytimes.com/roomfordebate/2013/10/22/should-police-wear-cameras.

104 In 2012, a program: Ian Lovett, "In California, a Champion for Police Cameras," *New York Times*, August 21, 2013, http://www.nytimes.com/2013/08/22/us/in-california-a-champion-for-police-cameras.html?hp&_r=1&.

104 Over the next year: Lovett, "In California."

104 Knowing that they were: Lovett, "In California." Subsequently, the police department expanded the program to cover every uniformed officer. Other jurisdictions, including New York

City, Albuquerque, Oakland, and Fort Worth, have introduced similar cameras into their forces. John F. Timoney, "The Real Costs of Policing the Police," *New York Times*, August 19, 2013, http://www.nytimes.com/2013/08/20/opinion/the-real-costs-of-policing-the-police.html?hp; Lovett, "In California."

104 The proliferation of video footage: Benforado, "Frames of Injustice," 1375–76; Paul Lewis, "Every Step You Take: UK Underground Centre That Is Spy Capital of the Word," *Guardian*, March 2, 2009, http://www.theguardian.com/uk/2009/mar/02/westminster-cctv-system-privacy.

104 Since camera angles that offer: Ratcliff et al., "Camera Perspective Bias," 203.

104 Since it's often not possible: Benforado, "Frames of Injustice," 1359.

104 We should be particularly careful: Benforado, "Frames of Injustice," 1359. One danger is that police leadership may not be aware of the problem of perspective bias. The commissioner of the NYPD, Bill Bratton, for instance, has sung the praises of having cameras on his officers: "So much of what goes on in the field is 'he-said-she-said,' and the camera offers an objective perspective." Lovett, "In California." If only that were true.

104 Alternatively, we might allow it: Benforado, "Frames of Injustice," 1359.

104 The Sixth Amendment provides: Henry T. Greely, "Law and the Revolution in Neuroscience: An Early Look at the Field," *Akron Law Review* 42 (2009): 697.

105 It is not fair that: Aneeta Rattan, Cynthia S. Levine, Carol S. Dweck, and Jennifer L. Eberhardt, "Race and the Fragility of the Legal Distinction between Juveniles and Adults," *PLOS ONE* 7, no. 5 (2012): 2, doi: 10.1371/journal.pone.0036680.

105 Recent research suggests that: Natasha Schvey, Rebecca Puhl, Katherine Levandoski, and Kelly Brownell, “The Influence of a Defendant’s Body Weight on Perceptions of Guilt,” *International Journal of Obesity* 37, no. 9 (2013): 1279. doi: 10.1038/ijo.2012.211.

105 Female jurors, by contrast, do not: Schvey et al., “Weight on Perceptions of Guilt,” 1279.

105 What’s more, slim men appear: Schvey et al., “Weight on Perceptions of Guilt,” 1279.

106 Implicit association tests are: Sean M. Phelan et al., “Implicit and Explicit Weight Bias in a National Sample of 4,732 Medical Students: The Medical Student CHANGES Study,” *Obesity* 22 (2014): 1201–08; “About the IAT,” Project Implicit, accessed May 13, 2014, https://implicit.harvard.edu/implicit/iatdetails.html.

106 The basic idea behind: “About the IAT,” Project Implicit.

106 When an image or word appears: “About the IAT,” Project Implicit.

106 Then the categories are changed: “About the IAT,” Project Implicit.

106 Measuring the speed of responses: Phelan et al., “Implicit and Explicit Weight Bias,” 1201.

106 In these cases, many people: Phelan et al., “Implicit and Explicit Weight Bias,” 1201–08.

106 To date, the researchers who have developed: “Ethical Considerations,” Project Implicit, accessed May 13, 2014, https://implicit.harvard.edu/implicit/ethics.html.

107 The time may come when: Greely, “Law and the Revolution in Neuroscience,”698; Nadelhoffer and Sinnot-Armstrong, “Neurolaw and Neuroprediction,” 633.

107 And breakthroughs in neuroscience: Greely, “Law and the Revolution in Neuroscience,” 698; Thomas Nadelhoffer and Walter Sinnot-Armstrong, “Neurolaw and Neuroprediction: Potential Promises and Perils,” *Philosophy Compass* 7, no. 9 (2012): 633, doi: 10.1111/j.1747-9991.2012.00494.x.

107 In a recent fMRI study: Harrison A. Korn, Micah A. Johnson, and Marvin M. Chun, "Neurolaw: Differential Brain Activity for Black and White Faces Predicts Damage Awards in Hypothetical Employment Discrimination Cases," *Social Neuroscience* 7 (2012): 398–409.

107 Rather than filling out a questionnaire: Greely, "Law and the Revolution in Neuroscience," 698.

6. The Corruption of Memory ~ The Eyewitness

108 "Do you see a person": Harvard University Press, "Understanding Eyewitness Misidentifications," March 14, 2011, http://harvardpress.typepad.com/hup_publicity/2011/03/understanding-eyewitness-misidentifications.html; Brandon L. Garrett, "Introduction: New England Law Review Symposium on 'Convicting the Innocent,'" *New England Law Review* 46 (2012): 671–74.

108 "Yes, sir": Harvard University Press, "Understanding Eyewitness Misidentifications."

108 The Meriwether County prosecutor: Maureen Downey, Georgia Innocence Project, "Sharper Eyewitnessing," December 21, 2007, http://www.ga-innocenceproject.org/Articles/Article_95.htm.

108 This was a pivotal moment: Garrett, "Introduction," 672.

108 The woman on the stand: Bill Rankin, Georgia Innocence Project, "Innocent Man's Conviction Show's Flaws in Line-Ups," December 13, 2007, http://www.ga-innocenceproject.org/Articles/Article_90.htm; Innocence Project, "John Jerome White," last accessed May 12, 2014, http://www.innocenceproject.org/Content/John_Jerome_White.php.

108 "If you would, please, ma'am": Harvard University Press, "Understanding Eyewitness Misidentifications."

108 "That's him": Harvard University Press, "Understanding Eyewitness Misidentifications."

108 John Jerome White was convicted: Garrett, "Introduction," 672.

108 At trial, White had been adamant: Innocence Project, "John Jerome White."

109 He was not the one: Innocence Project, "John Jerome White."

109 "I know I didn't": Garrett, "Introduction," 672.

109 The prosecution didn't have much: Transcript of Record at 102, 122, State v. White, No. 314 (Ga. Super. Ct. May 29, 1980).

109 But under cross-examination: Transcript at 112.

109 The victim had identified White: Innocence Project, "John Jerome White"; Garrett, "Introduction," 672.

109 In the words of Supreme Court Justice: Watkins v. Sowders, 449 U.S. 341, 352 (1981) (Brennen, J., dissenting).

109 But John Jerome White was not: Innocence Project, "John Jerome White."

109 DNA tests conducted in 2007: Innocence Project, "John Jerome White." The Georgia Innocence Project got involved in the case in 2004 after White sent them a letter while in prison. Rankin, "Innocent Man's Conviction."

109 By the time White walked out: Dorie Turner, "DNA Test Clears Man After 27 Years," *Washington Post*, December 11, 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/12/11/AR2007121101207.html.

109 Without her error, White wouldn't: White initially served ten years in prison for the crime he did not commit. While on parole, he was convicted of drug and robbery charges and served an additional 12.5 years—a sentence enhanced by his previous (wrongful) conviction. Innocence Project, "John Jerome White."

109 The authorities never looked: Rankin, "Innocent Man's Conviction."

110 It was then, just a few weeks: Gary Wells, "The Mistaken Identification of John Jerome White," last accessed May 18, 2015, http://www.psychology.iastate.edu/~glwells/The_Misidentification_of_John_White.pdf.

110 White appears in the middle: Wells, "The Mistaken Identification."

110 He is rail thin: Wells, "The Mistaken Identification."

110 He looks directly at: Wells, "The Mistaken Identification."

110 Lineup photograph: I thank Brandon Garrett for providing this copy of the original lineup.

110 The victim had no trouble: Brandon L. Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Cambridge, MA: Harvard University Press, 2011), 66.

110 As she explained, she was: Garrett, *Convicting the Innocent*, 66.

110 Standing before her, just two spots: Wells, "The Mistaken Identification"; Kaffie Sledge, Georgia Innocence Project, "Adjusting to Freedom," April 21, 2008, http://www.ga-innocenceproject.org/Articles/Article_104.htm.

110 At the police station, she had looked: Garrett, "Introduction," 672.

110 Parham's inclusion in the lineup: Garrett, "Introduction," 672–73.

111 Parham just happened to be: Rankin, "Innocent Man's Conviction"; Garrett, "Introduction," 673.

111 The police had no idea: Wells, "The Mistaken Identification."

111 And it would be almost thirty years: The perpetrator's DNA was eventually matched to the pubic hair found at the original crime scene. Rankin, "Innocent Man's Conviction."

111 Even among the limited number: Garrett, *Convicting the Innocent*, 57–58, 67.

111 In one of those cases: Jennifer Thompson, "I Was Certain, but I Was Wrong," *New York Times*, June 18, 2000, 2014, http://www.nytimes.com/2000/06/18/opinion/i-was-certain-but-i-was-wrong.html?src=pm.

111 She was determined to help: Thompson, "I Was Certain, but I Was Wrong."

111 Thompson was "completely confident": Thompson, "I Was Certain, but I Was Wrong."

111 But then another man: Thompson, "I Was Certain, but I Was Wrong."

111 At Cotton's retrial, Poole was brought: Thompson, "I Was Certain, but I Was Wrong."

111 Without hesitation she responded: Thompson, "I Was Certain, but I Was Wrong."

111 Cotton was sentenced again: Thompson, "I Was Certain, but I Was Wrong."

111 But, just like White: Thompson, "I Was Certain, but I Was Wrong."

111 As Thompson wrote later: Thompson, "I Was Certain, but I Was Wrong."

112 While there are other ways: Dan Simon, *In Doubt: The Psychology of the Criminal Justice System* (Cambridge, MA: Harvard University Press, 2012), 50.

112 Some witness memories, like the face: Simon, *In Doubt*, 51.

112 Others are important for determining: Simon, *In Doubt*, 90.

112 To cite just one statistic: Gary L. Wells and Elizabeth A. Olson, "Eyewitness Identification: Information Gain from Incriminating and Exonerating Behaviors," *Journal of Experimental Psychology: Applied* 8 (2002): 155, doi: 10.1037//1076-898X.8.3.155.

112 Our dependence on witness memory: Simon, *In Doubt*, 53.

112 There is, for instance, compelling evidence: Richard A. Wise, Clifford S. Fishman, and Martin A. Safer, "How to Analyze the Accuracy of Eyewitness Testimony in a Criminal Case," *Connecticut Law Review* 42 (2009): 440–41 n. 12.

112 When the actual perpetrator: Steven E. Clark, Ryan T. Howell, and Sherrie L. Davey, "Regularities in Eyewitness Identification," *Law and Human Behavior* 32 (2008): 198–218.

112 And of those witnesses who do: Simon, *In Doubt*, 53; Clark, "Regularities in Eyewitness Identification," 198–218.

112 This is great news if: Simon, *In Doubt*, 54.

112 But even more disturbing: Simon, *In Doubt*, 54; Clark, "Regularities in Eyewitness Identification," 198–218.

112 Moreover, people who successfully pick: Simon, *In Doubt*, 54.

113 It is no surprise, then: Garrett, "Introduction," 676; Roy S. Malpass, Colin G. Tredoux, and Dawn McQuiston-Surrett, "Lineup Construction and Lineup Fairness," in *Handbook of Eyewitness Psychology (Vol. 2): Memory for People*, eds. R. C. L. Lindsay et al. (Mahwah, NJ: Lawrence Erlbaum & Associates, 2007), 1.

As we've seen before, one of the reasons that erroneous witness identifications or testimony can be so damaging is that they influence other evidence. Simon, *In Doubt*, 55. When the police get a positive identification of someone like White, they are likely to then work harder to find corroborating evidence to confirm his guilt and interpret such evidence in a biased way. That may mean placing more weight on the testimony of a jailhouse informant, who would otherwise be viewed skeptically, or interpreting genuinely ambiguous forensic evidence (like the hair sample found in the victim's apartment) in a manner that confirms guilt.

113 Of the first 250 DNA exonerations: Adam Liptik, "34 Years Later, Supreme Court Will Revisit Witness IDs," *New York Times*, August 22, 2011, http://www.nytimes.com/2011/08/23/us/23bar.html?_r=1&src=rech.

113 Victims tend to be strongly motivated: Victims may, however, be fearful of helping the police or reluctant to confront the perpetrator at trial, despite wanting the offender to be caught and punished.

113 The vast majority of other witnesses: Of course, certain witnesses may be reluctant to cooperate with the police particularly in neighborhoods with a strong "no-snitch" code. Mark Konkol, "Chicago Police Solve More Murders With New Strategy, Witness Cooperation," *DNAinfo Chicago*, July 24, 2013, http://www.dnainfo.com/chicago/20130724/loop/chicago-police-solve-more-murders-with-new-strategy-witness-cooperation.

113 There is nothing in: Garrett, "Introduction," 673.

113 It wasn't a story of some evil: Errin Haines, Georgia Innocence Project, "Man Cleared by DNA Eager for Christmas in Freedom," December 20, 2007, http://www.ga-innocenceproject.org/Articles/Article_94.htm.

113 One of the most widely shared: Daniel J. Simons and Christopher F. Chabris, "What People Believe About How Memory Works: A Representative Survey of the U.S. Population," *PLoS ONE,* 6, no.8 (2011), doi: 10.1371/journal.pone.0022757, http://www.plosone.org/article/info:doi%2F10.1371%2Fjournal.pone.0022757. A number of studies suggest that high percentages of people, including police officers, find the video camera metaphor to be accurate. Simon, *In Doubt*, 95; Richard S. Schmechel et al., "Beyond the Ken? Testing Jurors' Understanding of Eyewitness Reliability Evidence," *Jurimetrics* 46 (2006): 177–214; Richard A. Wise, Martin A. Safer, and Christina M. Maro, "What U.S. Law Enforcement Officers Know and Believe About Eyewitness Interviews and Identification Procedures," *Applied Cognitive Psychology* 25 (2011): 488–500; John C. Yullie, "Research and Teaching with Police: A Canadian Example," *International Review of Applied Psychology* 33 (1984): 5–23.

113 Sure, sometimes we forget: Simons, "What People Believe."

114 Not only do a large majority: Schmechel, "Beyond the Kin"; Wise, Safer, and Maro, "What U.S. Law Enforcement Officers Know"; Yullie, "Research and Teaching with Police"; Simon, *In Doubt*, 95, 150–51; John C. Brigham and Robert K. Bothwell, "The Ability of Prospective Jurors to Estimate the Accuracy of Eyewitness Identifications," *Law and Human Behavior* 7 (1983): 19–30; Erin M. Harley, Keri A. Carlsen, and Geoffrey R. Loftus, "The 'Saw-It-All-Along' Effect: Demonstrations of Visual Hindsight Bias," *Journal of Experimental Psychology: Learning, Memory, and Cognition* 30 (2004), 960–68.

114 As a result, we have great faith: Simon, *In Doubt*, 150–57.

114 We have an uncanny ability: That said, although we can be adept at spotting the faces of those whom we previously had reason to focus on, we do not generally excel at encoding the images of *strangers*. Simon, *In Doubt*, 55–56; Ahmed M. Megreya and A. Mike Burton, "Matching Faces to Photographs: Poor Performance in Eyewitness Memory (Without the Memory)," *Journal of Experimental Psychology: Applied* 14 (2008): 364–72. And human memories are not all the same: some people are much, much better than others at certain memory tasks. Roni Caryn Rabin, "A Memory for Faces, Extreme Version," *New York Times*, May 25, 2009, http://www.nytimes.com/2009/05/26/health/26face.html. So, when it comes to faces, there are both "super-recognizers" and those with "face blindness" (a condition called prosopagnosia), who sometimes cannot even recognize their immediate family members. Rabin, "A Memory for Faces"; Rick Nauert, "Ability to Recognize Faces is Hardwired," *PsychCentral*, accessed December 5, 2011, http://psychcentral.com/news/2011/12/05/ability-to-recognize-faces-is-hardwired/32196.html.

114 How is it possible that: Charles Darwin, *On the Origin of Species* (London: John Murray, 1859).

114 The answer is that our memories: Overall, there is a large gap between widely held beliefs about memory and the scientific consensus. Simons and Chabris, "What People Believe." Indeed, in a recent study, only 1.5 percent of participants demonstrated an accurate understanding of memory across the six basic questions that were asked. Simons and Chabris, "What People Believe."

114 To begin with, our real memories: Simons and Chabris, "What People Believe."

114 Just seeing or hearing or smelling: University of California, Los Angeles, "Did You See That? How Could You Miss It?" *ScienceDaily*, November 26, 2012, http://www.sciencedaily.com/releases/2012/11/121126151058.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fmind_brain%2Fpsychology+%28ScienceDaily%3A+Mind+%26+Brain+News+--+Psychology%29.

115 We don't generally take notice: University of California, Los Angeles, "Did you See That?"

115 In one study, researchers found that: Alan Castel et al., "Fire Drill: Inattentional Blindness and Amnesia for the Location of Fire Extinguishers," *Attention, Perception, and Psychophysics* 74 (2012): 1391–92; University of California, Los Angeles, "Did you See That?"

115 The fire extinguishers were not germane: Castel, "Fire Drill," 1391, 1395. This is the potent influence of inattentional blindness and amnesia—our failure to attend to elements in a scene when our focus is directed elsewhere, with a corresponding inability to recall those elements later despite having seen them. Castel, "Fire Drill," 1391. Perhaps the most famous demonstration of inattentional blindness comes in the so-called "invisible gorilla" experiments,

in which people shown a video of two teams of basketball players and asked to count the number of passes made by one team fail to notice a man in a gorilla suit walking into the picture. Castel, "Fire Drill," 1391; Daniel J. Simons and Christopher F. Chabris, "Gorillas in our Midst: Sustained Inattentional Blindness for Dynamic Events," *Perception*, 28 (1999): 1059–1074.

115 On the bright side: Castel, "Fire Drill," 1394–95.

115 When the experimenters returned: Castel, "Fire Drill," 1394–95; University of California, Los Angeles, "Did you See That?"

116 Ten Dollar Bill image: "File: US10dollarbill-Series 2004A.jpg," *Wikimedia Commons*, last accessed May 15, 2014, http://en.wikipedia.org/wiki/File:US10dollarbill-Series_2004A.jpg.

116 They lack the permanence: Simon, *In Doubt*, 98.

116 We tend to be best at remembering: Dan Simon, "The Limited Diagnosticity of Criminal Trials," *Vanderbilt Law Review*, 64 (2011): 161; Simon, *In Doubt*, 97.

116 The specifics are also the fastest: Simon, *In Doubt*, 97, 109.

116 Events that elicit strong emotion: Simon, *In Doubt*, 107; John C. Yuille et al., "Eyewitness Memory of Police Trainees for Realistic Role Plays," *Journal of Applied Psychology* 79 (1994): 931–36; Lynn M. Hulse and Amina Memon, "Fatal Impact? The Effects of Emotional and Weapon Presence on Police Officers' Memories for a Simulated Crime," *Legal and Criminological Psychology* 11 (2006): 313–25.

117 The trouble with relying on: Simons, "What People Believe."

117 As a result, two people will not: Simons, "What People Believe."

117 And once formed: Simons, "What People Believe."

117 Memory is a constructive process: Simon, *In Doubt*, 96.

117 When we go to retrieve a memory: Simons, "What People Believe."

117 The malleability of our memories: Dario Sacchi, Franca Agnoli, and Elizabeth Loftus, "Changing History: Doctored Photographs Affect Memory for Past Public Events," *Applied Cognitive Psychology* 21 (2007): 1005, doi: 10.1002/acp.1394, https://webfiles.uci.edu/eloftus/Sacchi_Agnoli_Loftus_ACP07.pdf.

117 The alteration of the photograph: Sacchi, Agnoli, and Loftus, "Changing History," 1008–09.

117 We can even remember things: Simon, *In Doubt*, 99.

117 One study found that: Steven Frenda, Rebecca Nichols, and Elizabeth Loftus, "Current Issues and Advances in Misinformation Research," *Current Directions in Psychological Science* 20 (2011): 22.

117 Tiananmen Square photographs: The original photo used in the experiment is by Stuart Franklin, "The Tank Man" (Magnum Photos, 1989).

118 Contrary to what we'd expect: Simon, *In Doubt*, 104–105; Margery A. Eldridge, Philip J. Barnard, and Debra A. Bekerian, "Autobiographical Memory and Daily Schemas at Work," *Memory* 2 (1994): 51–74.

118 In most cases, our false memories: Simon, *In Doubt*, 100–105.

118 Put differently, roughly every: Simon, *In Doubt*, 93.

118 But the problem is not just that: Jennifer L. Tomes and Albert N. Katz, "Confidence-Accuracy Relations for Real and Suggested Events," *Memory* 8 (2000): 279.

118 She was seventy-four years old: Downey, "Sharper Eyewitnessing"; Rankin, "Innocent Man's Conviction."

118 The only light came from: Innocence Project, "John Jerome White."

118 And before leaving, the perpetrator: Rankin, "Innocent Man's Conviction."

118 Research shows that a witness's eyesight: Simon, *In Doubt*, 60–61; Jean H. Searcy, "Age Differences in Accuracy and Choosing in Eyewitness Identification and Face Recognition," *Memory and Cognition* 27 (1999): 538.

118 For instance, one study showed that: Simon, *In Doubt*, 60.

119 Simply by altering the conditions: Simon, *In Doubt*, 57; D. Stephen Lindsay, J. Don Read, and Kusum Sharma, "Accuracy and Confidence in Person Identification: The Relationship Is Strong When Witnessing Conditions Vary Widely," *Psychological Science* 9 (1998): 215–18.

119 In White's case, for example: Harvard University Press, "Understanding Eyewitness Misidentifications."

119 Research suggests that people are 50 percent: Simon, *In Doubt*, 63; Christian A. Meissner and John C. Bringham, "Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review," *Psychology, Public Policy, and Law* 7 (2001): 3–35.

119 The same is true of identifying: Simon, *In Doubt*, 63; Matthew G. Rhodes and Jeffrey S. Anastasi, "The Own-Age Bias in Face Recognition: A Meta-Analytic and Theoretical Review," *Psychological Bulletin* 138 (2012): 146–74.

119 Researchers have also shown that: Research suggests that while a slightly heightened level of anxiety can improve accuracy, high levels of stress are clearly detrimental. Tim Valentine and Jan Mesout, "Eyewitness Identification Under Stress in the London Dungeon," *Applied Cognitive Psychology* 23 (2009): 153; Simon, *In Doubt*, 61; Kenneth A. Deffenbacher et al., "A Meta-Analytic Review of the Effects of High Stress on Eyewitness Memory," *Law and Human Behavior* 28 (2004): 687–706.

119 In one study, for example, participants: Valentine, "Eyewitness Identification Under Stress," 154.

119 Participants who did not find: Valentine, "Eyewitness Identification Under Stress," 158; Simon, *In Doubt*, 62. While about 54 percent of high-anxiety participants picked an innocent person out of the lineup and only around 18 percent made an accurate identification, 75 percent of low-anxiety participants made an accurate identification. Valentine, "Eyewitness Identification Under Stress," 158; Simon, *In Doubt*, 62.

120 When a weapon is aimed at us: Simon, *In Doubt*, 62; Nancy M. Steblay, "A Meta-Analytic Review of the Weapon Focus Effect," *Law and Human Behavior* 16 (1992): 413–24.

120 Our memories may also be compromised: Lorraine Hope et al., "Witnesses in Action: The Effects of Physical Exertion on Recall and Recognition," *Psychological Science* 23 (2012): 386, doi: 10.1177/0956797611431463, http://pss.sagepub.com/content/23/4/386.

120 In one simulation study: Hope et al., "Witnesses in Action," 387–88.

120 Not only did they struggle to recall: Hope et al., "Witnesses in Action," 387–88.

120 One implication is that when: Hope et al., "Witnesses in Action," 386.

120 It's likely that they just: Hope et al., "Witnesses in Action," 388–89.

120 Yet these officials have significant: Simon, *In Doubt*, 57.

120 And the processes and practices we use: Of course, the two types of factors often interact with each other: someone who sees a suspect in low light for a short period of time is likely to be more susceptible to the misleading influence of a police officer. Simon, *In Doubt*, 57–58.

120 It's strange, then, to discover: Simon, *In Doubt*, 69. For example, in 2007, the Georgia Innocence Project found that 82 percent of Georgia's law enforcement agencies had no recorded standardized eyewitness identification procedure. Dorie Turner, "DNA Test Clears Man After 27 Years," *USA Today*, December 11, 2007, http://usatoday30.usatoday.com/news/nation/2007-12-11-524839445_x.htm.

120 A large majority of officers: Simon, *In Doubt*, 76 n. 130.

121 The real-life rape case: Innocence Project, "John Jerome White."

121 When a Georgia Bureau of Investigations: Innocence Project, "John Jerome White."

121 Those who view a composite image: Simon, *In Doubt*, 64; Gary L. Wells, Steve D. Charman, and Elizabeth A. Olson, "Building Face Composites Can Harm Lineup Identification Performance," *Journal of Experimental Psychology: Applied* 11 (2005): 147–56.

121 But the very process of working: Simon, *In Doubt*, 65; Wells, Charman, and Olson, "Building Face Composites," 147–56.

121 In White's case, any distortion: We do not have a copy of the original photographic array because it was not preserved but it almost certainly showed White along with a number of other men. Harvard University Press, "Understanding Eyewitness Misidentifications."

121 On the positive side, photo arrays: Simon, *In Doubt*, 51–52. Show-ups constitute approximately half of identifications that end up being prosecuted. Simon, *In Doubt*, 69.

121 Cops like show-ups because: Simon, *In Doubt*, 70.

122 For one thing, when witnesses are shown: Neil Brewer and Gary Wells, "Eyewitness Identification," *Current Directions in Psychological Science* 20 (2011): 24.

122 After being told that they chose: Simon, *In Doubt*, 56; Lisa E. Hasel and Saul M. Kassin, "On the Presumption of Evidentiary Independence: Can Confessions Corrupt Eyewitness Identifications?" *Psychological Science* 20 (2009): 122–26.

122 The good news is that: Brewer and Wells, "Eyewitness Identification," 24; Simon, *In Doubt*, 73.

122 Furthermore, showing multiple photographs: Innocence Project, *Reevaluating Lineups: Why Witnesses Make Mistakes and How to Reduce the Chance of Misidentification* (New York:

Benjamin N. Cardozo School of Law, Yeshiva University), http://www.innocenceproject.org/docs/Eyewitness_ID_Report.pdf; Gary L. Wells, "The Psychology of Lineup Identifications," *Journal of Applied Social Psychology* 14 (1983): 89–103.

122 There is an easy solution here: Simon, *In Doubt*, 71. The potential drawback of sequential lineups is that, although they have been consistently shown to reduce false identifications, in certain studies they also reduced some correct identifications. Simon, *In Doubt*, 71.

122 Perhaps the biggest problem: Rankin, "Innocent Man's Conviction."

122 Time is the enemy of eyewitness accuracy: Brewer and Wells, "Eyewitness Identification," 24.

122 Indeed, the most precipitous drop: Simon, *In Doubt*, 66.

122 In one study, witnesses who identified a perpetrator: Simon, *In Doubt*, 66; Tim Valentine, Alan Pickering, and Stephen Darling, "Characteristics of Eyewitness Identification that Predict the Outcome of Real Lineups," *Applied Cognitive Psychology* 17 (2003): 983–84, 988. However, in the period between a month and six months, the proportion of correct identifications seems to level out.

122 Although it's less common than some: Simon, *In Doubt*, 69.

123 One of the basic principles of creating: Brewer and Wells, "Eyewitness Identification," 25.

123 So a lineup may really: Simon, *In Doubt*, 72. Think about it this way: if someone who had not witnessed the crime could read the description of the perpetrator and easily pick the suspect out of the lineup (or quickly eliminate two of the fillers), the witness's identification is fairly worthless. That seems pretty common sense and, yet, there are numerous cases in which the

suspect was the only person who met the witness's description of having facial hair or pock-marked skin or crossed eyes. Garrett, *Convicting the Innocent*, 58–59.

123 In White's case, the victim initially: Garrett, "Introduction," 672; Garrett, *Convicting the Innocent*, 66.

123 She said he had short hair: Harvard University Press, "Understanding Eyewitness Misidentifications."

123 Flip back to the photograph: Harvard University Press, "Understanding Eyewitness Misidentifications."

123 Moreover, his hair is fairly long: Harvard University Press, "Understanding Eyewitness Misidentifications."

123 Indeed, the only man who seems: Harvard University Press, "Understanding Eyewitness Misidentifications."

123 There is substantial evidence that: Simon, *In Doubt*, 96.

123 The process of retrieving memories: Simon, *In Doubt*, 96.

123 This unconscious transference can arise: Brewer and Wells, "Eyewitness Identification," 25.

123 In fact, there is some evidence: Garrett, "Introduction," 682.

123 More often the problem arises when: Simon, *In Doubt*, 66.

124 Experimental evidence confirms that having: Simon, *In Doubt*, 66; Amina Memon et al., "Eyewitness Recognition Errors: The Effects of Mugshot Viewing and Choosing in Young and Old Adults," *Memory and Cognition* 30 (2002): 1219–27.

124 In White's case, the second procedure: Harvard University Press, "Understanding Eyewitness Misidentifications"; Rankin, "Innocent Man's Conviction."

124 What they did not realize is that: Innocence Project, "John Jerome White."

124 The victim may have felt: Rankin, "Innocent Man's Conviction."

124 That is because a witness's level: Brewer and Wells, "Eyewitness Identification," 25; Gary L. Wells and Amy L. Bradfield, "'Good You Identified the Suspect': Feedback to Eyewitnesses Distorts Their Reports of the Witnessing Experience," *Journal of Applied Psychology* 83 (1998): 372–73.

124 When a police officer offers: Brewer and Wells, "Eyewitness Identification," 25; Simon, *In Doubt*, 75.

124 After a witness observes a crime: Simon, *In Doubt*, 101–02.

124 Some of this information may come: Simon, *In Doubt*, 101–02.

124 There is, of course, the potential: Simon, *In Doubt*, 101–03.

125 In one recent study: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 21.

125 After looking at the photos: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 21.

125 When participants were asked: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 21.

125 In another study, two groups: Elizabeth F. Loftus and John C. Palmer, "Reconstruction of Automobile Destruction: An Example of the Interaction Between Language and Memory," *Journal of Verbal Learning and Verbal Behavior* 13 (1974): 585.

125 When the word *smashed* was used: Loftus and Palmer, "Reconstruction of Automobile Destruction," 585.

125 Participants in the "smashed" group: Loftus and Palmer, "Reconstruction of Automobile Destruction," 585.

125 Young children and the elderly appear: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 21; Simon, *In Doubt*, 114.

125 Perhaps most shocking is that: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 22.

125 A number of studies have shown: Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 22.

125 One group of researchers found that: Sacchi, Agnoli, and Loftus, "Changing History," 1006–07.

125 Both verbal and nonverbal cues: Simon, *In Doubt*, 74.

126 It seems like good advice and harmless: Simon, *In Doubt*, 74.

126 And a simple cough, sigh, or gesture: Chris Opfer, "The Problem with Police Line-Ups," *Atlantic*, February 19, 2013, http://www.theatlanticcities.com/politics/2013/02/problem-police-line-ups/4724/.

126 In one study, when an experimenter: Daniel J. Gurney, Karen J. Pine, and Richard Wiseman, "The Gestural Misinformation Effect: Skewing Eyewitness Testimony Through Gesture," *American Journal of Psychology* 126 (2013): 305.

126 Interviews are especially fraught: Ronald Fisher, Rebecca Milne, and Ray Bull, "Interviewing Cooperative Witnesses," *Current Directions in Psychological Science* (2011): 16; Simon, *In Doubt*, 112.

126 Since most officers have very little: Fisher, Milne, and Bull, "Interviewing Cooperative Witnesses," 16; Simon, *In Doubt*, 112.

126 Among other things, they fail: Fisher, Milne, and Bull, "Interviewing Cooperative Witnesses," 16; Simon, *In Doubt*, 112.

126 When they reach a dead end: Simon, *In Doubt*, 94.

126 This may be effective on occasion: Simon, *In Doubt*, 94, 114.

126 And the more that detectives repeat: Simon, *In Doubt*, 113.

127 However, research suggests that most judges: Simon, *In Doubt*, 55.

127 And they are often oblivious: Simon, *In Doubt*, 151–52.

127 Compounding the problem is that: Simon*, In Doubt*, 152.

127 For instance, jurors are two to three: Simon, *In Doubt*, 115, 153; Kevin Krug, "The Relationship Between Confidence and Accuracy: Current Thoughts of the Literature and a New Area of Research," *Applied Psychology in Criminal Justice* 3 (2007): 7–8.

127 When a woman like the victim: Garrett, *Convicting the Innocent*, 66.

127 Jurors appear to be particularly impressed: Simon, *In Doubt*, 154.

127 Yet these identifications might: Simon, *In Doubt*, 155.

128 They believe that standard legal tools: Garrett, "Introduction," 682.

128 In his 1908 book, *On the Witness Stand*: Hugo Münsterberg, *On the Witness Stand: Essays in Psychology and Crime* (New York: Doubleday, Page, 1908), 51.

128 All of a sudden: Münsterberg, *On the Witness Stand,* 51.

128 The men shouted at each other: Münsterberg, *On the Witness Stand,* 52.

128 A few moments later: Münsterberg, *On the Witness Stand,* 52.

128 Given that a criminal investigation was: Münsterberg, *On the Witness Stand,* 52.

128 Unbeknownst to them, the entire: Münsterberg, *On the Witness Stand,* 52.

128 The results were disheartening: Münsterberg, *On the Witness Stand,* 52–53.

128 According to Münsterberg, when: Münsterberg, *On the Witness Stand,* 31.

128 Indeed, "in a thousand courts": Münsterberg, *On the Witness Stand,* 43.

129 In the direct aftermath: Downey, "Sharper Eyewitnessing"; Rankin, "Innocent Man's Conviction."

129 But other than the creation: "Editorial: Georgia Should Have Eyewitness ID Protocol," *Athens Banner Herald*, September 23, 2011, http://onlineathens.com/stories/092311/opi_889162565.shtml; Garrett, "Introduction," 673.

129 In the vast majority of jurisdictions: Garrett, "Introduction," 675, 680–82.

129 Of course, *some* progress: "Hugo Münsterberg," accessed May 18, 2014, http://www.famouspsychologists.org/hugo-munsterberg/.

129 In the last thirty years: Liptak, "34 Years Later, Supreme Court Will Revisit Eyewitness IDs."

129 As Münsterberg put it: Münsterberg, *On the Witness Stand,* 11.

129 As I mentioned, studies: Garrett, "Introduction," 683.

130 In almost half of those cases: Innocence Project, *Reevaluating Lineups*.

130 As a spokesman for the Georgia Bureau: Rankin, "Innocent Man's Conviction."

131 In 2001 the attorney general: Opfer, "The Problem with Police Line-Ups"; Erica Goode and John Schwartz, "Police Lineups Start to Face Fact: Eyes Can Lie," *New York Times*, August 28, 2011, http://www.nytimes.com/2011/08/29/us/29witness.html?hp; State of New Jersey, Office of the Attorney General, "Attorney General Guidelines for Preparing and Conducting Photo and Live Lineup Identification Procedures," April 18, 2001, http://www.innocenceproject.org/docs/NJ_eyewitness.pdf.

131 The police are also instructed: State of New Jersey, Office of the Attorney General, "Attorney General Guidelines for Preparing and Conducting Photo and Live Lineup Identification Procedures," April 18, 2001, http://www.innocenceproject.org/docs/NJ_eyewitness.pdf; Goode, "Police Lineups Start to Face Fact."

131 Writing of the "troubling lack": State v. Henderson, 27 A.3d 872, 218 (N.J. 2011); Garrett, "Introduction," 680.

131 Even when disputed evidence: Benjamin Weiser, "In New Jersey, Rules Are Changed on Witness IDs," *New York Times*, August 24, 2011, http://www.nytimes.com/2011/08/25/nyregion/in-new-jersey-rules-changed-on-witness-ids.html?_r=2&hp.

131 Reformers hope that New Jersey: Goode and Schwartz, "Police Lineups Start to Face Fact."

131 One of the best existing tools: Fisher, Milne, and Bull, "Interviewing Cooperative Witnesses," 16, 18; Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 22.

131 Based on insights: Fisher, Milne, and Bull, "Interviewing Cooperative Witnesses," 16–17; Frenda, Nichols, and Loftus, "Current Issues and Advances in Misinformation Research," 22.

131 Studies have documented that: Fisher, Milne, and Bull, "Interviewing Cooperative Witnesses," 17.

In revolutionizing our eyewitness system, we should also support the development of new investigative methods. There are many promising avenues on the horizon, from improving recall of memory details by employing eye-closure or using timelines to improving identification

accuracy by forcing witnesses to make decisions quickly but permitting less precision. Annelies Vredeveldt and Steven D. Penrod, “Eye-closure Improves Memory for a Witnessed Event Under Naturalistic Conditions,” *Psychology, Crime and Law* 1 (2012): 1; “Witnesses Given New Tool to Fight Gang Crime,” UoP News, March 19, 2013, accessed May 21, 2014, http://www.port.ac.uk/uopnews/2013/03/19/witnesses-given-new-tool-to-fight-gang-crime/; Association for Psychological Science, “Having to Make Quick Decisions Helps Witnesses Identify the Bad Guy in a Lineup,” August 28, 2012, http://ow.ly/djveA; Association for Psychological Science, “Unusual Suspects: How to Make Witnesses More Reliable,” March 5, 2012, http://www.psychologicalscience.org/index.php/news/unusual-suspects-how-to-make-witnesses-more-reliable.html#hide.

131 One of the reasons that: Fisher, Milne, and Bull, “Interviewing Cooperative Witnesses,” 16; Frenda, Nichols, and Loftus, “Current Issues and Advances in Misinformation Research,” 22.

131 The benefits of that approach suggest: Others have made similar suggestions. Liptak, “34 Years Later, Supreme Court Will Revisit Eyewitness IDs”; Simon, *In Doubt*, 81.

132 As Hugo Münsterberg argued: Münsterberg, *On the Witness Stand,* 44–45.

132 Münsterberg thought that the path: Münsterberg, *On the Witness Stand,* 44–45, 194. According to Münsterberg, we need to admit what we don’t know and seek help: “No juryman would be expected to follow his general impressions in the question as to whether the blood on the murderer’s shirt is human or animal. But he is expected to make up his mind as to whether the memory ideas of a witness are objective reproductions of earlier experience or are mixed up with associations and suggestions.” Münsterberg, *On the Witness Stand,* 45.

7. How to Tell a Lie ~ The Expert

133 Woken up by the drumbeat: Seth Mydans, Richard W. Stevenson, and Timothy Egan, "Seven Minutes in Los Angeles," *New York Times*, March 18, 1991, http://www.nytimes.com/1991/03/18/us/seven-minutes-los-angeles-special-report-videotaped-beating-officers-puts-full.html?module=Search&mabReward=relbias:r,{%221=%22:=%22RI:5=%22}=&pagewanted=1; *The "Rodney King" Case: What the Jury Saw in* California v. Powell, directed by Dominic Palumbo (New York: Courtroom Television Network, 1992), videocassette (VHS), 116 min.

133 Though it was almost one: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 In the first seconds: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 He's got Taser darts: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 Over the next minute and a half: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 He falls and they kick him: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 He rolls on the ground: *The "Rodney King" Case*; Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

133 They drag him: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

134 He suffered a concussion: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

134 The officers claimed that: Lou Cannon, "Prosecution Rests Case in Rodney King Beating Trial," *Washington Post*, March 16, 1993, http://tech.mit.edu/V113/N14/king.14w.html.

134 And though it was speeding: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles." Drunk and on parole for a robbery conviction, King had sped by a cop at around 100 miles per hour and then led LAPD officers on an eight-mile chase. Koon v. United States, 518 U.S. 81, 86 (1996). When he had finally pulled over, he hadn't complied with the police orders; unlike the two other passengers in the car who lay down on their stomachs with their arms behind their backs, he had resisted. *Koon*, 518 U.S. at 86.

134 The tape was played over: Michael Goldstein, "The Other Beating," *Los Angeles Times*, February 19, 2006, http://articles.latimes.com/2006/feb/19/magazine/tm-holiday8.

134 And before the trial: Douglas Linder, "The Rodney King Beating Trials," *Jurist*, December 2001, http://jurist.law.pitt.edu/famoustrials/king.php.

134 The details that emerged: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

134 Earlier in the night: Associated Press, "Judge Says Remarks on 'Gorillas' may be Cited in Trial on Beating," *New York Times*, June 12, 1991, http://www.nytimes.com/1991/06/12/us/judge-says-remarks-on-gorillas-may-be-cited-in-trial-on-beating.html.

134 And after nearly killing King: Linder, "The Rodney King Beating."

134 In the hospital emergency room: Richard A. Serrano, "LAPD Officers Reportedly Taunted King in Hospital," *Los Angeles Times*, March 23, 1991, http://articles.latimes.com/1991-03-23/news/mn-433_1_grand-jury.

134 According to Tom Bradley: Mydans, Stevenson, and Egan, "Seven Minutes in Los Angeles."

134 President George Bush, whose law-and-order: Andrew Rosenthal, "Bush Calls Police Beating 'Sickening,'" *New York Times*, March 22, 1991, http://www.nytimes.com/1991/03/22/us/bush-calls-police-beating-sickening.html?module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22RI%3A5%22%7D. Bill Clinton, who would be elected president in the fall, remarked, "Like most of America I saw the tape of the beatings several times, and it certainly looks excessive to me . . . ." Seth Mydans, "The Police Verdict," *New York Times*, April 30, 1992, http://www.nytimes.com/learning/general/onthisday/big/0429.html?module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22RI%3A5%22%7D#article.

135 The evidence was so clear: Rosenthal, "Bush Calls Police Beating 'Sickening.'"

135 Police departments around the country: Seth Mydans, "Los Angeles Policemen Acquitted in Taped Beating," *New York Times*, April 30, 1992, http://www.nytimes.com/learning/general/onthisday/big/0429.html?module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22RI%3A5%22%7D#article.

135 And Darryl F. Gates, the police chief: Mydans, "Los Angeles Policemen Acquitted."

135 On April 29, 1992, all four: Mydans, "The Police Verdict."

135 Stores were looted: Mydans, "The Police Verdict."

135 More than fifty people would die: Goldstein, "The Other Beating"; "Los Angeles Riots Fast Facts," CNN.com, last modified May 3, 2014, http://www.cnn.com/2013/09/18/us/los-angeles-riots-fast-facts/.

135 The acquittals that set off: Linder, "The Rodney King Beating Trials"; *The "Rodney King" Case.*

135 The removal of the case: David Margolick, "As Venues Are Changed, Many Ask How Important a Role Race Should Play," *New York Times*, May 23, 1992, http://www.nytimes.com/1992/05/23/us/as-venues-are-changed-many-ask-how-important-a-role-race-should-play.html?module=Search&mabReward=relbias:r,{%221=%22:=%22RI:7=%22}=&pagewanted=1.

135 The real reason that Koon: Goldstein, "The Other Beating."

136 They watched Koon on the stand: *The Rodney King Incident: Race and Justice in America*, directed by Michael Pack (Princeton, NJ: Films for the Humanities and Sciences, 1998), videocassette (VHS), 56 min.

136 They looked at his relaxed body: *The Rodney King Incident*.

136 They listened to his measured voice: *The Rodney King Incident*.

136 They watched how he'd look: *The Rodney King Incident*.

136 They met his gaze: *The Rodney King Incident*; Christine Pelisek, "L.A. Riots Anniversary: Stacey Koon's Disturbing Testimony," *Daily Beast*, April 28, 2012, http://www.thedailybeast.com/articles/2012/04/28/l-a-riots-anniversary-stacey-koon-s-disturbing-testimony.html. Here, the defense attorney Darryl Mounger had asked Koon why King had been beaten so violently. Koon was quite forthright that it was a violent and brutal beating, but emphasized that it was necessary to "control an aggressive combative suspect." Pelisek, "L.A. Riots Anniversary."

136 They took it all in: *The Rodney King Incident*.

136 Likewise, the jury ate up: Bill Nichols, *Blurred Boundaries: Questions of Meaning in Contemporary Culture* (Bloomington: Indiana University Press, 1994), 30.

136 Duke, a former LAPD self-defense instructor: *The Rodney King Incident*.

136 Barrel-chested with a brown mustache: *The Rodney King Incident*. Unsurprisingly, jurors are less likely to accept what an expert says when there is a salient reason to think he might be biased. Owen D. Jones et al., "Neuroscientists in Court," *Nature Review Neuroscience* 14 (2013): 732. The prosecution's expert on use of force, Commander Michael Bostic, was effectively discredited when the defense team raised the suggestion that Bostic was simply acting as a mouthpiece for the L.A. police chief—his boss—who wanted the officers convicted so he could wipe away the problem. Linda Deutsch, "Witness Denies Being Influenced by Gates," *Los Angeles Times*, April 14, 1992, http://articles.latimes.com/1992-04-14/local/me-1_1_excessive-force. By focusing our attention on salient biases like this, we may overlook more powerful skew that lies below the surface.

136 "I never form an opinion": "Excerpts from the LAPD Officers' Trial," *Famous Trials*, accessed August 27, 2014, http://law2.umkc.edu/faculty/projects/ftrials/lapd/kingtranscript.html.

136 No: "Excerpts from the LAPD Officers' Trial."

136 The officers were following: *The Rodney King Incident*; "Excerpts from the LAPD Officers' Trial."

137 Just as important: Nichols, *Blurred Boundaries*, 30.

137 Duke, trading on the power: Carolyn Boyes-Watson, *Crime and Justice: Learning Through Cases* (Lanham, MD: Rowman & Littlefield, 2014), 220. Steven Chermak and Frankie Y. Bailey, eds., *Crimes and Trials of the Century Volume 1: From the Black Sox Scandal to the Attica Prison Riots*, (Westport, CT: Greenwood Press, 2007), 148; *The Rodney King Incident*; "Excerpts from the LAPD Officers' Trial."

137 It seemed like an entirely natural: Helen E. Allison and Richard J. Hobbs, *Science and Policy in Natural Resource Management: Understanding System Complexity* (New York: Cambridge University Press, 2006), 85.

137 And the particular techniques: Allen Feldman, "On Cultural Anesthesia: From Desert Storm to Rodney King," *American Ethnologist* 21, no. 2 (May 1994): 411.

137 Duke's air of objective authority: Feldman, "On Cultural Anesthesia," 411.

137 Even more masterful: Feldman, "On Cultural Anesthesia," 412.

137 His approach focused the attention: Feldman, "On Cultural Anesthesia," 412.

138 We assume that the result: There is an evolutionary narrative here, too: with capacities honed over 250,000 generations—five million years since we diverged with our chimpanzee siblings—it stands to reason that we are no amateurs when it comes to spotting liars and miscreants. Paul H. Robinson, Robert Kurzban, and Owen Jones, "The Origins of Shared Intuitions of Justice," *Vanderbilt Law Review* 60 (2007): 1643 n. 35. To gain the significant benefits of group living, we had to minimize the costs. Robinson, Kurzban, and Jones, "The Origins," 1647–49. Those less able to discern deception, deceit, and dishonesty in the people around them would have been at a comparative disadvantage in the competition to survive and pass on their genes. Robinson, Kurzban, and Jones, "The Origins," 1647–49. Evolutionary pressures, then, left us natural-born experts in lie detection—or so we assume.

138 The Model Criminal Jury Instructions: "About the Court," United States Court of Appeals for the Third Circuit, http://www.ca3.uscourts.gov/about-court; MODEL CRIMINAL JURY INSTRUCTIONS: CREDIBILITY OF WITNESSES § 3.04 (3d Cir. 2012).

138 Before trial, Third Circuit judges: MODEL CRIMINAL JURY INSTRUCTIONS §3.04.

139 Detecting lies isn't rocket science: MODEL CRIMINAL JURY INSTRUCTIONS §3.04.

139 Jurors don't even have to: You must, however, be over the age of eighteen to serve on a federal jury. "Juror Qualifications, Exemptions and Excuses," United States Courts, accessed May 18, 2014, http://www.uscourts.gov/FederalCourts/JuryService/JurorQualificaitons.aspx.

139 Our system of justice celebrates: MODEL CRIMINAL JURY INSTRUCTIONS: ROLE OF THE JURY § 1.02 (3d Cir. 2012).

139 Those officially designated as experts: FED. R. EVID. 702.

139 In the Third Circuit, for example: MODEL CRIMINAL JURY INSTRUCTIONS: OPINION EVIDENCE (EXPERT WITNESSES) § 2.09 (3d Cir. 2012).

139 In fact, a juror "may disregard": MODEL CRIMINAL JURY INSTRUCTIONS § 2.09.

140 In experiments and surveys: Dan Simon, "The Limited Diagnosticity of Criminal Trials," *Vanderbilt Law Review* 64 (2011): 175–76. And it is not just Americans or Westerners who put a lot of stock in the link between truth and maintaining eye contact, either—when researchers surveyed respondents from over fifty countries, some two-thirds of people suggested that averting one's gaze was linked to lying. Simon, "Limited Diagnosticity," 176.

140 Police officers and others: Simon, "Limited Diagnosticity," 175–76.

140 If you remember, with the Reid technique: "The Reid Technique," John E. Reid & Associates, Inc., accessed May 18, 2014, http://www.reid.com/educational_info/critictechnique.html; "Beyond Good Cop/Bad Cop: A Look at Real-Life Interrogations," NPR, December 5, 2013, http://www.npr.org/2013/12/05/248968150/beyond-good-cop-bad-cop-a-look-at-real-life-interrogations.

140 And to do that: Fred E. Inbau et al., *Criminal Interrogation and Confessions* (Burlington, MA: Jones & Bartlett Learning, 2011), 121. According to the Reid technique, by asking

challenging questions, a police officer can elicit different posture, eye contact, facial expressions, and movements of the hands and feet based on whether the suspect is being honest or deceitful. "The Reid Technique," John E. Reid & Associates, Inc. At the opening of the chapter "Behavior Symptom Analysis," the Reid technique manual quotes from *Hamlet*: "There is a kind of confession in your looks, which your modesties have not craft enough to color." Inbau et al., *Criminal Interrogation*, 101.

140 So, for example, "a suspect": Inbau et al., *Criminal Interrogation*, 135. While embracing gaze aversion as a relevant cue to lying, the Reid manual does caution that averted gaze can occasionally arise from eye disability, psychological disorders, or cultural differences. Inbau et al., *Criminal Interrogation*, 135.

140 Knowing the signs of deceit: Inbau et al., *Criminal Interrogation*, 121–134; "Beyond Good Cop/Bad Cop." Since this training manual, and others like it, cast the notion that these "tells" reveal lying as a general truism, it's no surprise that police officers rely on these cues in a variety of circumstances outside of interviewing suspects, from talking to witnesses at a crime scene to routine traffic stops.

140 Similarly, in evaluating the believability: Simon, "Limited Diagnosticity," 174.

140 In the Third Circuit, for example: MODEL CRIMINAL JURY INSTRUCTIONS §3.04.

140 Indeed, we have such faith: Max Minzner, "Detecting Lies Using Demeanor, Bias, and Context," *Cardozo Law Review* 29 (2008): 2559; Simon, "Limited Diagnosticity," 174. A strong belief in the power of demeanor evidence underlies some of the core structures of our criminal justice system. Simon, "Limited Diagnosticity," 174. As the Supreme Court explained, the great benefit of the Confrontation Clause requirement that witnesses tesify in person is that it provides the accused with "an opportunity . . . of compelling [the witness] to stand face to face with the

jury in order that they may look at him, and judge by his demeanor upon the stand and the manner in which he gives his testimony whether he is worthy of belief." Mattox v. United States, 156 U.S. 237, 242–43 (1895); Donelly v. California, 228 U.S. 243 (1913) (quoted in Minzner, "Detecting Lies," 2559). Likewise, one of the reasons that appellate courts defer to the factual determinations of the trial court is that appellate judges are not able to observe the testimony offered in a case. Minzner, "Detecting Lies," 2559. In the Supreme Court's view, only those who are there during the actual trial are in a position to "be aware of the variations in demeanor and tone of voice that bear so heavily on the listener's understanding of and belief in what is said." Anderson v. Bessemer City, 470 U.S. 564, 575 (1985) (quoted in Simon, "Limited Diagnosticity," 174). Vital information is missed when a judge only reads a transcript of what was said.

140 If a jury watches a defendant: MODEL CRIMINAL JURY INSTRUCTIONS § 3.04; Minzner, "Detecting Lies," 2559. Even in less dire circumstances, judgments of witness credibility often turn the direction of trials; and these judgments can also have an effect in the weeks and months before a jury is chosen, as police officers conduct investigations to gather the evidence used by prosecutors. Simon, "Limited Diagnosticity," 174.

140 The problem is that when: Bella M. DePaulo et al., "Cues to Deception," *Psychological Bulletin* 129, no. 1 (2003): 90–106; Simon, "Limited Diagnosticity," 176–77.

140 The handful that are somewhat predictive: DePaulo et al., "Cues to Deception," 92–94; Simon, "Limited Diagnosticity," 176–77.

141 Numerous studies have shown, for example: Lucy Akehurst et al., "Lay Persons' and Police Officers' Beliefs Regarding Deceptive Behavior," *Applied Cognitive Psychology* 10 (1996): 467–68; Simon, "Limited Diagnosticity," 176 n. 140; Siegfried L. Sporer and Barbara

Schwandt, “Moderators of Nonverbal Indicators of Deception: A Meta-Analytic Synthesis,” *Psychology, Public Policy and Law* 13, no. 1 (2007): 1, 19–22; “TSA Should Limit Future Funding for Behavior Detection Activities,” United States Government Accountability Office, November 2013, 17, http://www.gao.gov/assets/660/658923.pdf; DePaulo et al., “Cues to Deception,” 93–94; Minzner, “Detecting Lies,” 2565.

141 Even worse, when people are under: Charles F. Bond, Jr., and Bella M. DePaulo, “Accuracy of Deception Judgments,” *Personality and Social Psychology Review* 10, no. 3 (2006): 214, 231; Simon, “Limited Diagnosticity,” 178–79.

141 Put the affable and handsome: Maureen O’Sullivan, “The Fundamental Attribution Error in Detecting Deception: The Boy-Who-Cried-Wolf Effect,” *Personality and Social Psychology Bulletin* 29, no. 10 (2003): 1316, 1320, 1323–24; Simon, “Limited Diagnosticity,” 180.

141 Likewise, tell observers that: Pär Anders Granhag and Leif A. Strömwall, “Effects of Preconceptions on Deception Detection and New Answers to Why Lie-Catchers Often Fail,” *Psychology, Crime and Law* 6 (2000): 197–218; Simon, “Limited Diagnosticity,” 180.

141 Initial evidence suggests: Karel Kleisner et al., “Trustworthy-Looking Face Meets Brown Eyes,” *PLOS ONE* 8, no. 1 (2013): 3–6, doi: 10.1371/journal.pone.0053285; Public Library of Science, “Brown-eyed People Appear More Trustworthy than Blue-eyed People: People Judge Men’s Trustworthiness Based on Face Shape, Eye Color,” *ScienceDaily*, January 9, 2013, http://www.sciencedaily.com/releases/2013/01/130109185850.htm.

141 According to the researchers: Kleisner et al., “Trustworthy-Looking Face,” 1, 6; Public Library of Science, “Brown-eyed People.” Another theory is that rounder faces are perceived to be more baby-faced, and those with baby faces are viewed as more honest. Kleisner et al., “Trustworthy-Looking Face,” 1, 3–4.

141 In a recent analysis of more than: In the sample, people accurately classified about 60 percent of truths and 48 percent of lies. Bond, Jr., and DePaulo, "Accuracy of Deception Judgments," 223, 230–31.

141 And the elements that we: Bond, Jr., and DePaulo, "Accuracy of Deception Judgments," 231.

142 Moreover, the people one might: Bond, Jr., and DePaulo, "Accuracy of Deception Judgments," 229. This is not to suggest that there is nothing to be done to improve our ability to detect lying. The most promising avenue, though, may have more to do with changing how we interact with the person we are assessing than in somehow bolstering our own detection skills. In the police investigation context, there is initial evidence, for example, that individuals can improve their deceit judgments by initially collecting more information from a person and then confronting that person with inconsistencies in what they've said, or by making the individual cognitively work harder to respond to questioning (e.g., making a suspect tell his story starting with the last event first). Simon, *In Doubt*, 126–27; Maria Hartwig et al., "Strategic Use of Evidence During Police Interviews: When Training to Detect Deception Works," *Law and Human Behavior* 30 (2006): 614–17; Aldert Vrij et al., "Increasing Cognitive Load to Facilitate Lie Detection: The Benefit of Recalling an Event in Reverse Order," *Law and Human Behavior* 32 (2008): 253, 262–63.

142 Yet just like my students: Simon, "Limited Diagnosticity," 180; Bella M. DePaulo et al., "The Accuracy-Confidence Correlation in the Detection of Deception," *Personality and Social Psychology Review* 1, no. 4 (1997): 346, 351–56.

142 And, unfortunately, those who are: Simon, "Limited Diagnosticity," 180; DePaulo et al., "Accuracy-Confidence Correlation," 346, 353–56.

142 Although it would be nice: Simon, "Limited Diagnosticity," 179.

142 First of all, while study participants: Simon, "Limited Diagnosticity," 178.

142 And being unable to attend: United States v. Watson, 483 F.3d 828, 834–35, (D.C. Cir. 2007). At least one court, however, has invalidated a per se rule excluding blind jurors (although it noted that in some cases exclusion may be appropriate). Galloway v. Superior Court, 816 F.Supp. 12, 18 (D.D.C. 1993).

142 Ironically, contrary to the assumptions: For the same reason, appellate judges may have an advantage over trial observers. That is counterintuitive: we generally assume that appellate judges are in a worse position to judge veracity than the fact finders in the trial court because they generally have access only to a trial transcript and, thus, must focus on *what* was said rather than *how* it was said. Simon, "Limited Diagnosticity," 178. Looking across dozens of studies, however, researchers found that participants who judged deceit purely based on body language performed significantly worse than those who were given only audio or only a written transcript. Bond, Jr., and DePaulo, "Accuracy of Deception Judgments," 225.

142 Furthermore, during an actual trial: Simon, "Limited Diagnosticity," 179.

142 Meanwhile, some dishonest witnesses: Pär Anders Granhag and Leif A. Strömwall, "Repeated Interrogations: Verbal and Non-verbal Cues to Deception," *Applied Cognitive Psychology* 16 (February 2002): 254; Simon, "Limited Diagnosticity," 179–80.

142 Finally, it is hard to see: Simon, "Limited Diagnosticity," 179.

142 How is she supposed to: Simon, "Limited Diagnosticity," 179. In addition, although it might seem likely that jurors could overcome these challenges by consulting with one another during deliberations, the benefits of group assessments only seem to come in making individuals feel more confident in their observations, with only insignificant improvements in judging

veracity. Mark G. Frank et al., "Individual and Small Group Accuracy in Judging Truthful and Deceptive Communication," *Group Decision and Negotiations* 13, no.1 (January 2004): 53–54; Simon, "Limited Diagnosticity," 180.

143 Besides, everyone knows that: The fact that experts tend to be compensated for preparing and providing their testimony by a particular side is one of the reasons that jurors feel confident in relying on their own intuitions instead: the lack of a monetary incentive, one way or the other, seems to ensure objectivity. Studies show that when experts are unaware of which side of a case has hired them, people view them as more credible and their testimony is more persuasive. Christopher T. Robertson and David V. Yokum, "The Effect of Blinded Experts on Juror Verdicts," *Journal of Empirical Legal Studies* 9, no. 4 (2012): 777–78.

Empirical research also suggests that our skepticism about experts is not unfounded. For instance, when scientists had 108 experienced forensic mental health experts evaluate violent sex offenders, they rated the individuals as at a significantly greater risk of reoffending when they believed that they were being paid as an expert for the prosecution than when they believed they were being paid as an expert for the defense. Daniel C. Murrie et al., "Are Forensic Experts Biased by the Side That Retained Them?" *Psychological Science* 24, no. 10 (2013): 1889, 1893–96; Association for Psychological Science, "Forensic Experts May Be Biased by the Side That Retains Them," *ScienceDaily*, August 28, 2013, http://www.sciencedaily.com/releases/2013/08/130828092302.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fscience_society%2Fjustice+%28ScienceDaily%3A+Science+%26+Society+News+--+Justice%29.

143 The fact that we expect lying: As Charles Dickens recorded more than 150 years ago, "Nature never writes a bad hand. Her writing, as it may be read in the human countenance, is

invariably legible, if we come at all trained to the reading of it." Charles Dickens, *The Works of Charles Dickens*, vol. 36, *The Demeanour of Murderers* (New York: Charles Scribner's Sons, 1908), 111. Just as we continue to expect that we can spot guilt or evil in a person's face—despite the demise of physiognomy—we also maintain a belief that, in the words of the Blue Fairy in Pinocchio, "Lies can be easily recognized." Don Grubin and Lars Madsen, "Lie Detection and the Polygraph: A Historical Review," *Journal of Forensic Psychiatry and Psychology* 16, no. 2 (June 2005): 357. Yes, in real life, noses don't grow when people fib, but perhaps they twitch, turn cold, or flare at the nostrils.

143 Daniel Defoe, the author: C. D. Merriman, "Biography of Daniel Defoe," *The Literature Network*, accessed May 15, 2014, http://www.online-literature.com/defoe/; Daniel Defoe, *An Effectual Scheme for the Immediate Preventing of Street Robberies, and Suppressing All Other Disorders of the Night* (London: J. Wilford, 1731), 34; Grubin and Madsen, "Lie Detection," 359.

144 Some two hundred years later: Grubin and Madsen, "Lie Detection," 359–60.

144 Like Defoe, Marston pursued: Grubin and Madsen, "Lie Detection," 359.

144 Yet there was nothing fictive: Grubin and Madsen, "Lie Detection," 360.

144 The court ultimately refused: Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923); Grubin and Madsen, "Lie Detection," 360.

144 But his efforts laid critical groundwork: Grubin and Madsen, "Lie Detection," 360.

144 And it was Frye's case: Frederick Schauer, "Can Bad Science Be Good Evidence? Neuroscience, Lie Detection, and Beyond," *Cornell Law Review* 95 (2010): 1196–97; Brian L. Cutler and Margaret Bull Kovera, "Expert Psychological Testimony," *Current Directions in Psychological Science* 20, no. 1 (2011): 54, doi: 10.1177/0963721410388802. The refinement of

the *Frye* test was prompted by Congressional adoption of Federal Rule of Evidence 702, which provided that a "qualified" expert witness could testify if her specialized knowledge would "assist the trier of fact." FED. R. EVID. 702. In the case of *Daubert v. Merrell Dow Pharmaceuticals*, the Supreme Court interpreted the rule to require judges to make their *own* determination of whether the expert testimony was relevant and scientifically reliable, rather than focusing solely on whether the implicated scientific community had accepted the research, as with the *Frye* test. Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579, 589–94; FED. R. EVID. 702; Cutler and Kovera, "Expert Psychological Testimony," 54. That said, although the federal rules of evidence are widely influential, each state has adopted its own rules for deciding which expert testimony is admissible. Cutler and Kovera, "Expert Psychological Testimony," 54. It is important to note that both of these tests are only focused on determining whether scientific testimony is relevant to the issues in the case. To be admissible in court, the testimony must also not be unduly prejudicial, in the sense of having a disproportionate effect on the jury. Jones et al., "Neuroscientists in Court," 733.

144 Despite widespread use: Henry T. Greely and Judy Illes, "Neuroscience-Based Lie Detection: The Urgent Need for Regulation," *American Journal of Law and Medicine* 33 (2007): 385–86; Grubin and Madsen, "Lie Detection," 364–67; Brian Farrell, "Can't Get You Out of My Head: The Human Rights Implications of Using Brain Scans as Criminal Evidence," *Interdisciplinary Journal of Human Rights Law* 4 (2010): 90.

144 As the Supreme Court put: United States v. Scheffer, 523 U.S. 303, 309 (1998) (quoted in Farrell, "Can't Get You Out," 90).

144 Part of the problem is that: Grubin and Madsen, "Lie Detection," 366–67.

144 People regularly lie without sweating: Grubin and Madsen, "Lie Detection," 367.

144 More recent developments: Richard Wiseman et al., "The Eyes Don't Have It: Lie Detection and Neuro-Linguistic Programming," *PLOS ONE* 7, no. 7 (2012): 5, doi: 10.1371/journal.pone.0040259.

145 It's appealing to think: Wiseman et al., "Eyes Don't Have It," 5. I do not mean to suggest that eye-related assessments are necessarily a dead end when it comes to lie detection, only that much of what is currently parading as settled science is untested hearsay. Two more promising avenues may be new research on periorbital thermography, which is focused on temperature changes in the area near the eyes brought about by increased blood flow from rapid eye movements associated with lying, and microfacial expression analysis championed by the psychologist Paul Ekman. Mark Hansen, "True Lies," *ABA Journal*, October 1, 2009, http://www.abajournal.com/magazine/article/true_lies/; Greely and Illes, "Neuroscience-Based Lie Detection," 389–90. At this time, though, neither has provided sufficient evidence of accuracy to be considered a reliable tool for assessing deception. Greely and Illes, "Neuroscience-Based Lie Detection," 389–90. The lack of empirical support has done little to slow the growth in YouTube videos, training courses, and thousands of webpages all promising to reveal the science of eye movements. Wiseman et al., "Eyes Don't Have It," 1.

145 More generally, methods and technologies: The Transportation Security Administration, for example, spent about $900 million to train "behavior detection officers" in assessing people's expressions and demeanor to help catch terrorists. "TSA Should Limit Future Funding," 1–2; John Tierney, "At Airports, a Misplaced Faith in Body Language," *New York Times*, March 23, 2014, http://mobile.nytimes.com/2014/03/25/science/in-airport-screening-body-language-is-faulted-as-behavior-sleuth.html?from=homepage. But when the Government Accountability

Office reviewed it, they found that there was no proof of its effectiveness and suggested eliminating funding. "TSA Should Limit Future Funding," 47–48.

145 Until very recently this approach: Joëlle Anne Moreno, "The Future of Neuroimaged Lie Detection and the Law," *Akron Law Review* 42 (2009): 719.

145 We now have the potential: In essence, fMRI holds the potential to move beyond capturing a person's *responses* to lying to capturing the underlying lie based on the idea that different areas of the brain are activated when a person lies versus when a person tells the truth. Greely and Illes, "Neuroscience-Based Lie Detection," 395–400.

Another fMRI approach to identifying deceit may yield even greater benefits over the traditional polygraph: detecting the presence of memories that a person has explicitly denied (e.g., you said that you were never at the crime scene, but when you were shown a photograph of the bathroom where the murder took place, your brain reacted in a certain way). Thomas Nadelhoffer and Walter Sinnot-Armstrong, "Neurolaw and Neuroprediction: Potential Promises and Perils," *Philosophy Compass* 7, no. 9 (September 2012): 632, doi: 10.1111/j.1747-9991.2012.00494.x. With a polygraph, we need the person to participate actively by answering questions in order to gain any information. If the person refuses to respond, the polygraph cannot function. That's not true with fMRI: we are looking at brain activity, which may be prompted simply by showing someone a photograph of a gun used in the crime or reading a letter from the victim. Jay Stanley, "High-Tech 'Mind Readers' Are Latest Effort to Detect Lies," *Free Future* (blog), American Civil Liberties Union, August 29, 2012, https://www.aclu.org/blog/technology-and-liberty/high-tech-mind-readers-are-latest-effort-detect-lies.

145 And there has been a mad dash: Schauer, "Can Bad Science Be Good," 1198–99.

145 In 2011 the Defense Advanced: Azeen Ghorayshi, “This Is Your Brain on the Department of Defense,” *Blue Marble* (blog), *Mother Jones*, April 3, 2012, http://www.motherjones.com/blue-marble/2012/04/department-of-defense-neuroscience-bioethics-brains-law; Mark Harris, “MRI Lie Detectors: Can Magnetic-Resonance Imaging Show Whether People Are Telling the Truth?” *IEEE Spectrum*, July 30, 2010, http://spectrum.ieee.org/biomedical/imaging/mri-lie-detectors/0.

145 For a few thousand dollars: Hansen, “True Lies”; “Brain Fingerprinting Advantages,” Brainwave Science, accessed May 16, 2014, http://www.brainwavescience.com/product-advantages.html; Harris, “MRI Lie Detectors.” On the website of No Lie MRI, the company explains that its technology “represents the first and only direct measure of truth verification and lie detection in human history!” “New Truth Verification Technology,” No Lie MRI, accessed May 16, 2014, http://www.noliemri.com/index.htm.

146 In 2012, Judge Eric M. Johnson: Michael Laris, “Debate on Brain Scans as Lie Detectors Highlighted in Maryland Murder Trial,” *Washington Post*, August 26, 2012, http://www.washingtonpost.com/local/crime/debate-on-brain-scans-as-lie-detectors-highlighted-in-maryland-murder-trial/2012/08/26/aba3d7d8-ed84-11e1-9ddc-340d5efb1e9c_story.html.

146 The prosecution alleged that Gary Smith: Michael Laris, “Gary Smith Guilty of Involuntary Manslaughter in 2006 Shooting of Fellow Army Ranger,” *Washington Post*, September 19, 2012, http://www.washingtonpost.com/local/crime/gary-smith-guilty-of-involuntary-manslaughter-in-2006-shooting-of-fellow-army-ranger/2012/09/19/d2a1885a-01be-11e2-b260-32f4a8db9b7e_story.html.

146 When the police had arrived: Laris, “Debate on Brain Scans.”

146 He was the one who had: Laris, “Debate on Brain Scans.”

146 Sure enough, when the officers: Laris, "Debate on Brain Scans."

146 But, curiously, there was no gun: Laris, "Debate on Brain Scans."

146 Gary had proceeded to try: Laris, "Debate on Brain Scans."

146 He'd come home and found: Laris, "Debate on Brain Scans."

146 No, the gun was there: Laris, "Debate on Brain Scans."

146 No, wait, Gary *had* been: Laris, "Debate on Brain Scans."

146 He had panicked because: Laris, "Debate on Brain Scans."

146 He had thrown it: Laris, "Debate on Brain Scans."

146 Gary hoped he could clear things: Laris, "Debate on Brain Scans"; Andy Balmer, "Gary James Smith v. State of Maryland," *Reasonable Excuse* (blog), August 30, 2012, http://andybalmer.wordpress.com/tag/no-lie-mri/.

146 Technicians asked Gary a series: Laris, "Debate on Brain Scans."

147 He was told to lie: Laris, "Debate on Brain Scans."

147 "Did you shoot Mike": Laris, "Debate on Brain Scans."

147 Gary responded that: Laris, "Debate on Brain Scans."

147 Professor Haist then reviewed: Laris, "Debate on Brain Scans."

147 Knowing which areas of the brain: Laris, "Debate on Brain Scans"; Benedict Carey, "Decoding the Brain's Cacophony," *New York Times*, October 31, 2011, http://www.nytimes.com/2011/11/01/science/telling-the-story-of-the-brains-cacophony-of-competing-voices.html?_r=1&pagewanted=print.

147 In Haist's opinion, the images taken: Laris, "Debate on Brain Scans."

147 Even the uninitiated would see: "Brains Scan for Lie Detection," *Washington Post*, August 26, 2012, http://www.washingtonpost.com/local/crime/brains-scan-for-lie-detection/2012/08/26/0676909a-efd5-11e1-892d-bc92fee603a7_graphic.html.

147 The clear implication, then: Laris, "Debate on Brain Scans."

147 First of all, we do not yet: Schauer, "Can Bad Science Be Good," 1200.

147 Some technologies have virtually: Farrell, "Can't Get You Out," 91–93.

147 One company, Brainwave Science: "Product Applications," Brainwave Science, accessed May 16, 2014, http://www.brainwavescience.com/technology.html.

147 According to the Brainwave Science website: "Brain Fingerprinting Advantages," Brainwave Science.

147 The benefits are apparent: "Product Application for Law Enforcement," Brainwave Science, accessed May 16, 2014, http://www.brainwavescience.com/law-advantages.html.

148 Neither are most scientists: Greely and Illes, "Neuroscience-Based Lie Detection," 387–88.

148 The technique that has the most: Henry Greely, "To Tell the Truth: Brain Scans Should Not Be Used for Lie Detection Unless Their Reliability Is Proven," *Scientific American*, December 2010, 18; Turhan Canli et al., "Neuroethics and National Security," *American Journal of Bioethics* 7, no. 5 (May 2007): 6, 8, doi: 10.1080/15265160701290249.

Although there are more than two dozen studies that consider fMRI lie detection, there is little agreement on which particular areas of the brain matter when it comes to lying. Greely, "To Tell the Truth"; Hansen, "True Lies." The fMRI images also vary quite a lot among people with normally functioning brains, making it a challenge to determine when a level of activity in a particular part of the brain is actually significantly raised. Carey, "Decoding the Brain's

Cacophony," 4. In addition, using fMRI is both expensive and resource intensive, so most experiments don't have more than a handful of participants, and those participants tend to be disproportionately healthy, young, white, right-handed men. Greely and Illes, "Neuroscience-Based Lie Detection," 402–03.

148 One of the biggest problems: Greely, "To Tell the Truth," 18; The Royal Society, *Brain Waves Module 4: Neuroscience and the Law*, (London: The Royal Society, 2011), 25, https://royalsociety.org/~/media/Royal_Society_Content/policy/projects/brain-waves/Brain-Waves-4.pdf; Canli et al., "Neuroethics and National Security," 6.

148 Is a person trying to cover up: Hansen, "True Lies."

148 And could that psychopath: The Royal Society, *Brain Waves Module 4*, 25–26.

148 We've known for a long time that: Greely and Illes, "Neuroscience-Based Lie Detection," 404–05; Hansen, "True Lies."

148 You can render the data unusable: Greely and Illes, "Neuroscience-Based Lie Detection," 404–05; Canli et al., "Neuroethics and National Security," 6; Hansen, "True Lies."

148 Changing what you are thinking about: Canli et al., "Neuroethics and National Security," 6; The Royal Society, *Brain Waves Module 4*, 8–9. With respect to memory-based approaches to detecting deceit, cognitive neuroscientists have documented that people can alter their neural responses when presented with familiar and unfamiliar faces by thinking about something familiar when looking at an unfamiliar face and focusing on a part of a known face that is novel. In the laboratory, when participants employed these countermeasures, researchers were unable to use the brain scans to determine whether each person was looking at a familiar or unfamiliar face. Cognitive Neuroscience Society, "Memory, the Adolescent Brain and Lying: The Limits of

Neuroscientific Evidence in the Law," *ScienceDaily*, April 16, 2013, http://www.sciencedaily.com/releases/2013/04/130416180039.htm.

148 But if you make your brain busier: Greely and Illes, "Neuroscience-Based Lie Detection," 404–05.

148 Conversely, if you carefully memorize: Greely and Illes, "Neuroscience-Based Lie Detection," 404–05. It is interesting to consider how the race to gain access to revealing brain activity is likely to encourage efforts to develop means to disguise or eliminate that brain activity. Based on initial experiments with animals, it seems probable that it will one day be possible to erase certain memories in humans with the aid of newly developed drugs or technology. Erica J. Young et al., "Selective, Retrieval-Independent Disruption of Methamphetamine-Associated Memory by Actin Depolymerization," *Biological Psychiatry Journal* 75 (2014): 100–03; Scripps Research Institute, "Possibility of Selectively Erasing Unwanted Memories," *ScienceDaily*, September 10, 2013, http://www.sciencedaily.com/releases/2013/09/130910140941.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fmind_brain%2Fpsychology+%28ScienceDaily%3A+Mind+%26+Brain+News+--+Psychology%29. In one study, researchers were able to eliminate memories associated with methamphetamine use, including objects seen or felt and odors detected, by inhibiting certain molecular activity in the brains of mice and rats that occurs during the maintenance phase of memory formation. Young et al., "Selective, Retrieval-Independent Disruption," 100–03. Interestingly, the intervention did not appear to disrupt other memories. Young et al., "Selective, Retrieval-Independent Disruption," 102.

149 In the 1990s, attorneys: Wendy Brickell, "Is It the CSI Effect or Do We Just Distrust Juries?" *Criminal Justice* 23 (2008): 16. Looking at just expert psychological testimony, we have

solid evidence that it sways jurors. Cutler and Kovera, "Expert Psychological Testimony," 55. In one representative experiment, mock jurors presented with a case involving a woman who had killed her abusive husband were more supportive of self-defense claims and more lenient in their ultimate decisions when presented with expert testimony by a psychologist than when no expert opinion was offered. Regina A. Schuller and Patricia A. Hastings, "Trials of Battered Women Who Kill: The Impact of Alternative Forms of Expert Evidence," *Law and Human Behavior* 20, no. 2 (1996): 167, 181–85. The influence of the expert was significant, regardless of whether she described matters in terms of "battered woman syndrome" or focused on the husband's coercion and the wife's agency. Schuller and Hastings, "Trials of Battered Women Who Kill," 167, 181–85.

149 A decade later, the fears morphed: Deborah R. Baskin and Ira B. Sommers, "Crime-Show-Viewing Habits and Public Attitudes Toward Forensic Evidence: The 'CSI Effect' Revisited," *Justice System Journal* 31, no. 1 (2010): 97; Brickell, "Is It the CSI Effect," 11. The experimental evidence documenting "white coat syndrome" and the "CSI effect" has been decidedly mixed, and some critics have argued that these fears are more a reflection of distrust of the jury system and a need to explain unexpected verdicts than anything else. Brickell, "Is It the CSI Effect," 13, 17; Schauer, "Can Bad Science Be Good," 1210.

149 More recently, researchers have begun looking: David P. McCabe and Alan D. Castel, "Seeing Is Believing: The Effect of Brain Images on Judgments of Scientific Reasoning," *Cognition* 107 (2008): 343, 349–51; Deena Skolnick Weisberg et al., "The Seductive Allure of Neuroscience Explanations," *Journal of Cognitive Neuroscience* 20, no. 3 (2008): 470, 475–77; John Monterosso, Edward B. Royzman, and Barry Schwartz, "Explaining Away Responsibility: Effects of Scientific Explanation on Perceived Culpability," *Ethics and Behavior* 15, no. 2

(2005): 139, 150–54; Nadelhoffer and Sinnot-Armstrong, “Neurolaw and Neuroprediction,” 637–38; Schauer, “Can Bad Science Be Good,” 1210; Sara Reardon, “Courtroom Neuroscience Not Ready for Prime Time,” *ScienceInsider* (blog), *American Association for the Advancement of Science*, December 12, 2011, http://news.sciencemag.org/scienceinsider/2011/12/courtroom-neuroscience-not-ready.html?rss=1. Research has shown, for example, that describing MRI images as indicating brain lesions increased the likelihood of finding a defendant not guilty by reason of insanity. Jessica R. Gurley and David K. Marcus, “The Effects of Neuroimaging and Brain Injury on Insanity Defenses,” *Behavioral Sciences and the Law* 26 (2008): 85, 93–95. That said, a complete picture of how and when neuroscientific evidence can be prejudicial is still emerging and a few of the early studies have drawn criticism for, among other things, design flaws that prevented a fair comparison of neuroscientific evidence with other equivalent evidence. Schauer, “Can Bad Science Be Good,” 1210, 1210 n. 103, 1211 n. 104, 1211 n. 108.

149 Brain scans may have: David P. McCabe, Alan D. Castel, and Matthew G. Rhodes, “The Influence of fMRI Lie Detection Evidence on Juror Decision-Making,” *Behavioral Sciences and the Law* 29 (2011): 566, 572–76, doi: 10.1002/bsl.993.

149 In one experiment, significantly more: McCabe, Castel, and Rhodes, “The Influence of fMRI,” 566, 570, 572. In a control condition, no evidence that the defendant was lying was presented. McCabe, Castel, and Rhodes, “The Influence of fMRI,” 570.

149 Diagnostic imaging, we assume: At this point, however, it is unclear whether the brain images—the pictures—have an independent influence on people. Building on the general research on the undue influence of images (see, e.g., David A. Bright and Jane Goodman-Delahunty, “Gruesome Evidence and Emotion: Anger, Blame, and Jury Decision-Making,” *Law and Human Behavior* 30, no. 2 (2006): 183, 197-200; Aura Hanna and Roger Remington, “The

Representation of Color and Form in Long-Term Memory," *Memory and Cognition* 24, no. 3 (1996): 322, 328–29), researchers have provided some data that the presence of brain images can sway people toward a particular conclusion. McCabe and Castel, "Seeing Is Believing," 343, 349–51. But more recent work has suggested that brain images may not have an additional effect beyond nonvisual neuroscience-based evidence. N. J. Schweitzer et al., "Neuroimages as Evidence in a *Mens Rea* Defense: No Impact," *Psychology, Public Policy, and Law* 17, no. 3 (2011): 357, 387–90, doi: 10.1037/a0023581; Robert B. Michael et al., "On the (Non)Persuasive Power of a Brain Image," *Psychonomic Bulletin and Review* 20 (2013): 720, 722–24.

149 In one study, 181 state trial judges: Lisa G. Aspinwall, Teneille R. Brown, and James Tabery, "Supplementary Materials for 'The Double-Edged Sword: Does Biomechanism Increase or Decrease Judges' Sentencing of Psychopaths?'" *Science*, August 17, 2012, 6, http://www.sciencemag.org/content/suppl/2012/08/15/337.6096.846.DC1/1219569.Aspinwall.SM.pdf; Lisa G. Aspinwall, Teneille R. Brown, and James Tabery, "The Double-Edged Sword: Does Biomechanism Increase or Decrease Judges' Sentencing of Psychopaths?" *Science* 337 (2012): 846, doi: 10.1126/science.1219569.

149 According to testimony from: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 846.

150 In addition, half of the judges: Aspinwall, Brown, and Tabery, "Supplementary Materials," 10–11; Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 846.

150 The test revealed that Donahue carried: Aspinwall, Brown, and Tabery, "Supplementary Materials," 11; Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 846.

150 The other half of the judges: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 846.

150 Judges rated the evidence of psychopathy: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 847–48; Benedict Carey, "Study of Judges Finds Evidence from Brain Scans Led to Lighter Sentences," *New York Times*, August 16, 2012, http://www.nytimes.com/2012/08/17/science/brain-evidence-sways-sentencing-in-study-of-judges.html?_r=1&pagewanted=all.

150 With the source of Donahue's behavior: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 847; Carey, "Study of Judges." Other researchers have used the term "naïve dualism" to describe the tendency to view criminal behavior as *caused* when it is linked to a brain characteristic, but *intentional* when it is linked to psychologically damaging childhood experiences. Monterosso, Royzman, and Schwartz, "Explaining Away Responsibility," 139, 150–56; John Monterosso and Barry Schwartz, "Did Your Brain Make You Do It?" *New York Times*, July 27, 2012, http://www.nytimes.com/2012/07/29/opinion/sunday/neuroscience-and-moral-responsibility.html?_r=1&hp. These scientists found that even when a neural deficiency was described as *weakly* associated with violent behavior, participants exonerated the defendant more than when he suffered from a psychological problem *strongly* linked to violence. Monterosso, Royzman, and Schwartz, "Explaining Away Responsibility," 139, 150–56; Monterosso and Schwartz, "Did Your Brain Make You."

150 The question, of course, is whether: Carey, "Study of Judges."

150 After all, the judges had already: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 846–47; Carey, "Study of Judges."

151 It should not make any difference: Aspinwall, Brown, and Tabery, "The Double-Edged Sword," 847; Carey, "Study of Judges." More specifically, it seems problematic that the defendant who is described as having "an impaired emotional-processing system" is given a

greater sentence than the defendant who is described as having “an impaired emotional-processing system” as a result of carrying a particular gene. Aspinwall, Brown, and Tabery, “Supplementary Materials,” 9–12; Aspinwall, Brown, and Tabery, “The Double-Edged Sword,” 846–47.

151 During three days of pretrial testimony: Laris, “Debate on Brain Scans.”

151 Now he had to decide: Laris, “Debate on Brain Scans.”

151 It was never going to be: Laris, “Debate on Brain Scans.”

151 All he asked was that: Laris, “Debate on Brain Scans.”

151 No, said Judge Johnson: Laris, “Debate on Brain Scans.”

151 Gary Smith was ultimately convicted: Michael Laris, “Ex-Army Ranger Gary Smith Sentenced to 28 Years in Prison in Retrial,” *Washington Post*, October 15, 2012, http://www.washingtonpost.com/local/crime/ex-army-ranger-gary-smith-sentenced-to-28-years-in-prison-in-retrial/2012/10/15/3e9c2a3e-1712-11e2-a55c-39408fbe6a4b_story.html; Dan Morse, “The Long Life of a MoCo Homicide Case: Two Trials, Two Appeals, Third Trial on the Horizon,” *Washington Post*, August 31, 2014, http://www.washingtonpost.com/local/crime/the-long-life-of-a-moco-homicide-case-two-trials-two-appeals-third-trial-on-the-horizon/2014/08/31/fc2c9980-2fc0-11e4-bb9b-997ae96fad33_story.html.

151 On June 12, 2008, in Mumbai: Maharashtra v. Sharma, Sessions Case No. 508/07, June 12, 2008, 55–61, 67 (India), http://court.mah.nic.in/courtweb/orders/pundcis/orders/201501005082007_1.pdf; Erin B. Pulice, “The Right to Silence at Risk: Neuroscience-Based Lie Detection in the United Kingdom, India, and the United States,” *George Washington International Law Review* 42 (2010): 866.

151 Aditi Sharma and Udit Bharati met: Pulice, “Right to Silence at Risk,” 865.

151 They dated as students: Pulice, “Right to Silence at Risk,” 865.

151 But Aditi soon broke off: Pulice, “Right to Silence at Risk,” 865.

151 Aditi and Pravin dropped out of school: Pulice, “Right to Silence at Risk,” 865.

152 Six months later, though: Angela Saini, “The Brain Police: Judging Murder with an MRI,” *Wired UK*, May 27, 2009, http://www.wired.co.uk/magazine/archive/2009/06/features/guilty?page=all; Pulice, “Right to Silence at Risk,” 865.

152 Udit would not survive: Saini, “The Brain Police”; Pulice, “Right to Silence at Risk,” 866.

152 According to prosecutors, Aditi poisoned: Saini, “The Brain Police”; Pulice, “Right to Silence at Risk,” 866.

152 The turning point in the case: Anand Giridharadas, “India’s Use of Brain Scans in Courts Dismays Critics,” *New York Times*, September 15, 2008, 2, http://www.nytimes.com/2008/09/15/world/asia/15iht-15brainscan.16148673.html?_r=1&pagewanted=2; *Maharashtra*, Sessions Case No. 508/07, 8.

152 As she sat with thirty-two electrodes: Giridharadas, “India’s Use of Brain Scans,” 2.

152 “I met Udit at McDonald’s”: Giridharadas, “India’s Use of Brain Scans,” 2.

152 According to investigators administering: Giridharadas, “India’s Use of Brain Scans,” 2; Saini, “The Brain Police.” BEOS was developed by Champadi Raman Mukundan, the former head of the clinical psychology department at the National Institute of Mental Health and Neuro Sciences in Bangalore. Giridharadas, “India’s Use of Brain Scans,” 1.

152 When she heard the details: Giridharadas, “India’s Use of Brain Scans,” 1–2; Saini, “The Brain Police.”

152 Aditi had not just heard: Giridharadas, “India’s Use of Brain Scans,” 2.

152 And what is particularly astonishing: Saini, "The Brain Police."

152 The BEOS results provided key evidence: Giridharadas, "India's Use of Brain Scans," 2; Pulice, "Right to Silence at Risk," 866; *Maharashtra*, Sessions Case No. 508/07, 58–67.

152 Because Aditi was later released: Emily Murphy, "Update on Indian BEOS Case: Accused Released on Bail," *Law and Biosciences Blog*, Stanford Law School, April 2, 2009, http://blogs.law.stanford.edu/lawandbiosciences/2009/04/02/update-on-indian-beos-case-accused-released-on-bail/; Michael Cook, "Liar, Liar, Brain on Fire!" *Mercatornet*, June 17, 2010, http://www.mercatornet.com/articles/view/liar_liar_brain_on_fire.

152 In the United States, courts have resisted: Carey, "Decoding the Brain's Cacophony," 4.

153 Over the last decade: The Royal Society, *Brain Waves Module 4*, 13; Jones et al., "Neuroscientists in Court," 730.

153 So, for example, when Grady Nelson: Jones et al., "Neuroscientists in Court," 730; Greg Miller, "Brain Exam May Have Swayed Jury in Sentencing Convicted Murderer," *ScienceInsider*, December 14, 2010, http://news.sciencemag.org/technology/2010/12/brain-exam-may-have-swayed-jury-sentencing-convicted-murderer.

153 Two jurors who came out: Jones et al., "Neuroscientists in Court," 734; Miller, "Brain Exam May Have Swayed Jury."

153 "It turned my decision": Jones et al., "Neuroscientists in Court," 734; Miller, "Brain Exam May Have Swayed Jury."

153 "The technology really swayed me": Jones et al., "Neuroscientists in Court," 734; Miller, "Brain Exam May Have Swayed Jury."

153 If either of those jurors: Jones et al., "Neuroscientists in Court," 734; Miller, "Brain Exam May Have Swayed Jury."

153 Although the polygraph has: Grubin and Madsen, “Lie Detection,” 366.

153 Polygraphs are regularly used: Grubin and Madsen, “Lie Detection,” 366.

153 As we saw in Juan Rivera’s wrongful conviction: Rob Warden, “Juan Rivera Freed After More Than 19 Years Behind Bars for a Crime It Had Long Been Obvious He Could Not Have Committed,” Bluhm Legal Clinic, Northwestern Law, accessed May 17, 2014, http://www.law.northwestern.edu/legalclinic/wrongfulconvictions/exonerations/il/juan-rivera.html; Duaa Eldeib, “3 Disputed Polygraph Exams in Wrongful Conviction Cases,” *Chicago Tribune*, March 10, 2013, http://articles.chicagotribune.com/2013-03-10/news/ct-met-polygraph-fox-rivera-gauger-20130310_1_polygraph-wrongful-conviction-cases-false-confession-cases.

153 Kevin Fox, for instance: Eldeib, “3 Disputed Polygraph Exams”; Fourth Amended Complaint at 12–13, Fox v. Tomczak, No. 04 C 7309, 2006 WL 1157466 (N.D. Ill. Apr. 26, 2006).

153 The test administrator, however: Eldeib, “3 Disputed Polygraph Exams”; Fourth Amended Complaint at 12–13, *Fox*, 2006 WL 1157466.

153 With that seemingly devastating strike: Eldeib, “3 Disputed Polygraph Exams”; Fourth Amended Complaint at 15–16, *Fox*, 2006 WL 1157466. An investigation by the *Chicago Tribune* in 2013 revealed six apparent wrongful conviction cases implicating the use of the polygraph by police in the Chicago area alone. Duaa Eldeib, “Polygraphs and False Confessions in Chicago,” *Chicago Tribune*, March 10, 2013, http://articles.chicagotribune.com/2013-03-10/news/ct-met-polygraph-confessions-20130310_1_polygraph-unit-chicago-police-police-polygraphists. The report noted the failure of the Chicago police polygraph examiners to follow

procedures—like recording all tests and having results reviewed by a second person. Eldeib, "Polygraphs and False Confessions."

153 Polygraphs are a routine part: Grubin and Madsen, "Lie Detection," 364–65.

153 In New Jersey, for example: Chris Megerian, "N.J. Parole Board Says Polygraph Tests Effective in Detecting, Preventing Violations by Sex Offenders," NJ.com, November 18, 2009, http://www.nj.com/news/index.ssf/2009/11/nj_parole_board_study_says_pol.html; Heather Tubman-Carbone, "An Exploratory Study of New Jersey's Sex Offender Polygraph Policy: Report to the New Jersey State Parole Board," November 13, 2009, 2, http://media.nj.com/ledgerupdates_impact/other/11.18.09%20polygraph%20report.pdf.

154 Hooked up to the machine: Megerian, "Parole Board Says Polygraph Tests Effective"; Tubman-Carbone, "An Exploratory Study," 9.

154 Failing the test can mean: Megerian, "Parole Board Says Polygraph Tests Effective"; Tubman-Carbone, "An Exploratory Study," 2.

154 In certain states, they may: Texas Department of Criminal Justice Parole Division, "Sex Offender Treatment and Polygraph Guidelines," January 28, 2014, 10, https://www.tdcj.state.tx.us/documents/parole/03.06.09_parole_policy.pdf.

154 These technologies are starting: The message of this chapter is not that novel technology and science that attempts to capture people's hidden thoughts, memories, and intentions must be permanently kept out of our judicial system. Some of this initial research is greatly promising and should continue. For instance, inspired by the Aditi Sharma case, cognitive neuroscientists decided to conduct some initial experiments looking at whether brain images can be used to distinguish between whether someone is looking at a novel image or something they have previously encountered. Cognitive Neuroscience Society, "Memory, the Adolescent Brain and

Lying." To test this, they had people wear a digital camera around their necks for a few weeks, which took 45,000 photos per person. Study participants were then placed inside an MRI and shown some of those photos along with scenes that they had never seen. By looking at the participant's brain activity, researchers found they could distinguish the familiar and unfamiliar images with a mean accuracy of 91 percent. Cognitive Neuroscience Society, "Memory, the Adolescent Brain and Lying." This is precisely the type of valuable endeavor that we should support.

As suggested in the introduction, we must also remember that our current approaches to determining people's inner motives and impressions may rest on completely untested assumptions, so in some cases techniques based on encouraging but limited findings or imperfect science may actually be an improvement over the status quo.

154 The existing instructions just aren't: Cutler and Kovera, "Expert Psychological Testimony," 55–56.

154 The main problem is not the criteria: *Daubert*, 509 U.S. at 589–94; Neil Vidmar, "The Psychology of Trial Judging," *Current Directions in Psychological Science* 20, no. 1 (2011): 60, doi: 10.1177/0963721410397283.

154 In a recent survey, only 5 percent: Sophia I. Gatowski et al., "Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-*Daubert* World," *Law and Human Behavior* 25, no. 5 (October 2001): 433, 445–47; Vidmar, "Psychology of Trial Judging," 60.

154 Moreover, in an experiment involving: Margaret Bull Kovera and Bradley D. McAuliff, "The Effects of Peer Review and Evidence Quality on Judge Evaluations of Psychological

Science: Are Judges Effective Gatekeepers?" *Journal of Applied Psychology* 85, no. 4 (2000): 574, 579–83; Vidmar, "Psychology of Trial Judging," 60.

155 Indeed, in the last few years: "Judicial Seminars on Emerging Issues in NeuroScience," American Association for the Advancement of Science, last updated July 22, 2014, http://www.aaas.org/page/judicial-seminars-emerging-issues-neuroscience; MacArthur Foundation Research Network on Law and Neuroscience, "Education and Outreach," Vanderbilt University, 2014, http://www.lawneuro.org/outreach.php; Floyd E. Bloom et al., *A Judge's Guide to Neuroscience: A Concise Introduction* (Santa Barbara: University of California, 2010); National Research Council of the National Academies, *Reference Manual on Scientific Evidence*, 3rd ed. (Washington: The National Academic Press, 2011).

155 The first law and neuroscience coursebook: "Law and Neuroscience," Vanderbilt University, 2014, http://www.psy.vanderbilt.edu/courses/neurolaw/.

155 We could very well bar: Henry T. Greely, "Law and the Revolution in Neuroscience: An Early Look at the Field," *Akron Law Review* 42 (2009): 698–99. There are other questions to consider related to the treatment of lie detection companies. Should we regulate private entities and the technology they develop to improve accuracy, just as we oversee the safety and effectiveness of medical devices and drugs? Greely, "Law and the Revolution," 699. Should stepladders continue to face more direct government oversight than lie detectors, or will such review stifle innovation? Occupational Safety and Health Administration, "Safety and Health Regulations for Construction," accessed May 18, 2014, https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10839. Although, there is no general regulation of lie detectors requiring that they prove their effectiveness, at least one scholar has suggested adopting an FDA-type review of neuroscience

lie detection technology to address unreliability and maximize the benefits of the new scientific approaches. Greely and Illes, "Neuroscience-Based Lie Detection," 405–20.

155 For centuries, we've espoused: Stanley, "High-Tech 'Mind Readers.'"

155 Under traditional English law: Boyd v. U.S. 116 U.S. 616, 625–29 (1886); Stanley, "High-Tech 'Mind Readers.'"

155 In the United States, the Fourth: Stanley, "High-Tech 'Mind Readers.'"

155 Many of my students shrug: Charles Duhigg, "How Companies Learn Your Secrets," *New York Times*, February 16, 2012, http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?pagewanted=all.

156 The truth is that many Americans: Stanley, "High-Tech 'Mind Readers.'" The ACLU takes the position that even if lie detection was sufficiently reliable, it ought to be rejected as an "unacceptable violation of civil liberties." Stanley, "High-Tech 'Mind Readers.'"

156 Given the different cultural backgrounds: Such an approach seems consistent with a Rawlsian vision of justice. John Rawls, *A Theory of Justice* (Cambridge, MA: Belknap Press, 1971).

156 There's no reason that prosecutors and defendants: Certain scholars have made strong arguments in favor of having different standards of admission of scientific evidence for the prosecution and defense. Christopher Slobogin, *Proving the Unprovable: The Role of Law, Science, and Speculation in Adjudicating Culpability and Dangerousness* (New York: Oxford University Press, 2007), 131–44.

8. Umpires or Activists? ~ The Judge

157 John Roberts was sitting on: Biographies of Current Justices of the Supreme Court, Supreme Court of the United States, http://www.supremecourt.gov/about/biographies.aspx.

157 It had been more than a decade: Richard W. Stevenson, "President Names Roberts as Choice for Chief Justice," *New York Times*, September 6, 2005, http://www.nytimes.com/2005/09/06/politics/politicsspecial1/06confrim.html?pagewanted=all.

157 There were now two vacancies: Stevenson, "President Names Roberts."

157 Standing in his way: United States Senate Committee on the Judiciary, Nomination of John G. Roberts, http://www.judiciary.senate.gov/meetings/nomination-of-john-g-roberts.

157 But the landscape had changed: Nina Totenberg, "Robert Bork's Supreme Court Nomination 'Changed Everything, Maybe Forever,'" NPR, March 19 2012, http://www.npr.org/blogs/itsallpolitics/2012/12/19/167645600/robert-borks-supreme-court-nomination-changed-everything-maybe-forever.

157 Like Roberts, Bork had: Totenberg, "Robert Bork's Supreme Court Nomination."

157 And despite the efforts: Totenberg, "Robert Bork's Supreme Court Nomination."

157 But a series of missteps: Totenberg, "Robert Bork's Supreme Court Nomination."

158 In the end, fifty-eight senators: Totenberg, "Robert Bork's Supreme Court Nomination."

158 Where Bork had appeared humorless: Totenberg, "Robert Bork's Supreme Court Nomination"; Kenneth Jost, "Roberts' Confirmation Hearings Conclude," NPR, September 15, 2005, http://www.npr.org/templates/story/story.php?storyId=4850135.

158 Where Bork had weighed in: *Confirmation Hearing on the Nomination of Robert H. Bork to be Associate Justice of the United States*, *Before the Comm. on the Judiciary*, 100th Cong. (1987); Totenberg, "Robert Bork's Supreme Court Nomination"; Jost, "Roberts' Confirmation Hearings Conclude."

158 Arguably the savviest move: *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005).

158 Roberts certainly wasn't the first: In an *American Bar Association Journal* survey conducted shortly before the hearings, more than 50 percent of Americans voiced serious concern about "judicial activism." American Bar Association, "Most Americans See 'Judicial Activism' Crisis," *WND*, September 20, 2005, http://www.wnd.com/2005/09/32620/; Robert Schwartz, "Like They See 'Em," *New York Times*, October 6, 2005, http://www.nytimes.com/2009/07/12/weekinreview/12weber.html?pagewanted=all. And during the proceedings, then-Senator Sam Brownback (R.-Kan.) rued the fact that "we've gotten to a point today where in many respects the judiciary is the most active policy player on the field." *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005). Senator Jeff Sessions (R.-Ala.) offered a similar sentiment, speaking of the desperate need for "a fair and unbiased umpire, one who calls the game according to the rules and does so competently and honestly every day." *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005). The *New York Daily News* lauded the analogy, explaining that it showed that Roberts's "work will deal with legal opinions, not his personal opinions." "The Next Chief Justice," *New York Daily News*, September 16, 2005. Here, in Roberts's model, was a counter to the unelected "activist," legislating from the bench. Schwartz, "Like They See 'Em."

158 Good judges call: *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005).

158 They don't pitch: *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005).

158 Bad judges, by contrast: Schwartz, "Like They See 'Em."

158 They are unelected activists: Schwartz, "Like They See 'Em."

158 In setting out the two: *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States*, *Before the Comm. on the Judiciary*, 109th Cong. (2005); Jost, "Roberts' Confirmation Hearings Conclude."

158 More important, he engendered a world: *Confirmation Hearing on the Nomination of Samuel A. Alito, Jr. to be an Associate Justice of the Supreme Court of the United States, Before the Comm. on the Judiciary*, 109th Cong. 14 (2006); *Confirmation Hearing on the Nomination of Hon. Sonia Sotomayor, to be an Associate Justice of the Supreme Court of the United States, Before the Comm. on the Judiciary*, 109th Cong. 57–59 (2009); *Confirmation Hearing on the Nomination of Elena Kagan to be an Associate Justice of the Supreme Court of the United States, Before the Comm. on the Judiciary*, 111th Cong. (2010).

158 Justice Sotomayor's path through: Sonia Sotomayor, "A Latina Judge's Voice," *Berkeley La Raza Law Journal* 13 (2002): 87–92.

159 In Sotomayor's estimation: Sotomayor, "A Latina Judge's Voice," 92. This perspective aligned with President Barack Obama's statement, during the search to replace retiring justice David Souter on the bench, that "empathy" was a key trait that he looked for in a Supreme Court nominee. "Failure of Empathy and Justice," *New York Times*, March 31, 2011, http://www.nytimes.com/2011/04/01/opinion/01fri2.html. And it is no surprise that the president also came under fire, as a result: the empathetic justice is, in many ways, the opposite of the cold, steel-eyed umpire justice.

159 As the Republican senator: Bruce Weber, "Umpires v. Judges," *New York Times*, July 11, 2009, http://www.nytimes.com/2009/07/12/weekinreview/12weber.html?pagewanted=all&_r=0.

159 While a few Democratic senators criticized: Tony Mauro and David Ingram, "The Sotomayor Confirmation Hearings: Sotomayor Pledges 'Fidelity to the Law,'" *National Law Journal*, July 13, 2009, http://www.law.com/jsp/article.jsp?id=1202432212396&The_Sotomayor_Confirmation_Hearings_Sotomayor_Pledges_Fidelity_to_the_Law&slreturn=20120912191112. At her hearing, Judge Sotomayor explained that "judges can't rely on what's in their heart" and that her "philosophy of judging [is] applying the law to the facts at hand." Her responses eventually prompted Senator Lindsey Graham of South Carolina to remark, "I listen to you today; I think I'm listening to Judge Roberts." Peter Baker and Neil A. Lewis, "Republicans Press Judge About Bias," *New York Times*, July 14, 2009, http://www.nytimes.com/2009/07/15/us/politics/15confirm.html.

159 During his confirmation hearings: The conceptions of biased and unbiased judges embodied in the umpire analogy was never intended to be just a description of the world, but rather as a tool to change it. Adam Benforado, "Color Commentators of the Bench," *Florida State University Law Review* 38 (2010–2011): 466; Aaron S.J. Zelinsky, "The Justice as Commissioner: Benching the Judge-Umpire Analogy," *Yale Law Journal* 199 (2010): 117, http://www.yalelawjournal.org/the-yale-law-journal-pocket-part/supreme-court/the-justice-as-commissioner:-benching-the-judge%25.

159 There was a war over: Benforado, "Color Commentators of the Bench," 466.

159 Establishing the umpire as an ideal: Benforado, "Color Commentators of the Bench," 466.

159 There was no need: Benforado, "Color Commentators of the Bench," 466.

159 And it would limit others: Benforado, “Color Commentators of the Bench,” 466.

160 Indeed, a majority of Americans: American Bar Association, “‘Judicial Activism’ Crisis”; Schwartz, “Like They See ’Em”; Adam Liptak and Allison Kopicki, “Approval Ratings for Justices Hits Just 44% in New Poll,” *New York Times*, June 7, 2012, http://www.nytimes.com/2012/06/08/us/politics/44-percent-of-americans-approve-of-supreme-court-in-new-poll.html?_r=1&hp&pagewanted=print.

160 Likewise, while 45 percent of conservative: “Supreme Court’s Favorable Rating Still at Historical Low,” *Pew Research Center for the People and the Press*, March 25, 2013, http://www.people-press.org/2013/03/25/supreme-courts-favorable-rating-still-at-historic-low/.

160 A prime culprit appears to be: Robert P. Vallone, Lee Ross, and Mark R. Lepper, “The Hostile Media Phenomenon: Biased Perception and Perceptions of Media Bias in Coverage of the Beirut Massacre,” *Journal of Personality and Social Psychology* 49, no. 3 (1985): 577–85.

160 In one of the most famous demonstrations: Vallone, Ross, and Lepper, “The Hostile Media Phenomenon,” 580.

160 Given the impact of cultural cognition: Vallone, Ross, and Lepper, “The Hostile Media Phenomenon,” 581.

160 What *is* surprising is that: Vallone, Ross, and Lepper, “The Hostile Media Phenomenon,” 581. In sports, the same dynamic may give rise to the strange—but not unusual—situation where opposing fans at the end of a game agree on nothing, except that the refs were terrible.

161 In line with Roberts’s model: Take the general directive that a “judge should not allow family, social, political, financial, or other relationships to influence judicial conduct or judgment.” “Code of Conduct for United States Judges,” United States Courts, last revised March 20, 2014,

http://www.uscourts.gov/RulesAndPolicies/CodesOfConduct/CodeConductUnitedStatesJudges.aspx. This implies that a judge is fully aware of when, say, his identity as a Republican, Harvard-educated, white male or a member of the Catholic church influences his decision-making and can simply decide not to allow it to have any effect. Being impartial, in this view, is a choice.

161 That's why we have rules: "Code of Conduct for United States Judges"; "Judicial Conference Regulations—Gifts," United States Courts, http://www.uscourts.gov/RulesAndPolicies/CodesOfConduct/JudicialConferenceRegulationsGifts.aspx. We assume that by focusing on "bribes" and close personal ties to litigants and controversies, our rules to guard against bias are on the right track, but may just not go far enough. According to the Code of Conduct for United States Judges, a judge should not hold office in a political organization or solicit funds for a candidate. "Code of Conduct for United States Judges." Likewise, a judge should not receive gifts from those coming before the court. And a judge should not secretly meet with one side in a case and exclude the other. "Judicial Conference Regulations—Gifts." These prohibitions all make intuitive sense. Seemingly, the only problem is that they don't apply to all judges—in particular, Supreme Court Justices and state and local judges—and leave too much discretion to individual judges.

The evidence that members of the judiciary regularly and consciously exploit the lacunas in our rules at the expense of impartiality is all too clear to many of us. On the right side of the bench, the wife of Justice Clarence Thomas founded a conservative legal organization dedicated to opposing President Obama's policy agenda and Thomas attended a private political retreat set up by Charles Koch, the billionaire conservative who has made no secret of his goal to undermine the Obama administration, yet Thomas has failed to recuse himself in key cases in which the president's policies have been challenged. Eric Lichtblau, "Thomas Cites Failure to

Disclose Wife's Job," *New York Times*, January 24, 2011, http://www.nytimes.com/2011/01/25/us/politics/25thomas.html. Similarly, Justice Scalia robed up for a challenge to Vice President Dick Cheney's energy task force despite going on a duck-hunting trip with the vice president less than a month after the Court elected to hear the case. Eric Lichtblau, "Advocacy Group Says Justices May Have Conflict in Campaign Finance Cases," *New York Times*, January 19, 2011, http://www.nytimes.com/2011/01/20/us/politics/20koch.html?_r=1&emc=eta1. On the left side of the bench, Justice Ginsburg cofounded the Women's Rights Project at the ACLU, but ruled on many cases related to woman's rights. Sandra Pullman, "Ginsburg and WRP Staff," American Civil Liberties Union, March 7, 2006, http://www.aclu.org/womens-rights/tribute-legacy-ruth-bader-ginsburg-and-wrp-staff. And Justice Kagan was "a cheerleader for ObamaCare" as solicitor general, in the words of S.A. Miller at the *New York Post*, but didn't step "aside from the legal challenge to it" once she became a justice. S.A. Miller, "Kagan O'Care Bias Feared," *New York Post*, November 16, 2011, http://www.nypost.com/p/news/national/kagan_care_bias_feared_rCgJr9pt6EoKnTRwHAXTeO.

161 As we will see, all judges: In essence, we are guarding our benches with a faulty alarm system. The sirens—whether part of our formal judicial code or sounded in public opinion—certainly discourage certain problematic behavior. But the system is plagued by false alarms and is frequently triggered by disagreements over substance, not by actual bias. When he penned the majority opinion upholding Obamacare, Chief Justice Roberts went from objective umpire to backboneless politician in the eyes of many, not because he suddenly decided to stop being fair and balanced, but because his substantive decision in a particular case was objectionable to a

certain subgroup of citizens. Albert R. Hunt, “Washington Flip Flops on Justice Roberts,” *New York Times*, July 1, 2012, http://rendezvous.blogs.nytimes.com/2012/07/01/washington-flip-flops-on-justice-roberts/; “Congressional Baseball Game 2012: Political Wounds Still Fresh,” CBS News, June 29, 2012, http://www.cbsnews.com/8334-503544_162-57463434-503544/congressional-baseball-game-2012-political-wounds-still-fresh/. Once again, perceiving bias provides a potent means to minimize ideas and views that conflict with our own. And the bias bell stands ready to ring for the rarest and most blatant incidents of partiality, while remaining utterly silent as every judge, every day, in every case is pushed and pulled by hidden tides.

161 While judges are meant to check: John Irwin and Daniel Real, “Unconscious Influences on Judicial Decision-Making: The Illusion of Objectivity,” *McGeorge Law Review* 43 (2010): 1–2.

161 Under oath, Roberts claimed: Kenneth Jost, “Roberts Says He Has ‘No Agenda’ on Bench,” NPR, September 12, 2005, http://www.npr.org/templates/story/story.php?storyId=4843769.

161 Although it is hard to find: Cass R. Sunstein and Thomas Miles, “Depoliticizing Administrative Law,” *Duke Law Journal* 58 (2008): 2193–2230; Cass R. Sunstein, “Judicial Partisanship Awards,” *Washington Independent*, July 31, 2008, http://washingtonindependent.com/350/judicial-partisanship-awards.

161 Democratic appointees disproportionately: Sunstein, “Judicial Partisanship Awards.” In the rare instances where the method of classifying decisions as “liberal” and “conservative” did not withstand scrutiny (for instance, where the public interest group bringing the challenge was a conservative group), the researchers adjusted the coding. Sunstein and Miles, “Depoliticizing

Administrative Law," 2200. Justice Thomas was the most partisan member of the Supreme Court and was 46 percent more likely to support invalidating a liberal agency decision than a conservative agency decision. Sunstein and Miles, "Depoliticizing Administrative Law," 2205–06.

162 What's more, although the charge is: Sunstein, "Judicial Partisanship Awards." Ironically, Justice Scalia was the most "activist" Supreme Court justice. Sunstein and Miles, "Depoliticizing Administrative Law," 2206–07.

162 Other studies have revealed a similar: Neil Vidmar, "The Psychology of Trial Judging," *Current Directions in Psychological Science* 20, no. 1 (2011): 60, doi: 10.1177/0963721410397283; C.K. Rowland and Bridget Jeffery Todd, "Where You Stand Depends on Who Sits: Platform Promises and Judicial Gatekeeping in the Federal District Courts," *Journal of Politics* 53, no. 1 (1995): 175–85. The judicial elections that are mandated in certain states—and justified largely on the grounds of ensuring that judges maintain fairness and objectivity—may, quite ironically, exacerbate these tendencies. A survey of about 6,000 criminal cases decided in state supreme courts across the country indicated that justices who are appointed show less rigid adherence to their preconceived notions about a case and a better ability to evaluate the facts in a manner that results in a correct decision under the law. Matias Iaryczower, Garrett Lewis, and Matthew Shum, "To Elect or to Appoint? Bias, Information, and Responsiveness of Bureaucrats and Politicians," *Journal of Public Economics* 97 (2013): 230–44, doi: 10.1016/j.jpubeco.2012.08.007; "Researchers Find Appointed Justices Outperform Elected Counterparts," Feburary 22, 2013, *ScienceDaily*, www.sciencedaily.com/releases/2013/02/130222121049.htm.

And the closer it is to an election, the more it seems to matter whether you are appearing before an elected or an appointed judge. Carlos Berdejo and Noam M. Yuchtman, "Crime, Punishment and Politics: An Analysis of Political Cycles in Criminal Sentencing," *Review of Economics and Statistics* 95, no. 3 (2013): 741–56. In a study of Superior Court judges in Washington, while appointees exhibited general consistency, elected judges used their discretion to deviate upwards from sentencing guidelines 50 percent more often and handed down criminal sentences for serious offenses that were about 10 percent longer at the end of an election cycle, as compared with the beginning. Berdejo and Yuchtman, "Crime, Punishment and Politics," 741. Even elected judges who were running unopposed were significantly affected by the political climate in the last three months before an election. Berdejo and Yuchtman, "Crime, Punishment and Politics."

Nonpartisan elections do not appear to be a salve: when it comes to contentious issues, like the death penalty, state supreme court justices show a bias towards majority public opinion when there are targeted campaigns waged to influence judicial positions. Brandice Canes-Wrone, Tom S. Clark, and Jason P. Kelly, "Judicial Selection and Death Penalty Decisions," *American Political Science Review* 108, no. 1 (2014): 23–39. A judge may believe that he is being consistent and delivering sentences based purely on the facts before him, when he is really being subtly drawn away from uniformity and objectivity by his own attitudes and worldviews, amplified by salient and personally meaningful external events.

162 Of course, it is not just political: Christina L. Boyd, Lee Epstein, and Andrew D. Martin, "Untangling the Causal Effects of Sex on Judging," *American Journal of Political Science* 54 (2010): 389–411; Jonathan P. Kastellec, "Racial Diversity and Judicial Influence on Appellate Courts," *American Journal of Political Science* 57 (2013): 167–83; Linda Greenhouse,

"Evolving Opinions; Heartfelt Words from the Rehnquist Court," *New York Times*, July 6, 2013, http://www. nytimes.com/2003/07/06/weekinreview/ideas-trends-evolving-opinions-heartfelt-words-from-the-rehnquist- court.html.

162 Although she was forced to: Sotomayor, "A Latina Judge's Voice," 92.

162 Justice Scalia, in particular: Dorothy J. Samuels, "Scalia's Gay Marriage Problem," *New York Times*, March 15, 2013, http://takingnote.blogs.nytimes.com/2013/03/25/scalias-gay-marriage-problem/?hp.

162 But the fact is that no judge: Obviously, one response to all of this is to constrain how personal differences between judges influence outcomes. You should not get a sentence that is twice as long because you happen to come before Judge X instead of Judge Y. That is not justice; that is luck. In this regard, a promising solution, taken up in the final chapter of this book, may be to reduce judicial discretion. That was the original impetus for the Federal Sentencing Guidelines, although they have been less than successful, in part because they are only advisory. United States v. Booker, 543 U.S. 220 (2005); Adam Liptak, "Harsher Sentencing Guidelines Can't Be Used for Old Offenses, Justices Say," *New York Times*, June 10, 2013, http://www.nytimes.com/2013/06/11/us/politics/supreme-court-divides-over-sentencing-guidelines.html.

162 Researchers recently found that: Adam N. Glynn and Maya Sen, "Identifying Judicial Empathy: Does Having Daughters Cause Judges to Rule for Women's Issues," *American Journal of Political Science* (2014): 14, doi: 10.1111/ajps.12118. It is important to note that the study did not find the daughter effect with respect to criminal cases. Glynn and Sen, "Identifying Judicial Empathy," 11. However, the researchers' focus on rape cases very likely distorted the data. Other work shows that gender-based commitments may take a backseat to more dominant

cultural predispositions (in particular, the degree to which someone is supportive of existing hierarchies in society) when it comes to views on rape cases. Kahan, “Culture, Cognition, and Consent.” More research is needed to sort out whether having daughters has an influence on how judges decide criminal cases with a gender angle.

162 The effect appears to be: Glynn and Sen, “Identifying Judicial Empathy,” 14.

162 One theory is that having: Glynn and Sen, “Identifying Judicial Empathy,” 15; Adam Liptak, “Another Factor Said to Sway Judges to Rule for Women’s Rights: A Daughter,” *New York Times*, June 16, 2014, http://www.nytimes.com/2014/06/17/us/judges-with-daughters-more-often-rule-in-favor-of-womens-rights.html.

163 White men, for instance: Torres-Spelliscy et al., “Improving Judicial Diversity.” Indeed, even today, a number of state supreme courts are all white. Torres-Spelliscy et al., “Improving Judicial Diversity.” The fact that this is, nonetheless, the most varied judiciary we have ever enjoyed has deep implications and brings an added urgency to the diversification project. On this front, we might consider adopting proven diversity-enhancement measures from business and academia—like nominating commissions focused specifically on identifying minority judicial candidates—so that when you appear before a particular supreme court, at the state or federal level, you are at least getting a cross-section of viewpoints and commitments. Ciara Torres-Spelliscy et al., “Improving Judicial Diversity,” Brennan Center for Justice, 2010, http://www.brennancenter.org/publication/improving-judicial-diversity. Each justice may be biased, but if they are biased in different ways, that may encourage a more neutral outcome or, at least, make the influence of personal characteristics on judicial decision-making more obvious, which might, in turn, prompt other reforms aimed at providing more impartial justice.

163 What qualifies as rape: Marital rape was not rape in many states for decades. "Feminist Philosophy of Law," Stanford Encyclopedia of Philosophy, May 19, 2009, http://plato.stanford.edu/entries/feminism-law/.

163 Yet the answers we have: Susan Navarro Smelcer, *Supreme Court Justices: Demographic Characteristics, Professional Experience, and Legal Education,* 1789–2010, CRS Report R40802 (Washington, DC: Library of Congress, Congressional Research Service, April 9, 2010) 6–11, 30–31, http://www.fas.org/sgp/crs/misc/R40802.pdf.

163 The Supreme Court was pumping out: Smelcer, *Supreme Court Justices*, 6–8.

163 So, even if you happen to: Torres-Spelliscy et al., "Improving Judicial Diversity." Were it not for their bias-enhancing effects, judicial elections might seem like a ready solution, but states in which citizens vote for judges do not yield more diverse judiciaries, likely, in part, because of redistricting efforts that reduce the influence of minority voters. Torres-Spelliscy et al., "Improving Judicial Diversity."

163 As we've seen, our decisions: Chris Guthrie, Jeffrey J. Rachlinski, and Andrew J. Wistrich, "Blinking on the Bench: How Judges Decide Cases," *Cornell Law Review* 93 (2007): 5.

163 You might suppose that a judge: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 5.

164 Like the rest of us: Chris Guthrie, Jeffrey J. Rachlinski, and Andrew J. Wistrich, "Inside the Judicial Mind," *Cornell Law Review* 86 (2001): 780.

164 Unfortunately, these intuitive processes: Guthrie, Rachlinski, and Wistrich, "Inside the Judicial Mind," 780; Brite Englich, Thomas Mussweiler, and Frtiz Strack, "Playing Dice With Criminal Sentences: The Influence of Irrelevant Anchors on Experts' Judicial Decision Making," *Personality and Social Psychology Bulletin* 32 (2006): 197.

164 Consider the so-called anchoring effect: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 19; Amos Tversky and Daniel Kahneman, "Judgment Under Uncertainty: Heuristics and Biases," *Science* 185 (1974): 1124–31.

164 By the mid-1970s: Tversky and Kahneman, "Judgment Under Uncertainty," 1128; Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 20; Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 188–89.

164 Yet when researchers took up: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 20; Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 189.

164 Asked to sentence a hypothetical defendant: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 190–91.

164 Shockingly, even rolling a set of dice: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 194.

165 One of the things that was: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 197.

165 And while other research suggests: Guthrie, Rachlinski, and Wistrich, "Inside the Judicial Mind," 778; Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 193–94. In fact, highly experienced judges may mistakenly believe that they are less influenced by biasing factors. Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 194.

165 The source of the problem is no secret: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 189.

165 It doesn't help that the evidence: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 189.

165 Judges are required, for example: Vidmar, "The Psychology of Trial Judging," 59.

165 While that fact may make: Vidmar, "The Psychology of Trial Judging," 59.

165 However, in two separate sets: Andrew J. Wistrich, Chris Guthrie, and Jeffrey J. Rachlinski, "Can Judges Ignore Inadmissible Information? The Difficulty of Deliberately Disregarding," *University of Pennsylvania Law Review* 153 (2005): 1251–1345; Stephan Landsman and Richard F. Rakos, "A Preliminary Inquiry into the Effect of Potentially Biasing Information on Judges and Jurors in Civil Litigation," *Behavioral Sciences and the Law* 12 (1994): 113–26; Vidmar, "The Psychology of Trial Judging," 59.

165 A similar dynamic is at work: Englich, Mussweiler, and Strack, "Playing Dice With Criminal Sentences," 188; Jeffrey J. Rachlinski et al., "Does Unconscious Racial Bias Affect Trial Judges?" *Notre Dame Law Review* 84 (2009): 1195, 1221; Vidmar, "The Psychology of Trial Judging," 59.

166 The investigators turned their attention: The judges averaged 22.5 years of experience. Shai Danziger, Jonathan Levav, and Liora Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," *Proceedings of the National Academy of Sciences* 108, no. 17 (2010): http://www.pnas.org/content/108/17/6889.

166 Overall, these judges rejected: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889.

166 An analysis of more than: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889.

166 Moreover, factors like the severity: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6890.

166 The study's authors hypothesize: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889. The status quo enjoys an unfair advantage across many

situations, especially when we face a difficult or complex decision. When we have doubt, we are inclined to stay the course, which can lead to erroneous decision-making and poor choices, whether that means sticking with your employer's default retirement package or failing to overturn the death sentence of a defendant. Stephen Fleming, Charlotte Thomas, and Raymond Dolan, "Overcoming Status Quo Bias in the Human Brain," *Proceedings of the National Academy of Sciences* (2009): 6005, 6007, http://www.pnas.org/content/107/13/6005.

166 Repeatedly making decisions taxes our: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889. Although the researchers didn't look specifically at whether it was the influence of eating or simply taking a break that explained the pattern, it seems that the judges' two daily food breaks had a restorative effect on their abilities to deviate from the norm. Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889–92.

167 The two parole boards involved: Danziger, Levav, and Avnaim-Pesso, "Extraneous Factors in Judicial Decisions," 6889. After concerns were raised that the pattern of results might be the result of prisoners without representation being seen at the end of sessions, the authors of the study reanalyzed their data and replicated their original results, with case order and the timing of the break continuing to be robust predictors of the judges' decisions. Keren Weinshall-Margel and John Shapard, "Overlooked Factors in the Analysis of Parole Decisions," *Proceedings of the National Academy of Sciences* 108, no. 2 (2011), http://www.pnas.org/content/108/42/E833. The results also held up when the authors reran their analysis separating out rejections of parole from deferrals (both of which result in the prisoner staying locked up), which they had originally treated together. Shai Danziger, Jonathan Levav, and Liora Avnaim-Pesso, "Reply to Weinshall-Margel and Shapard: Extraneous Factors in

Judicial Decisions Persist," *Proceedings of the National Academy of Sciences* 108, no. 42, http://www.pnas.org/content/108/42/E834.

167 That's one of the reasons mental depletion: John Tierney, "Do You Suffer from Decision Fatigue?" *New York Times*, August 17, 2011, http://www.nytimes.com/2011/08/21/magazine/do-you-suffer-from-decision-fatigue.html?pagewanted=print&_r=0.

167 And one of the most disheartening: Uri Simonsohn and Francesca Gino, "Daily Horizons: Evidence of Narrow Bracketing in Judgment From 10 Years of M.B.A. Admissions Interviews," *Psychological Science* 24 (2013): 219-241.

167 In my Criminal Law course: "Drexel University School of Law Student Handbook: Academic Year 2013–2014," http://drexel.edu/law/studentLife/studentAffairs/Student%20Handbook/.

167 Researchers have dubbed this: Simonsohn and Gino, "Daily Horizons," 219.

167 According to this research: Simonsohn and Gino, "Daily Horizons," 223.

168 As the legal theorist and appellate: Jerome Frank, *Law and the Modern Mind* (New York: Brentano's, 1930), 104. At the same time, we must remember the complexity of the task at hand. It is not that judges are slaves to their backgrounds and at the total mercy of unappreciated elements in their situations. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 29. Judges do engage in careful deliberation and, in certain circumstances, do appear able to counteract certain erroneous intuitions. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 29. For instance, there is some evidence that judges are capable of overcoming hindsight bias when they are encouraged to engage in a deliberative process. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 28. In one research study, judges asked to determine the constitutionality of a particular car search *after* being informed that the police had found

damning criminal evidence in the trunk (the hindsight condition), were no more likely to find probable cause than judges who were presented with a comparable request for a telephonic warrant to search the same car not knowing what would be found inside (the foresight condition). Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 27. The authors of the study hypothesized that, in this special context, the Byzantine rule structures of the Fourth Amendment might have forced judges to deviate from their gut intuitions. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 27.

More research is needed into how various psychological dynamics play out across situations and how they interact when more than one is implicated in a real life case. The circumstances in which bias can creep in are numerous and diverse because of the nature of judicial decision-making: it is not just about ultimate outcomes and punishments. Vidmar, "The Psychology of Trial Judging," 58. Judicial bias can appear at any stage in a criminal case, from admitting evidence and signing off on plea bargains, to ruling on objections during cross-examination and approving jury instructions, to allocating time for oral argument during appeal and granting habeas motions seeking the release of a prisoner. Vidmar, "The Psychology of Trial Judging," 58.

168 While some social scientists have: As with judges, we've always assumed that the danger with referees is conscious bias: people altering their judgments in exchange for a bribe, out of spite, or after being threatened. The poster boy for the biased ref is Tim Donaghy, who bet on NBA games that he worked, as well as passing on critical information about referees and players to professional gamblers. Howard Beck and Michael S. Schmidt, "N.B.A. Referee Pleads Guilty to Gambling Charges," *New York Times*, August 16, 2007, http://www.nytimes.com/2007/08/16/sports/basketball/16nba.html?ref=timdonaghy. And leagues

have always been eager to portray bias by officials as rare and deliberate. Just as there are good, objective judges and bad, partisan judges, there are also good, objective referees who choose to adhere to the rules and bad, biased refs who choose to ruin the game for their own personal gain. According to this narrative, a handful of Donaghys in the system present the only threat: as former NBA Commissioner David Stern put it, "rogue, isolated criminal[s]." "Stern: Bet Probe 'Worst Situation That I Have Ever Experienced," ESPN.com, July 25, 2007, http://sports.espn.go.com/nba/news/story?id=2947237. But this account does not hold up against the empirical evidence.

168 The findings are staggeringly similar: See, e.g., Norbert Hagemann, Bernd Strauss, and Jan Leibing, "When the Referee Sees Red," *Psychological Science* 19 (2008): 769; Alexander Kranjec et al., "A Sinister Bias for Calling Fouls in Soccer," *PLOS ONE* 5 (2010): 1.

168 Tennis officials, for instance: David Whitney et al., "Perceptual Mislocalization of Bouncing Balls by Professional Tennis Referees," *Current Biology* 18 (2008): R947–49. More broadly, umpires, like judges, believe they are seeing the game exactly as it happens through unfiltered lenses and they are rarely in a position to understand that their particular perspective and situation may influence their judgments.

168 The spot where an umpire perceives: Whitney et al., "Perceptual Mislocation of Bouncing Balls." A similar issue arises in soccer. Trained referees are taught to observe the game following a diagonal path across the field, and a referee using a left-diagonal system will observe players moving into the offensive side of the field from a right-to-left orientation, while his linesmen, traveling along the sidelines, will observe players moving left to right. Kranjec et al., "A Sinister Bias," 1–3. Why might this matter? Scientists have discovered that experimental participants call more fouls when considering pictures of left-moving soccer tackles as when

looking at pictures of right-moving tackles. The likely reason has to do with familiarity: in the West, we read from left to right, and so things that occur right to left tend to be seen as atypical and disfluent. The end result is that, as with judges, a different perspective on the same events can lead to a different outcome.

168 White umpires give white batters: Joseph Price and Justin Wolfers, "Biased Referees?: Reconciling Results with the NBA's Analysis," *Contemporary Economic Policy* 30, no. 3 (2012): 328, doi: 10.1111/j.1465-7287.2011.00268.x; Niels van Quaquebeke and Steffen R. Giessner, "How Embodied Cognitions Affect Judgments: Height-Related Attribution Bias in Football Foul Calls," *Journal of Sport and Exercise Psychology* 32 (2010): 14–15; Hagemann, Strauss, and Leibing, "When the Referee Sees Red," 769.

Given that referees frequently have to make calls without all of the necessary information or in situations where the evidence that they have isn't conclusive, it is no surprise that they take cognitive short cuts just like judges. Robert L. Askins, "The Official Reacting to Pressure," *Referee* 3 (1978): 17, 18. Clearly, the fact that someone is a superstar doesn't tell you whether he just threw a ball or a strike; but when we don't know whether the pitch was inside or outside the strike zone, we may turn to the player's stardom to give us an answer: it was a strike. Tobias J. Moskowitz and L. Jon Wertheim, *Scorecasting: The Hidden Influences Behind How Sports Are Played and Games Are Won* (New York: Crown Archetype, 2011), 19–20. The result is that, on the mound, aces are given bigger strike zones than nonstars, and champion sluggers are less likely to get a third strike called on them than low-percentage hitters. Moskowitz and Wertheim, *Scorecasting*, 19–20. The same is true in basketball, where stars are less likely to receive additional fouls when they have gotten into early trouble than nonstars. Moskowitz and Wertheim, *Scorecasting,* 21.

Stranger and more troubling is the fact that white basketball referees appear to call relatively more fouls on black players than white players, and strike zones in baseball are partially defined by the race of the batter. Price and Wolfers, "Biased Referees?" 328. In one recent experiment, researchers found that although participants viewed black and white football players who "celebrated" after scoring as equally arrogant, black players were penalized for their actions at a greater rate. Erika Hall and Robert Livingston, "The Hubris Penalty," *Journal of Experimental Social Psychology* 48 (2012): 899–904. According to the study's authors, the likely explanation is that pride and arrogance are tolerated for those group members who possess high status (white players), but not for those with low status (black players). Black players face a "hubris penalty" that does not apply to their white counterparts. Much like with judges and police officers, racial cues seem to result in disparate treatment in sports, beyond the conscious awareness of the officials involved.

168 In addition, as with judges who expect: Moskowitz and Wertheim, *Scorecasting*, 22–24; Kyle J. Anderson and David A. Pierce, "Officiating Bias: The Effect of Foul Differential on Foul Calls in NCAA Basketball," *Journal of Sports Sciences* 27 (2009): 692–93. Again, the irony is that the great effort a person puts into trying to be neutral and objective can itself create bias. In basketball, the erroneous assumption that the number of fouls called on each team should be approximately equal in a fairly refereed game subtly influences the actions of those who are strongly motivated to appear fair. The larger the difference in fouls between two opposing basketball teams, the more likely the next whistle will be blown against the team with fewer fouls. Anderson and Pierce, "Officiating Bias," 692–93. Whether it's three fouls on the same team or three parole grants in a row, deviation from a preconceived vision of the pattern of objectivity sets off internal alarm bells, even though unequal distributions are statistically

predicted. When an umpire or referee makes a clear mistake, the motivation to even things out becomes even stronger. So, investigators have found that when umpires erroneously call a strike a ball, they are more likely to call the next pitch a strike. Moskowitz and Wertheim, *Scorecasting,* 22–23. Make-up calls are real, although, for many officials, they do not feel that way at all.

A related source of distortion involves the tendency to avoid blowing the whistle in critical situations. Moskowitz and Wertheim, *Scorecasting*, 24–30. Refs don't want to risk being seen as introducing bias and so, across a range of sports—hockey, football, and basketball, included—they show a significant tendency to omit calling fouls where it is not absolutely clear in the final moments of a game. Moskowitz and Wertheim, *Scorecasting*, 24–30. Instead, they go ahead and let the players "play" and "determine their own destinies." But, of course, that is neither fair nor an accurate description of what is happening: erroneously not calling an offensive foul that wins the game for one team is distorting the righteous outcome just as much as erroneously calling an offensive foul that loses the game for the same team.

168 Finally, like judges, referees are not: Anderson and Pierce, "Officiating Bias," 692–93; Moskowitz and Wertheim, *Scorecasting*, 138. We are a profoundly social species and none of us can just turn off the influence that other humans have on our decision-making. As with those who preside over our courts, sports officials will swear that they are not influenced by public perceptions, but the evidence suggests otherwise. Moskowitz and Wertheim, *Scorecasting* 156–65. In soccer, referees award fewer cards and more penalties to home teams and increase the amount of extra time at the end of a match when the home team is trailing and reduce it when they are ahead. Peter Dawson, et al., "Are Football Referees Really Biased and Inconsistent?: Evidence of the Incidence of Disciplinary Sanction in the English Premier League," *Journal of*

the Royal Statistical Society: Series A 170 (2007): 249; Matthias Sutter and Martin G. Kocher, "Favoritism of Agents—The Case of Referees' Home Bias," *Journal of Economic Psychology* 25 (2004): 467–68; Luis Garicano, Ignacio Palacios-Huerta, and Canice Prendergast, "Favoritism Under Social Pressure," *The Review of Economics and Statistics* 87 (2005): 209. Moreover, the bigger the crowd and the closer they are to the field, the larger the home-team bias. Moskowitz and Wertheim, *Scorecasting*, 160. The same trends are evident in basketball, football, and baseball: at away games, basketball players have an increased probability of being called for fouls and traveling, football players face a heightened likelihood of being penalized, and baseball players are at a disadvantage in calls related to stealing bases and turning double plays. Moskowitz and Wertheim, *Scorecasting,* 160.

169 Most would vigorously deny that: Justice Scalia is a case in point of how judges almost never see themselves as acting in a biased fashion. He counts his statement refusing to recuse himself from a case involving Vice President Cheney, with whom he'd gone duck hunting, as "maybe the *only* heroic opinion [he] ever issued." As he explained, "I did the right thing and it let me in for a lot of criticism and it was the right thing to do and I was proud of that. So that's the only heroic thing I've done." Jennifer Senior, "In Conversation: Antonin Scalia," *New York*, October 6, 2013, http://nymag.com/news/features/antonin-scalia-2013-10/.

169 Indeed, most would feel quite confident: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 43.

169 Legal training, experience, and the rules: Vidmar, "The Psychology of Trial Judging," 58.

170 Certainly, precedent and statutory laws can act: Vidmar, "The Psychology of Trial Judging," 58.

170 Justice Antonin Scalia's textual originalism: Richard A. Posner, "The Incoherence of Antonin Scalia," *New Republic*, August 24, 2012, http://www.tnr.com/article/magazine/books-and-arts/106441/scalia-garner-reading-the-law-textual-originalism?page=0,0.

170 A judge's decision, then, turns on: Antonin Scalia and Bryan A. Garner, interview by Stephen Adler, *Thompson Reuters Newsmaker*, September 17, 2012.

170 With seemingly no room for personal: Textual originalism, according to Justice Scalia and his coauthor, Bryan Garner, is the only "objective standard of interpretation even competing for acceptance." Posner, "The Incoherence of Antonin Scalia."

170 The Fourth Amendment begins: U.S. Const. amend. IV.

170 Is using a thermal-imaging device: Kyllo v. United States, 533 U.S. 27 (2001).

171 Is placing a GPS tracking device: United States v. Jones, 132 S. Ct. 945 (2012).

171 In situations like this, a judge is free: Posner, "The Incoherence of Antonin Scalia."

171 This is particularly evident in: Allison Orr Larsen, "Confronting Supreme Court Fact Finding," *Virginia Law Review* 98 (2012): 1255–1312; Josh Rothman, "Supreme Court Justices: Addicted to Google," *Boston Globe*, June 7, 2012, http://www.boston.com/bostonglobe/ideas/brainiac/2012/06/supreme_court_j.html.

171 The common portrayal is that: Adam Liptak, "Seeking Facts, Justices Settle for What Briefs Tell Them," *New York Times*, September 1, 2014, http://www.nytimes.com/2014/09/02/us/politics/the-dubious-sources-of-some-supreme-court-facts.html.

171 But members of the Court actually: Larsen, "Confronting Supreme Court Fact Finding"; Rothman, "Supreme Court Justices."

171 Rather than simply relying on: Larsen, "Confronting Supreme Court Fact Finding"; Rothman, "Supreme Court Justices."

171 Indeed, in surveying the 120 most: Larsen, "Confronting Supreme Court Fact Finding," 1262.

171 If a case comes down to: United States v. Sykes, 131 S. Ct. 2267, 2270 (2011).

172 In *United States v. Sykes,* both: Larsen, "Confronting Supreme Court Fact Finding," 1266. As Justice Kennedy wrote in the majority opinion, "Although statistics are not dispositive, here they confirm the commonsense conclusion that Indiana's vehicular flight crime is a violent felony." *Sykes*, 131 S. Ct. at 2274. So where did these important statistics come from? They did not appear in the briefs or in the record from the court below—rather, they were found by the justices and their clerks. Larson, "Confronting Supreme Court Fact Finding," 1266–67.

172 Isn't this precisely what we want: The Supreme Court is faced with a caseload that gets more diverse and specialized each year. If a justice does not feel he or she possesses enough knowledge to make an important decision, shouldn't he or she seek out additional information? The Federal Rules of Evidence take just such a solicitous view of this type of "in house" fact finding, placing no restrictions on the practice. Larsen, "Confronting Supreme Court Fact Finding," 1267–68.

172 In many cases, the "facts": Larsen, "Confronting Supreme Court Fact Finding," 1277–86. This is particularly noteworthy because citations and sources are uniquely important to the law. In the United States, the law's authority relies, in part, on the perceived legitimacy of the individuals and institutions charged to uphold and enforce it, but also, to a great extent, on the reasoning that those individuals and institutions employ. The facts carry a great amount of power. They may be used to persuade readers or to make a shaky proposition seem more solid.

They may be employed to win over sympathetic colleagues or undermine the positions or reasoning of adversaries. Sometimes the particular fact that a judge "uncovers" is essential to the outcome of the case—indeed, it may resolve the key question at issue. Larsen, "Confronting Supreme Court Fact Finding," 1277–86.

172 Judges, just like the rest of us, tend: Ezra Klein, "Unpoular Mandate," *The New Yorker*, June 25, 2012, http://www.newyorker.com/reporting/2012/06/25/120625fa_fact_klein#ixzz1yF1uS1MZ. In conducting a "common sense" parsing of a statute or case, a judge may be steered quickly and surely to what he believes and expects to be true, as he ignores, rejects, and overlooks contradictory evidence. Posner, "The Incoherence of Antonin Scalia."

172 When judges do research: Larsen, "Confronting Supreme Court Fact Finding," 1300.

172 The underlying drive is to bolster: Christopher H. Achen and Larry M. Bartels, "It Feels Like We're Thinking: The Rationalizing Voter and Electoral Democracy" (prepared for presentation at the Annual Meeting of the American Political Science Association, Philadelphia, August 30–September 3, 2006), http://www.princeton.edu/~bartels/thinking.pdf; Klein, "Unpopular Mandate."

173 But, in fact, having more information: Achen and Bartels, "Rationalizing Voter and Electoral Democracy"; Klein, "Unpopular Mandate."

173 When a pair of political scientists: Achen and Bartels, "Rationalizing Voter and Electoral Democracy," 12; Klein, "Unpopular Mandate."

173 A similar effect was found: Klein, "Unpopular Mandate."

173 With more information on hand: Klein, "Unpopular Mandate."

173 Our analytical skills can be distorted: Dan M. Kahan et al., "Motivated Numeracy and Enlightened Self-Government," The Cultural Cognition Project Working Paper No. 116 (2013); Keith O'Brien, "Do the Math? Only if I agree with It!" *Boston Globe*, October 20, 2013, http://www.bostonglobe.com/ideas/2013/10/20/math-only-agree-with/dNXiuubRILEUqtQ8IzUqEP/story.html.

173 In one set of experiments, researchers looked: Kahan et al., "Motivated Numeracy," 25–26.

173 On the skin-rash evaluation: Kahan et al., "Motivated Numeracy," 21; O'Brien, "Do the Math?"

173 But when participants were asked to: Kahan et al., "Motivated Numeracy," 21–24; O'Brien, "Do the Math?"

173 When the data pointed to a conclusion: Kahan et al., "Motivated Numeracy," 25–26.

173 Given numbers suggesting that crime decreased: Kahan et al., "Motivated Numeracy," 21–24; O'Brien, "Do the Math?"

173 The reverse was true for liberals: Kahan et al., "Motivated Numeracy," 21–24; O'Brien, "Do the Math?"

173 Despite knowing how to use: Kahan et al., "Motivated Numeracy," 24–28; O'Brien, "Do the Math?"

174 Indeed, when Justice Elena Kagan: Larsen, "Confronting Supreme Court Fact Finding," 1275; *Sykes*, 131 S. Ct. at 2290 n. 3 (Kagan, J., dissenting).

174 Look at recent opinions and you'll see: Larsen, "Confronting Supreme Court Fact Finding," 1300. Sure, there is the *New England Journal of Medicine*, the *New York Times*, and the website of the FDA, but so also *Musicweek*, the *Arkansas Gazette*, *Sporting News*, and the

Rape, Abuse, and Incest National Network. Larsen, "Confronting Supreme Court Fact Finding," 1286–89.

174 They have spouses, children, and friends: Roxanne Roberts and Amy Argetsinger, "A Truly Exclusive Washington Party: Antonin Scalia Hosts Justices to Toast New Henry Friendly Bio," *Washington Post*, May 1, 2012, http://www.washingtonpost.com/blogs/reliable-source/post/a-truly-exclusive-washington-party-antonin-scalia-hosts-justices-to-toast-new-henry-friendly-bio/2012/04/30/gIQAR2vYsT_blog.html.

174 Justice Scalia reads two newspapers: Senior, "In Conversation."

174 As he told a journalist: Senior, "In Conversation."

174 He was tipped over the edge: Senior, "In Conversation."

174 He "usually" listens to talk radio: He particularly likes Bill Bennet. Senior, "In Conversation."

174 In the past, he went to dinner parties: Senior, "In Conversation."

175 And you may surround yourself: While judges like to trot out examples of clerks they hired who had different worldviews (likely to bolster their self-affirming views as neutral and unbiased), such actions are exceptional. As Justice Scalia has explained, "I've said often in the past that other things being equal, which they usually are not, I like to have one of the four clerks whose predispositions are quite the opposite of mine—who are social liberals rather than social conservatives. . . . The trouble is, I have found it hard to get liberals . . . who pay attention to text and are not playing in a policy sandbox all the time." "In Conversation With Antonin Scalia," *New York*, http://nymag.com/news/features/antonin-scalia-2013-10/index6.html. In fact, empirical research shows that the hiring of clerks has taken on an increasingly partisan character over time. So, for example, 92.7 percent of Justice Scalia's and 100 percent of Justice Thomas's

clerks served for a lower federal court judge appointed by a Republican president. William E. Nelson, Harvey Rishikof, I. Scott Messinger, and Michael Jo, “The Liberal Tradition of the Supreme Court Clerkship: Its Rise, Fall, and Reincarnation,” *Vanderbilt Law Review* 62 (2009): 1775–76, 1780.

175 But search engines are themselves: Larsen, “Confronting Supreme Court Fact Finding.”

175 Many of them create filter bubbles: Eli Pariser, *The Filter Bubble* (New York: Penguin Press, 2011).

175 In essence, without your awareness: Larsen, “Confronting Supreme Court Fact Finding,” 36. Moreover, judges are not usually in a position to assess how much weight to place in a particular source. In many cases, they simply do not have the expertise to assess the methodology of research or place the findings in context. Though he is a not-infrequent offender when it comes to in-house fact-finding, Justice Scalia has offered the most pointed criticism of the Court on this score: “an adversarial process in the trial courts can identify flaws in the methodology of the studies that the parties put forward; here, we accept the studies’ findings on faith, without examining their methodology at all.” Larsen, “Confronting Supreme Court Fact Finding,” 34–35.

The problem is compounded by the simply overwhelming amount of data available on any question that might be asked. There was a point in the recent past when information was held primarily in books and other print resources, which limited the number and quality of information providers, as well as the ability of a judge to access the information. He or she had to go to a library or research facility, wait for a book or journal to be retrieved, and, then, flip page-by-page to search for the relevant information. Today, in real time, a judge can read a rare book on early-English judicial procedure held by Cambridge University, sift through the entire canon

of law review articles in search of a particular term, and gain access to nearly every social science study published in a major scholarly periodical over the last decade. It is easy to get buried under the ever-increasing weight of information. Larsen, "Confronting Supreme Court Fact Finding," 38. Typing "danger from police chases" into Google, for example, yields 26,900,000 results. Which of those pages holds the truth?

The adversary system was designed so that the different sides of a case or controversy could resolve that question by scrutinizing and challenging the evidence provided by the other side or sides. Larsen, "Confronting Supreme Court Fact Finding," 34–35. But when judges go looking for their own facts, there is no such oversight. Larsen, "Confronting Supreme Court Fact Finding," 34–35. The traditional gatekeeping function of the trial court is lost; indeed, the gates are flung open. Justices are free to disregard the information sources available—the briefs and lower court record—when those sources do not contain what they want to hear and go in search of conforming evidence to support their preconceived notions. Allison Orr Larson, "The Trouble with Amicus Facts," *Virginia Law Review* 100 (2014).

A related problem comes from amicus curiae briefs that were once fashioned as impartial "friend of the court" supplements to aid justices in understanding the unique facts of a case, but that have developed into an inexpensive way for outside parties to advocate for particular positions. Larson, "The Trouble with Amicus Facts," 1765–68. As a result, in important cases, the Supreme Court may be swamped by a sludge of unvetted and dubious facts, which the justices then paw through in hopes of finding a few nuggets to add a sparkle of legitimacy to whatever position they already hold. Larson, "The Trouble with Amicus Facts," 1763–64. To make matters worse, instead of carefully scrutinizing the original sources, the justices often

appear to uncritically accept the second-hand account on offer and cite in opinions directly to the briefs as authorities. Larson, "The Trouble with Amicus Facts," 1779.

The ultimate result is deep unfairness, both to the parties who are supposed to have a right to participate in the development and interrogation of the key facts of the case, as well as to all of those who are affected by the Court's decisions and who are entitled to legitimate process. Larsen, "Confronting Supreme Court Fact Finding," 43.

175 Amicus curiae briefs: Larsen, "The Trouble with Amicus Facts," 1757.

175 Although they often purport to: Larsen, "The Trouble with Amicus Facts," 1757, 1763.

175 And members of the Court draw from: Larsen, "The Trouble with Amicus Facts," 1763–64, 1785–86; Liptak, "Seeking Facts."

175 With dozens of amici: Larsen, "The Trouble with Amicus Facts," 1757; Liptak, "Seeking Facts."

176 Until recently, at the 36th Street subway: "MTA Fixing Trippy Brooklyn Subway Stairs After Dean Peterson's Hilarious Viral Video," *Huffington Post*, June 28, 2012, http://www.huffingtonpost.com/2012/06/28/mta-fixing-trippy-brooklyn-subway-stairs-dean-peterson_n_1634229.html; Katy Tur, "MTA Blocks Staircase After Viral Video Shows People Tripping on Same Subway Station Step," NBC New York, June 29, 2012, http://www.nbcnewyork.com/news/local/Subway-Stair-Tripping-People-Fall-Steps-Brooklyn-Station-36-Street-Sunset-Park-MTA-160629545.html.

176 Every day it caused numerous people to: Tur, "MTA Blocks Staircase."

176 But no one did anything: "MTA Fixing Trippy Brooklyn Subway Stairs."

176 The guy who nearly: "MTA Fixing Trippy Brooklyn Subway Stairs."

176 The woman who fell: "MTA Fixing Trippy Brooklyn Subway Stairs."

176 They caught their balance: Tur, "MTA Blocks Staircase."

176 Few, if any, blamed the step: "MTA Fixing Trippy Brooklyn Subway Stairs."

176 In under an hour: Dean Peterson, "New York Subway Stairs Gag: Dean Paterson Films Straphangers Enjoying Their 'Trip' (Video)," *Huffington Post*, July 5, 2012, http://www.huffingtonpost.com/2012/06/27/new-york-subway-stairs-dean-paterson_n_1631674.html?utm_hp_ref=new-york.

176 And within a day of the evidence: Tur, "MTA Blocks Staircase."

176 But if no one is keeping: There is an interesting analogy to the revolution in baseball entailed by the rise of Sabermetrics. Phil Birnbaum, "A Guide to Sabermetric Research," Society for American Baseball Research, accessed November 7, 2014, http://sabr.org/sabermetrics. As the godfather of Sabermetrics, Bill James has revealed the sophisticated statistical analysis of baseball that begun in the 1980s would never have been possible without the great data that had accumulated over many decades as a result of the decision by people back in the nineteenth century to keep really detailed records of games. Bill James, "Keynote Speech at the Conference on Empirical Studies," Penn Law School, Philadelphia, PA, 25 October 2013, Keynote Address.

176 It was the *Boston Globe*'s analysis: Marcella Bombardieri, Jonathan Saltzman, and Thomas Farragher, "For Drunk Drivers, a Habit of Judicial Leniency," *Boston Globe*, October 30, 2011, http://www.boston.com/news/local/massachusetts/articles/2011/10/30/for_drunk_drivers_a_habit_of_judicial_leniency/?page=full.

176 In 2010, 82 percent of defendants: Bombardieri, Saltzman, and Farragher, "For Drunk Drivers."

176 In interviews, the judges themselves: Bombardieri, Saltzman, and Farragher, "For Drunk Drivers"; Jonathan Saltzman, Marcella Bombardieri, and Thomas Farragher, "A Judicial Haven for Accused Drunk Drivers," *Boston Globe*, November 6, 2011, http://www.boston.com/news/local/massachusetts/articles/2011/11/06/a_judicial_haven_for_accused_drunk_drivers/. It is unclear why judges were so much more inclined to support drunk driving defendants than jurors were, but one theory is that because the evidence in such cases is highly repetitive (e.g., most police reports include a nearly identical description of bloodshot eyes, slurred speech, and the odor of alcohol on the breath), judges who hear the same thing over and over may become more skeptical that the routine description of events is genuine in a given case and apply a stricter reasonable doubt standard than do jurors for whom the evidence is novel. R. J. Cinquegrana and Diana K. Lloyd, *Report to the Supreme Judicial Court* (Boston: Choate, Hall & Stewart LLP, 2012), 32–34.

177 The journalists' work prompted: Brian Fraga, "Nearly Two Dozen State Judges Acquit 95 Percent of OUI Defendants in Bench Trials, Report States," *Herald News* (Fall River, MA), November 1, 2012, http://www.heraldnews.com/news/x303002561/Report-details-high-rate-of-OUI-acquittal-by-nearly-two-dozen-state-judges?zc_p=1. With respect to "judge shopping," for instance, the report suggested rotating judges and making jury waiver rule changes to require the consent of the prosecutor (in order to switch to a bench trial) and the exercise of the waiver prior to the assignment of the trial date. Cinquegrana and Lloyd, *Report to the Supreme Judicial Court*, 46–48. Although acknowledging that some of the changes required action by the legislature, the Massachusetts Supreme Court Justices did embrace certain suggested reforms, including instituting better training of judges in the handling of scientific evidence. *Statement of*

the Justices of the Supreme Judicial Court, November 1, 2012: 5–6, http://www.mass.gov/courts/docs/sjc/docs/sjc-statement-110112.pdf.

177 These ongoing reform efforts: Saltzman, Bombardieri, and Farragher, "A Judicial Haven."

177 If the Massachusetts Trial Court had: Bombardieri, Saltzman, and Farragher, "For Drunk Drivers."

177 Judges receive surprisingly little: John Irwin and Daniel Real, "Unconscious Influences on Judicial Decision-Making," 8; Guthrie, Rachlinski, and Wistrich, "Inside the Judicial Mind," 821–22; Henry T. Greely and Anthony D. Wagner, "Reference Guide on Scientific Evidence," in *Reference Manual on Scientific Evidence*, 3rd ed. (Washington, DC: The National Academies Press, 2011), 747–812; Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 164–66.

177 But seeing the data could be: Educated about bias and equipped with personalized statistics, a judge could say to herself, I know that in 90 percent of the Fourth Amendment cases that have come before me, I have sided with the police, while my colleagues rule in favor of the police at a 60 percent rate. I've also learned that people often engage in a biased search for evidence that confirms what they already believe to be correct, but that consciously shifting your frame of analysis can act as a counterweight. Guthrie, Rachlinski, and Wistrich, "Inside the Judicial Mind," 822. So, since my initial instinct was that the police were justified in their actions, I am going to now go back through the record with a different perspective: I am going to imagine that I hold the opposite instinct and see how much evidence I can find to support this conclusion. "The Mechanisms of Choice," *Observer* 25, no. 1 (2012), http://www.psychologicalscience.org/index.php/publications/observer/2012/january-12/the-mechanics-of-choice.html.

177 A judge is always going to: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 32–33.

177 But since they can also: Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 32–33. That may mean, in some cases, encouraging judges to take more time making critical decisions that are routinely decided on the fly, like the admissibility of evidence during trial. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 36. And, as we will discuss in the last chapter, it may imply a greater reliance on established protocols that guide the decision-making process on key issues and force a broadly focused deliberative process. Guthrie, Rachlinski, and Wistrich, "Blinking on the Bench," 35, 40–41.

178 Former New York supreme court judge: Jean Casarez, "Did Racial Bias Lead NYC Judge to Convict Man of Murder?" CNN.com, August 7, 2014, http://www.cnn.com/2014/08/06/justice/new-york-murder-conviction-revisited/.

178 Everything is stacked against it: "After Sending a Man to Prison, Judge Admits He Was Biased," NPR, June 14, 2014, http://www.npr.org/2014/06/14/321952967/after-sending-a-man-to-prison-judge-admits-he-was-biased.

178 In October 1999, the defendant: Casarez, "Did Racial Bias."

178 Kagan claimed that he had acted: Casarez, "Did Racial Bias."

178 But Judge Barbaro convicted him: Casarez, "Did Racial Bias."

178 Although it had been more than: Casarez, "Did Racial Bias."

178 And when he pored over: "After Sending a Man to Prison"; James C. McKinley Jr., "Ex-Brooklyn Judge Seeks Reversal of His Verdict in 1999 Murder Case," *New York Times*, December 12, 2013, http://www.nytimes.com/2013/12/13/nyregion/ex-brooklyn-judge-seeks-reversal-of-his-verdict-in-1999-murder-case.html.

178 He realized that his own background: "After Sending a Man to Prison."

178 That frame had caused him: Casarez, "Did Racial Bias."

178 Revisiting the facts, Wint now appeared: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

178 It seemed Kagan had shown: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

178 Wint's friends had dragged: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

179 When Kagan pulled his gun: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

179 In the scuffle, the gun: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

179 In December 2013, fourteen years after: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

179 It is almost unheard of: McKinley, "Ex-Brooklyn Judge Seeks Reversal."

179 And it took real courage: James C. McKinley Jr., "Prosecutor Questions Ex-Judge's Memory," *New York Times*, February 10, 2014, http://www.nytimes.com/2014/02/11/nyregion/prosecutor-tries-to-cast-doubt-on-ex-judge-seeking-reversal-of-his-own-verdict.html?module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22RI%3A6%22%7D.

179 But it seemed to Barbaro that: "After Sending a Man to Prison." When asked by an interviewer whether there was room in the legal system for the doubt he was feeling, Barbaro remarked, "I think too many times there is pressure to finish the cases, get the cases done and off the calendar. This pressure dooms people to be convicted unjustly. Now I'm not saying every case, but one is too much." "After Sending a Man to Prison."

9. An Eye for an Eye ~ The Public

183 More than five hundred citizens: Jan Bondeson, *The Feejee Mermaid and Other Essays in Natural and Unnatural History* (Ithaca: Cornell University Press, 1999), 143.

183 They assembled around the town: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 Earlier, the accused had been: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 And though the child had: Joseph P. McNamara, "Curiosities of the Law: Animal Prisoner at the Bar," *Notre Dame Law* 3, no. 30 (1927): 32; Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 Indeed, the guilty party had not: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 The crowd watched with eager eyes: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 She had been dressed in: McNamara, "Curiosities of the Law," 32.

183 It was 1386: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 But still, the condemned: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 As the last preparations were made: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

183 It was, the Vicomte must: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

184 When, some three decades later: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

184 Though the fresco has not: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

184 She was a pig: Bondeson, *The Feejee Mermaid and Other Essays*, 143.

184 Trials and punishments of animals: Geoffrey P. Goodwin and Adam Benforado, "Judging the Goring Ox: Retribution Directed Toward Animals," *Cognitive Science* (2014), 3-4, doi: 10.1111/cogs.12175.

184 Judicial proceedings were brought: Goodwin and Benforado, "Judging the Goring Ox," 4; E. P. Evans, *The Criminal Prosecution and Capital Punishment of Animals* (New York: E.P. Dutton and Company, 1906); Bondeson, *The Feejee Mermaid and Other Essays*, 131–60.

184 Mastiffs were guillotined: Bondeson, *The Feejee Mermaid and Other Essays*, 151.

184 Murderous bulls were seized: Evans, *The Criminal Prosecution*.

184 Horses were burned by court: Evans, *The Criminal Prosecution*, 162.

184 According to Plato: Plato, *The Laws of Plato*, trans. A. E. Taylor (London: J.M. Dent, 1934), 263–64.

184 The trial was to take place: Goodwin and Benforado, "Judging the Goring Ox," 4; Walter Woodburn Hyde, "The Prosecution and Punishment of Animals and Lifeless Things in the Middle Ages and Modern Times," *The University of Pennsylvania Law Review* 64, no. 7 (1916); Jen Girgen, "The Historical and Contemporary Prosecution and Punishment of Animals," *Animal Law* 9 (2003).

184 Likewise, by the mandate: Exodus 21:28 (King James). Interestingly, death by stoning was a special type of sentence reserved for the most egregious type of crimes and expressing the particular moral outrage of the offense. Goodwin and Benforado, "Judging the Goring Ox," 4; J. J. Finkelstein, "The Ox That Gored," *Transactions of the American Philosophical Society* 71, no. 2 (1981).

185 Many of the recorded examples: Goodwin and Benforado, "Judging the Goring Ox, 4."

185 And should the tribe fail: Sir James George Frazer, “The Ox That Gored,” in *Folk-Lore in the Old Testament*, vol. 3 (London: Macmillan, 1919), 415–16; John Macrae, “Account of the Kookies of Lunctas,” *Asiatic Researches* 7 (1803): 189. I’ve added italics to emphasize a particularly interesting facet of the quotation: if the actual perpetrator is not caught, a stand-in perpetrator must be found and killed.

185 It is tempting to write off: Esther Cohen, “Law, Folklore, and Animal Lore,” *Past and Present* 110 (1986); Evans, *The Criminal Prosecution*; Hans Kelsen, *General Theory of Law and State*, trans. A. Wedberg (New York: Russell & Russell, 1945), 91.

185 An ox lacks many: Goodwin and Benforado, “Judging the Goring Ox, 3, 5, 22-23.”

185 To suppose otherwise is: Parker-Harris Co. v. Tate, 188 S.W. 54, 55 (Tenn. 1916). The court provided the ox cart example in the context of a discussion of “deodand,” which historically was any personal property “whatever, animate or inanimate, which, becoming the immediate instrument by which the death of a human creature was caused, was forfeited to the king, for sale and a distribution of the proceeds in alms to the poor by his high almoner, ‘for the appeasing of God’s wrath’ . . . .” *Parker-Harris Co*., 188 S.W. at 55.

185 At the same time that: “Kentucky Dog Murder Trials Held Repealed,” *Washington Post*, January 25, 1929.

186 In 1918, Kentucky had passed: “Kentucky Dog Murder Trials Held Repealed.”

186 But the courts were slow: “Kentucky Jury Convicts Dog: Death Sentence Carried Out,” *New York Times*, January 11, 1926.

186 When Bill, a collie, was: “Kentucky Jury Convicts Dog”; “Condemned Dog Faces Kentucky Court Today,” *New York Times*, January 16, 1928.

186 Which helps explain why: “Condemned Dog Faces Kentucky Court Today.”

186 Thanks—perhaps—to his royal: "Condemned Dog Faces Kentucky Court Today."

186 And although convicted three: "Animals: Kaiser Bill," *Time*, November 18, 1929, http://content.time.com/time/magazine/article/0,9171,738059,00.html.

187 Interestingly, it was not: "Condemned Dog Faces Kentucky Court Today."

187 It was, she explained: "Condemned Dog Faces Kentucky Court Today."

187 A surfer is dragged underwater: Oliver Milman, "Shark Attacks Prompt Calls to Review the Great White's Protected Status," *Guardian*, July 16, 2012, http://www.guardian.co.uk/environment/2012/jul/16/marine-life-wildlife.

187 A grizzly bear attacks: Jessica Grose, "A Death in Yellowstone," *Slate*, April 2, 2012, http://www.slate.com/articles/health_and_science/death_in_yellowstone/2012/04/grizzly_bear_attacks_how_wildlife_investigators_found_a_killer_grizzly_in_yellowstone_.single.html; Scott Streater, "Yellowstone Bear Euthanized After DNA Evidence Links Two Fatal Attacks," *New York Times*, October 7, 2011, http://www.nytimes.com/gwire/2011/10/07/07greenwire-yellowstone-bear-euthanized-after-dna-evidence-52234.html?pagewanted=all.

187 When it comes to morality: Eyal Aharoni and Alan J. Fridlund, "Punishment Without Reason: Isolating Retribution in Lay Punishment of Criminal Offenders," *Psychology, Public Policy, and Law* 18, no. 4 (2012): 4.

187–88 And when I press you: Aharoni and Fridlund, "Punishment Without Reason," 5.

188 But did those reasons lead you: Aharoni and Fridlund, "Punishment Without Reason," 5; Peter H. Ditto, David A. Pizarro, and David Tannenbaum, "Motivated Moral Reasoning," in *Moral Judgment and Decision Making*, ed. Daniel M. Bartels et al. (Burlington, VT: Academic Press, 2009).

188 The best available evidence suggests: Kevin M. Carlsmith and John M. Darley, "Psychological Aspects of Retributive Justice," *Advances in Experimental Psychology* 40 (2008): 213. For an interesting overview, see Jonathan Haidt, *The Righteous Mind: Why Good People Are Divided by Politics and Religion* (New York: Pantheon, 2012).

188 In one famous experiment: Jonathan Haidt, Frederick Björklund, and Scott Murphy, "Moral Dumbfounding: When Intuition Finds No Reason" (unpublished manuscript, August 10, 2000); Jonathan Haidt, "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment," *Psychological Review* 108, no. 4 (2001): 814, doi: 10.1037/0033-295X.108.4.814; Aharoni and Fridlund, "Punishment Without Reason," 5–6.

188 The trick was that: Haid, Björklund, and Murphy, "Moral Dumbfounding," 18; Haidt, "The Emotional Dog and Its Rational Tail," 814; Aharoni and Fridlund, "Punishment Without Reason," 5–6.

188 In the incest scenario: Haid, Björklund, and Murphy, "Moral Dumbfounding," 18; Haidt, "The Emotional Dog and Its Rational Tail," 814; Aharoni and Fridlund, "Punishment Without Reason," 5–6.

188 In addition, the incest never: Haid, Björklund, and Murphy, "Moral Dumbfounding," 18; Haidt, "The Emotional Dog and Its Rational Tail," 814; Aharoni and Fridlund, "Punishment Without Reason," 5–6.

188 Study participants were quick to: Haid, Björklund, and Murphy, "Moral Dumbfounding," 3, 9; Haidt, "The Emotional Dog and Its Rational Tail," 814; Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 212.

188 Even when they ran out: Aharoni and Fridlund, "Punishment Without Reason," 5–6; Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 212.

188 Even our moral decision-making: Aharoni and Fridlund, "Punishment Without Reason," 5–6; Haidt, "The Emotional Dog and Its Rational Tail," 814. For interesting fMRI evidence supporting the role of emotional processes in moral judgment, see Joshua D. Greene et al., "The Neural Bases of Cognitive Conflict and Control in Moral Judgment," *Neuron* 44, no. 2 (2004): 389–400, doi: 10.1016/j.neuron.2004.09.027; Joshua D. Greene et al., "An fMRI Investigation of Emotional Engagement in Moral Judgment," *Science* 293, no. 5537 (2001): 2105–08, doi: 10.1126/science.1062872.

It is worth noting that my coauthor Geoff believes that models of moral judgment that emphasize the powerful influence of emotion and intuition are substantially overstated. He would argue for a greater role for reflection and reasoning in moral judgment than I would, although we agree that both are important components. My own position is that intuition is likely primary and almost certainly underestimated by those outside of psychology departments. For readers interested in research focused on reasoning in moral judgment, see Monica Bucciarelli, Sangeet Khemlani, and Philip N. Johnson-Laird, "The Psychology of Moral Reasoning," *Judgment and Decision Making* 3, no. 2, (2008): 121–39; Joseph M. Paxton and Joshua D. Greene, "Moral Reasoning: Hints and Allegations," *Topics in Cognitive Science* 2, no. 3 (2010): 511–27; Bertram F. Malle, Steve Guglielmo, and Andrew E. Monroe, "A Theory of Blame," *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory* 25, no. 2 (2014): 147–86, doi: 10.1080/1047840X.2014.877340; David A. Pizarro and Paul Bloom, "The Intelligence of the Moral Intuitions: Comment on Haidt (2001)," *Psychological Review* 110 (2003): 193–96; Paul Bloom, *Just Babies: The Origins of Good and Evil* (New York: Crown, 2013).

188 In these moments: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 212; Haidt, "The Emotional Dog and Its Rational Tail."

188 We arrive at a destination: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 212–13; Haidt, "The Emotional Dog and Its Rational Tail," 817; Haidt, *The Righteous Mind.*

189 There are several potential: Aharoni and Fridlund, "Punishment Without Reason," 2. For an overview of various theories of punishment, see Joshua Dressler, *Understanding Criminal Law*, 6th ed. (LexisNexis, 2012), 14–23.

189 When asked, people tend to: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 211.

189 But these self-reports don't: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 213.

189 Regrettably, that question is hard: Goodwin and Benforado, "Judging the Goring Ox," 2–3, 5-7.

189 But people should also feel: Goodwin and Benforado, "Judging the Goring Ox," 2–3, 5-7.

189 So varying the gravity: Goodwin and Benforado, "Judging the Goring Ox," 2–3, 5-7.

189 That was exactly the dilemma: Goodwin and Benforado, "Judging the Goring Ox, 2–3, 5-7."

190 When we hunt down: Goodwin and Benforado, "Judging the Goring Ox, 3, 8."

190 So we can effectively: Goodwin and Benforado, "Judging the Goring Ox," 3.

190 Eliminating the possibility that: Goodwin and Benforado, "Judging the Goring Ox," 15, 20.

190 In one, a shark attacks: Goodwin and Benforado, "Judging the Goring Ox," 17.

190 The shark has been hunted: Goodwin and Benforado, "Judging the Goring Ox," 15.

190 How much of a numbing agent: Goodwin and Benforado, "Judging the Goring Ox," 15.

190 If your motivation is ensuring: Goodwin and Benforado, "Judging the Goring Ox," 15, 20.

190 But your answer *should* change: Goodwin and Benforado, "Judging the Goring Ox," 18–19.

190 Sure enough, that's what Geoff and I: Goodwin and Benforado, "Judging the Goring Ox," 18–19.

190 We can alter the types: Goodwin and Benforado, "Judging the Goring Ox," 19–23.

190 People are driven by retribution: Goodwin and Benforado, "Judging the Goring Ox," 19–24.

191 On a purely rational level: Goodwin and Benforado, "Judging the Goring Ox," 20.

191 But our true intentions: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 211; Kevin M. Carlsmith and Avani Mehta Sood, "The Fine Line between Interrogation and Retribution," *Journal of Experimental Psychology* (2008): 191, doi: 10.1016/j.jesp.2008.08.025.

191 Indeed, there is a growing: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 215, 233; Anna-Kaisa Newheiser, Takuya Sawaoka, and John F. Dovidio, "Why Do We Punish Groups? High Entitativity Promotes Moral Suspicion," *Journal of Experimental Social Psychology* 48 (2012): 931; Aharoni and Fridlund, "Punishment Without Reason," 2; Fiery Cushman, "Punishment in Humans: From Intuitions to Institutions," *Philosophy Compass* 10 (2015): 118, doi: 10.1111/phc3.12192. For examples of the experimental research suggesting that retribution is the primary motive for punishment, see Kevin M. Carlsmith, John M. Darley,

and Paul H. Robinson, "Why Do We Punish? Deterrence and Just Deserts as Motives for Punishment," *Journal of Personality and Social Psychology* 83, no. 2 (2002): 284–99, doi: 10.1037/0022-3514.83.2.284; John M. Darley, Kevin M. Carlsmith, and Paul H. Robinson, "Incapacitation and Just Deserts as Motives for Punishment," *Law and Human Behavior* 24, no. 6 (2000): 659–83, doi: 10.1023/A:1005552203727; Robert E. Harlow, John M. Darley, and Paul H. Robinson, "The Severity of Intermediate Penal Sanctions: A Psychophysical Scaling Approach for Obtaining Community Perceptions," *Journal of Quantitative Criminology* 11 (1995): 71–95, doi: 10.1007/BF02221301; Robert M. McFatter, "Purposes of Punishment: Effects of Utilities of Criminal Sanctions on Perceived Appropriateness," *Journal of Applied Psychology* 67, no. 3 (1982): 255–67, doi: 10.1037/0021–9010.67.3.255; Derek D. Rucker et al., "On the Assignment of Punishment: The Impact of General-Societal Threat and the Moderating Role of Severity," *Personality and Social Psychology Bulletin* 30, no. 6 (2004): 673–84, doi: 10.1177/0146167203262849; Tom R. Tyler and Robert J. Boeckmann, "Three Strikes and You Are Out, But Why? The Psychology of Public Support for Punishing Rule Breakers," *Law and Society Review* 31, no. 2 (1997): 237–65, doi:10.2307/3053926; Mark Warr, Robert F. Meier, and Maynard L. Erickson, "Norms, Theories of Punishment, and Publicly Preferred Penalties for Crimes," *The Sociological Quarterly* 24 (1983): 75–91. doi: 10.1111/j.1533–8525.1983.tb02229.x. It is worth noting that some of the research in this area rests on faulty methodology, as Geoff and I have shown (see the first study in Goodwin and Benforado, "Judging the Goring Ox," 2–3, 5–7), so further investigation is warranted.

191 In their view, this is only: Carlsmith and Darley, "Psychological Aspects of Retributive Justice," 215, 233. Other psychologists are skeptical of this model of moral judgment. See, e.g., Malle, Guglielmo, and Monroe, "A Theory of Blame."

191 We've worked, for instance: For instance, the Model Penal Code—an influential template developed to help modernize and standardize penal law across the United States—treats many attempted crimes the same as accomplished crimes. Dressler, *Understanding Criminal Law*, 412.

191 To hold someone responsible: Dressler, *Understanding Criminal Law*, 117.

191 But starting in the thirteenth: Dressler, *Understanding Criminal Law*, 117.

192 Voluntarily swinging the ax: Dressler, *Understanding Criminal Law*, 85.

192 As the esteemed judge: Oliver Wendell Holmes, *The Common Law* (Boston: Little, Brown, 1881), 2; Dressler, *Understanding Criminal Law*, 120.

192 The requirement, in the words: Morissette v. United States, 342 U.S. 246, 251 (1952); Dressler, *Understanding Criminal Law*, 117.

192 Of course, different legal systems: The Royal Society, *Brain Waves Module 4: Neuroscience and the Law* (London: The Royal Society, December 2011), 13.

192 In England, for example: The Royal Society, *Brain Waves Module 4*, 13 n. 26. The Convention on the Rights of the Child specifically charges countries with setting a minimum age "below which children shall be presumed not to have the capacity to infringe the penal law." "Old Enough to Be a Criminal?," UNICEF, accessed May 27, 2014, http://www.unicef.org/pon97/p56a.htm.

192 Although state practice varies: "The Infancy Defense," The 'Lectric Law Library, accessed May 27, 2014, http://www.lectlaw.com/mjl/cl032.htm.

192 As we saw earlier: Roper v. Simmons, 543 U.S. 551, 551 (2005); Adam Liptak, "Justices Bar Mandatory Life Sentences for Juveniles," *New York Times*, June 25, 2012, http://www.nytimes.com/2012/06/26/us/justices-bar-mandatory-life-sentences-for-juveniles.html?hp&_r=0&gwh=5BFD4CE723571FCE5BBBB753D40EBE7D&gwt=pay.

193 The juvenile court system itself: Rachel Aviv, "No Remorse," *New Yorker*, January 2, 2012, 57.

193 As Benjamin Lindsey, a pioneering: Aviv, "No Remorse," 57.

193 Likewise, no matter how heinous: Atkins v. Virginia, 536 U.S. 304, 304 (2002); *Roper*, 543 U.S. 551, 568–69; Dressler, *Understanding Criminal Law*, 333–59.

193 Perceived blameworthiness does track: Adam Benforado and Geoff Goodwin, Unpublished Experiment.

193 But these judgments are sensitive: Benforado and Goodwin, Unpublished Experiment.

193 People believe that a boy: Benforado and Goodwin, Unpublished Experiment.

193 If through *pure chance*: Benforado and Goodwin, Unpublished Experiment.

193 What's more, on average: Benforado and Goodwin, Unpublished Experiment.

193 Indeed, people punish the unlucky: Although no harm came to the passengers of the car in the "harmless" condition, it is worth noting that we tried to ensure that the action of the boy was identical, so in both cases the bottle that he threw smashed the windshield of the vehicle. Benforado and Goodwin, Unpublished Experiment. For more on the psychology of "moral luck," see Fiery Cushman, "Crime and Punishment: Distinguishing the Roles of Causal and Intentional Analyses in Moral Judgment," *Cognition* 108 (2008): 353–80.

194 In this context, it is hardly: Aviv, "No Remorse," 57.

194 And it is entirely expected that: Some states have appeared to react to the Supreme Court's rulings in good faith—California foremost among them. Erik Eckholm, "Juveniles Facing Lifelong Terms Despite Rulings," *New York Times*, January 19, 2014, http://www.nytimes.com/2014/01/20/us/juveniles-facing-lifelong-terms-despite-rulings.html?_r=1.

194 Our hidden drives help explain: Erik Eckholm, "Juveniles Facing Lifelong Terms." In other cases, legislators have responded by enacting strong new mandatory minimums—twenty-five or more years before parole becomes an option—for juveniles who commit murder. Eckholm, "Juveniles Facing Lifelong Terms."

194 We profess not to blame: Dressler, *Understanding Criminal Law*, 350.

194 If our moral processing always: Cory J. Clark et al., "Free to Punish: A Motivated Account of Free Will Belief," *Journal of Personality and Social Psychology* 106, no. 4 (2014): 502.

194 But we often seem to be: Clark et al., "Free to Punish," 502. So, why are we driven to punish in the first place? Evolutionary psychologists suggest that the shared desire to blame and punish those who have committed wrongs provided a fitness benefit in a complex social world in which the danger of others taking harmful action was ever present. Clark et al., "Free to Punish," 502–03; Paul H. Robinson, Robert Kurzban, and Owen D. Jones, "The Origins of Shared Intuitions of Justice," *Vanderbilt Law Review* 60 (2007): 1633.

194 We want to hold someone: Clark et al., "Free to Punish," 501, 508; Mark D. Alicke, "Culpable Control and Psychology of Blame," *Psychological Bulletin* 126 (2000): 556–74; Joshua Knobe, "Intentional Action and Side Effects in Ordinary Language," *Analysis* 63 (2003): 190–94; Elaine Walster, "Assignment of Responsibility for an Accident," *Journal of Personality and Social Psychology* 3 (1996): 73–79.

194 That is strange indeed: Clark et al., "Free to Punish," 508.

195 Studies show that when: Azim F. Shariff et al., "Free Will and Punishment: A Mechanistic View of Human Nature Reduces Retribution," *Psychological Science* 25 (2014): 1568–69; Clark et al., "Free to Punish," 502; Lisa G. Aspinwall, Teneille R. Brown, and James Tabery, "The

Double-Edged Sword: Does Biomechanism Increase or Decrease Judges' Sentencing of Psychopaths?" *Science* 337, no. 6096 (August 2012): 846–49, doi: 10.1126/science.1219569; John Monterosso, Edward B. Royzman, and Barry Schwartz, "Explaining Away Responsibility: Effects of Scientific Explanation on Perceived Culpability," *Ethics and Behavior* 15 (2005): 139–58, doi: 10.1207/s15327019eb1502_4.

195 And the connection may run: Clark et al., "Free to Punish," 508.

195 Wanting to punish the judge: Interestingly, not only do people report stronger beliefs in free will after considering immoral behavior than after assessing neutral behavior, but real world data also shows that countries with higher crime and murder rates also have higher beliefs in free will. Clark et al., "Free to Punish," 501, 508.

195 When it comes to our moral intuitions: Experiments show that judgments of causation, for example, are contingent both on whether the consequences of an action are harmful or helpful (with harmful consequences giving rise to a greater sense of causality) and whether the purpose of the action giving rise to a harm was good or bad. Clark et al., "Free to Punish," 502. In one study, people viewed a driver as possessing more causal control in an accident when he crashed racing home to hide drugs from his parents than when he was racing home to hide an anniversary present he had bought them. Mark D. Alicke, "Culpable Causation," *Journal of Personality and Social Psychology* 63, no. 3 (1992): 368–78.

195 That is remarkable, given that: Alexander Volokh, "*n* Guilty Men," *University of Pennsylvania Law Review* 146 (1997): 174. Remember, even back in the early Middle Ages, before mental state and capacity requirements were introduced, there still needed to be proof that the defendant in question caused a harm. Dressler, *Understanding Criminal Law*, 85, 117.

195 As Benjamin Franklin explained: Benjamin Franklin, *The Writings of Benjamin Franklin*, vol. 9, ed. Albert Henry Smyth (London: Macmillan, 1906): 295; Volokh, "*n* Guilty Men," 174.

195 The famous English jurist: Volokh, "*n* Guilty Men," 174.

195 Even the Bible says that: Volokh, "*n* Guilty Men," 173, 177.

195 In one set of experiments: Benforado and Goodwin, Unpublished Experiment.

195 In the first scenario: Benforado and Goodwin, Unpublished Experiment.

196 In the third scenario: Benforado and Goodwin, Unpublished Experiment.

196 Not surprisingly, participants showed: Benforado and Goodwin, Unpublished Experiment.

196 But they didn't see: Benforado and Goodwin, Unpublished Experiment.

196 The shark from the same species: Benforado and Goodwin, Unpublished Experiment.

196 In related work, researchers looked: Fiery Cushman, A. J. Durwin, and Chaz Lively, "Revenge without Responsibility? Judgments about Collective Punishment in Baseball," *Journal of Experimental Social Psychology* 48 (2012).

196 What they found was that nearly: Cushman, Durwin, and Lively, "Revenge without Responsibility?" 1108

196 When it was their team: Cushman, Durwin, and Lively, "Revenge without Responsibility?" 1109.

196 The implications of the research: Benforado and Goodwin, Unpublished Experiment.

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201 Had this been a real case: Kirchmeier, "Our Existential Death Penalty," 68–70.

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202 A prosecutor may emphasize that: Arndt et al., "Terror Management in the Courtroom," 421–22.

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203 In trying to understand: Webster and Saucier, "Angels and Demons," 1455–70, 1455–56; Burris and Rempel, "Just Look at Him," 70.

203 And that's exactly what: Maggie Campbell and Johanna Ray Vollhardt, "Fighting the Good Fight: The Relationship Between Belief in Evil and Support for Violent Policies," *Personality and Social Psychology Bulletin* 40, no. 1 (2014): 18, 20–21. Those with stronger beliefs in pure evil are more supportive of harsh punishments and the death penalty and more opposed to criminal rehabilitation. Webster and Saucier, "Angels and Demons," 1455–70, 1461. Although the authors believe that BPE is likely a causal factor affecting aggression and prosociality, they did not specifically look at the causal relationship. Webster and Saucier, "Angels and Demons," 1467.

203 In one study, the potency: Campbell and Vollhardt, "Fighting the Good Fight," 18, 20–21.

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203 Even seemingly insignificant things: People who are highly skeptical of the existence of evil appear less likely to be influenced by symbolic "evil" cues. Burris and Rempel, "Just Look at Him," 78; Ellard et al., "Just World Processes in Demonizing," 355. That said, the list of relevant "evilness" cues is ever-growing. In one study involving a violent murder, the more the offender experienced pleasure from the killing, the more people supported giving him a capital sentence, which was mediated by perceptions of the evilness of the offender. Dena M. Gromet, Geoff P. Goodwin, and John M. Darley, "Taking Pleasure in Doing Harm: The Influence of Hedonic States on Judgments of Immorality and Evil" (unpublished manuscript). In another experiment, if a criminal broke into a house "just for the thrill of it" and ended up shooting the owner, people were inclined to view him as more evil and hand out a longer sentence than if he broke in for money and fired the same shots. Ellard et al., "Just World Processes in

Demonizing," 356. It also mattered whether he later expressed a desire to apologize: lack of remorse may itself activate the evilness schema, which may partially help explain why those who express regret fair better at sentencing. Ellard et al., "Just World Processes in Demonizing," 356.

203 Damien Echols, the accused: Burris and Rempel, "Just Look at Him," 78.

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10. Throwing Away the Key ~ The Prisoner

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John Miller, "'A Suffering People': English Quakers and their Neighbours c. 1650–c. 1700," *Past and Present* 188 (2005): 85–86.

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Admissions and Releases 1991–2012 (Washington, DC: Bureau of Justice Statistics, December 2013), 23–24, http://www.bjs.gov/content/pub/pdf/p12tar9112.pdf.

211 Part of this reflects: "Smarter Sentencing," *New York Times*, August 13, 2013, http://www.nytimes.com/2013/08/14/opinion/smarter-sentencing.html; Barbara H. Fried, "Beyond Blame: Would We Be Better Off in a World Without Blame?" *Boston Review*, June 28, 2013, http://www.bostonreview.net/forum/barbara-fried-beyond-blame-moral-responsibility-philosophy-law. In 2013, the Obama administration directed U.S. attorneys preparing narcotics indictments to no longer list out the specific amount of drugs—a trigger for mandatory minimums—when the offender had no significant criminal history and the offense did not involve minors, violence, weapons, or gangs. "Smarter Sentencing"; Charlie Savage, "Justice Dept. Seeks to Curtail Stiff Drug Sentences," *New York Times*, August 12, 2013, http://www.nytimes.com/2013/08/12/us/justice-dept-seeks-to-curtail-stiff-drug-sentences.html. More recently, the United States Sentencing Commission proposed altering the federal guidelines for drug offenses, which would reduce the average prison sentence for drug dealing by about a year. Matt Apuzzo, "Holder Endorses Proposal to Reduce Drug Sentences in Latest Sign of Shift," *New York Times*, March 13, 2014, http://www.nytimes.com/2014/03/14/us/politics/holder-endorses-proposal-to-reduce-drug-sentences.html. The Department of Justice has also been calling for eliminating mandatory minimums for drug crimes that do not involve violence. Apuzzo, "Holder Endorses Proposal to Reduce Drug Sentences." In 2014, the DOJ announced that it would be flexing the long-atrophying muscles of the executive clemency by providing potential relief to nonviolent, low-level federal inmates who have served at least ten years for a crime that would receive a lesser

sentence today. “Reviving Clemency, Serving Justice,” *New York Times*, April 23, 2014, http://www.nytimes.com/2014/04/24/opinion/reviving-clemency-serving-justice.html.

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211 Three-strikes laws are still: Cal. Penal Code § 1170.12 (West 2014).

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Brandon Keim, “Solitary Confinement: The Invisible Torture,” *Wired*, April 29, 2009, http://www.wired.com/2009/04/solitaryconfinement/.

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213 There is a toilet: Gawande, “Hellhole.”

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213 You get taken out only to: Gawande, “Hellhole”; Lance Tapley, “The Worst of the Worst: Supermax Torture in America,” *Boston Review*, November 1, 2010, http://bostonreview.net/tapley-supermax-torture-in-america.php.

213 In Maine, no radios or televisions: Tapley, “The Worst of the Worst.”

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213 Human contact is virtually: Keim, "Solitary Confinement."

213 The doors are often solid: Resnick and Curtis-Resnick, "Abolish the Death Penalty and the Supermax, Too."

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213 If you want to feel: Devereaux, "Prisoners Challenge Legality of Solitary Confinement Lasting More Than a Decade"; Tapley, "The Worst of the Worst."

213 Officers with shields and helmets: "Supermax Prison Cell Extraction," *Boston Review*, YouTube video, 12:44, uploaded December 16, 2010, http://youtu.be/3jUfK5i_lQs.

213 Your clothes may be cut off: "Supermax Prison Cell Extraction."

213 You may then be strapped: Tapley, "The Worst of the Worst."

213 More than 185 years after: Johnston, *Crucible of Good Intentions*, 102.

213 Philadelphia's penitentiary had a: Johnston, *Crucible of Good Intentions*, 61. The "tranquilizing chair" used at the penitentiary in the 1830s shows a striking resemblance to the restraint chair they use in Maine today. Johnston, *Crucible of Good Intentions*, 61. The instrument of straps, chains, and locks was invented by Dr. Benjamin Rush of the Society for Alleviating the Miseries of Public Prisons, who saw himself as a true humanitarian reformer and friend of the less fortunate—an apt reminder that those with the most benevolent intentions can engender the cruelest of punishment regimes. Johnston, *Crucible of Good Intentions*, 61.

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213 According to one theory, when: John T. Cacioppo and Louise C. Hawkley, "Perceived Social Isolation and Cognition," *Trends in Cognitive Sciences* (2009): 447.

213 And evidence collected over: Louise C. Hawkley and John T. Cacioppo, "Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms," *Annals of Behavioral Medicine* 40 (2010): 218; Holt-Lunstad, Smith, and Layton, "Social Relationships and Mortality Risk."

214 Infants die without food: Holt-Lunstad, Smith, and Layton, "Social Relationships and Mortality Risk," 14–15. Prior to the fall of communism, in countries such as Romania, foster care was rarely used and infants and children were often placed in large institutions where they experienced profound neglect. UNICEF, *Children at Risk in Central and Eastern Europe: Perils and Promises* (Florence, Italy: United Nationals Children's Fund, International Child Development Centre, 1997), 12–14. In many cases, existing family ties were completely severed

but not replaced by other significant human contact. UNICEF, *Children at Risk in Central and Eastern Europe*, 12–14.

214 More recently, researchers have found: Holt-Lunstad, Smith, and Layton, "Social Relationships and Mortality Risk," 14.

214 Put differently, having adequate social ties: Holt-Lunstad, Smith, and Layton, "Social Relationships and Mortality Risk," 2.

214 It hurts us to be alone: Hawkley and Cacioppo, "Loneliness Matters," 219. Loneliness is associated with an array of cardiovascular risk factors, as well as numerous emotional and cognitive problems—from personality disorders to Alzheimer's disease. Hawkley and Cacioppo, "Loneliness Matters," 220.

214 When the U.S. military studied: Gawande, "Hellhole."

214 As a POW, John McCain spent: Gawande, "Hellhole."

214 When he returned, he did not: Gawande, "Hellhole."

214 Solitary confinement appears not only: Daniel P. Mears, "Supermax Prisons: The Policy and the Evidence," *Criminology and Public Policy* 12 (2013): 691–92; Tapley, "The Worst of the Worst."

214 A healthy person who has: Keim, "Solitary Confinement"; Gawande, "Hellhole."

214 And many inmates in solitary: Tapley, "The Worst of the Worst"; Gawande, "Hellhole."

214 A number of these psychological problems: Tapley, "The Worst of the Worst."

214 Self-mutilation is a regular occurrence: Ridgeway, Casella, and Rodriguez, "Senators Finally Ponder the Question: Is Solitary Confinement Wrong?"; Gibbons and de B. Katzenbach, *Confronting Confinement*, 59; Goode, "Senators Start a Review of Solitary Confinement"; "The Abuse of Solitary Confinement."

214 Nineteenth-century Philadelphians were no doubt: Johnston, *Crucible of Good Intentions*, 61.

215 Meanwhile, thousands of our citizens: Amnesty International, *Death Sentences and Executions 2013*, 10; "Executions by Year Since 1976," Death Penalty Information Center, accessed May 24, 2014, http://www.deathpenaltyinfo.org/executions-year. There were forty-five executions in 2013 in the United States, which means that the chance of being put to death after committing a capital-punishment-eligible murder was less than 2 percent. Justin Wolfers, "Life in Prison, With the Remote Possibility of Death," *New York Times*, July 18, 2014, http://www.nytimes.com/2014/07/19/upshot/life-in-prison-with-the-remote-possibility-of-death.html?emc=eta1&abt=0002&abg=1. Instead, many prisoners end up locked on death row for decades. Wolfers, "Life in Prison."

215 Few of us stop to consider: Our incarceration system may cause more anguish than any the world has ever known, but it's hard to recognize that reality. Indeed, I am always interested to witness how vigorously some of my friends and colleagues will argue against the brutality of the death penalty and their ardor in fighting for its elimination while showing little concern with the current alternative of long prison sentences and solitary confinement.

215 Yet there have been prominent: Indeed, solitary confinement has been used for centuries as torture—that is, for the precise purpose of causing extreme suffering. Keim, "Solitary Confinement."

215 On March 8, 1842, during his tour: Johnston, *Crucible of Good Intentions*, 57.

215 He subsequently "passed the whole day": Johnston, *Crucible of Good Intentions*, 58.

215 But despite his initial excitement: Charles Dickens, *American Notes* (London: Chapman and Hall, 1842), 238–39; Gopnik, "The Caging of America."

215 The prison staff, in fact: Johnston, *Crucible of Good Intentions*, 58.

216 As Dickens wrote: Dickens, *American Notes*, 238; Johnston, *Crucible of Good Intentions*, 58.

216 Something "cruel and wrong" can be: Dickens, *American Notes*, 238; Johnston, *Crucible of Good Intentions*, 58.

216 In modern Saudi Arabia: Amnesty International, "Saudi Arabia: Five Beheaded and 'Crucified' Amid 'Disturbing' Rise in Executions," May 21, 2013, http://www.amnesty.org/en/news/saudi-arabia-five-beheaded-and-crucified-amid-disturbing-rise-executions-2013-05-21.

216 In Indonesia, a man can be: Amnesty International, "Indonesian Government Must Repeal Caning Bylaws in Aceh," May 22, 2011, https://www.amnesty.org/en/news-and-updates/indonesian-government-must-repeal-caning-bylaws-aceh-2011-05-20.

216 Dickens was correct: Dickens, *American Notes*, 239; Gopnik, "The Caging of America." We are also skeptical of harms that do not produce physical evidence because there is always the possibility that they might be feigned. Supporters of solitary confinement attacked Dickens's account of Eastern State on just such grounds, petitioning the British consul-general to re-interview several of the inmates with whom Dickens spoke for signs of deception. Johnston, *Crucible of Good Intentions*, 58. The consul-general did not disappoint, noting, in particular, a German prisoner who Dickens described as a "dejected, heart-broken, wretched creature" and "a picture of forlorn affliction and distress of mind," who turned out to be "an ingenious and clever fellow but a great hypocrite, and evidently saw Mr. D's weak side." Johnston, *Crucible of Good Intentions*, 58.

216 It is "a secret punishment": Gopnik, "The Caging of America."

216 When researchers studied prisoners: Gawande, "Hellhole."

216 Once again, our reluctance to: Robert Folger and S. Douglas Pugh, "The Just World and Winston Churchill: An Approach/Avoidance Conflict About Psychological Distance When Harming Victims," in *The Justice Motive in Everyday Life*, eds. Michael Ross and Dale T. Miller (Cambridge, UK: Cambridge University Press, 2002), 169.

216 It is much more difficult to administer: In his experimental variations, Stanley Milgram found that when the person administering the shock could not hear or see the victim who was in another room, 65 percent of participants provided the maximum shock. However, when the victim was in the same room, that number dropped to 40 percent. And in the condition where the participant had to hold the victim's hand on the shock plate, full compliance dropped to 30 percent. The average maximum voltage that participants were willing to inflict upon the victim followed the same trend. Stanley Milgram, *Obedience to Authority: An Experimental View* (New York: Harper and Row, 1974), 32–36.

216 Similarly, we are more hesitant when: Milgram, *Obedience to Authority*, 121–22.

217 We know that it's easier to: In Milgram's studies, the shock generator had thirty lever switches with voltage designations ranging from 15 to 450 volts. Milgram, *Obedience to Authority*, 20.

217 Studies show that harm caused by: Jonathan Baron and Ilana Ritov, "Omission Bias, Individual Differences, and Normality," *Organizational Behavior and Human Decision Processes* 94 (2003): 74.

217 The result is that few of us: No doubt, it also matters that those suffering are members of a despised outgroup—criminals. We will rarely feel motivated to protect those who we are already attuned to devalue.

217 The Department of Justice estimates that: David Kaiser and Lovisa Stannow, "Prison Rape and the Government," *New York Review of Books*, March 24, 2011, http://www.nybooks.com/articles/archives/2011/mar/24/prison-rape-and-government/?pagination=false.

217 Many of these victims are assaulted: Christopher Glazek, "Raise the Crime Rate," *N+1 Magazine*, Winter 2012, https://nplusonemag.com/issue-13/politics/raise-the-crime-rate/.

218 And the fact is that no one: Tim Hrenchir, "Sebelius' Son Sells Game Out of Cedar Crest," *Topeka Capital-Journal*, January 26, 2008, http://cjonline.com/stories/012608/bus_240507951.shtml; John Sebelius Art & Design, "Don't Drop the Soap," accessed May 24, 2014, http://www.johnsebelius.com/dontdropthesoap.html.

218 Think back to Leandro Andrade: Chemerinsky, "Cruel and Unusual," 1.

218 As a heroin addict stealing: David G. Savage, "Supreme Court to Hear Three-Strikes Challenge," *Los Angeles Times*, April 2, 2002, http://articles.latimes.com/2002/apr/02/news/mn-35804.

218 And what does this military veteran: Carl M. Cannon, "Petty Crime, Outrageous Punishment," *Reader's Digest*, October 2005.

218 By amending California's three-strikes law: Chemerinsky, "Cruel and Unusual," 1.

219 There is something unquestionably perverse: There are some promising signs that views may be changing, but only time will tell. In 2012, the Department of Justice issued a final rule setting national standards to address prison rape, pursuant to the Prison Rape Elimination Act of 2003, and explicitly noted that it was wrong to dismiss rape "as an inevitable—or even deserved—consequence of criminality." National Standards to Prevent, Detect, and Respond to Prison Rape, 28 C.F.R. pt. 115 (2012). According to the DOJ, sexual abuse is not "punishment

for a crime. Rather, it *is* a crime, and it is no more tolerable when its victims have committed crimes of their own." 28 C.F.R. pt. 115. The success of these national standards is likely to turn on changing how guards, prison administrators, members of the public, and even prisoners view rape. Unfortunately, there has already been some heavy resistance to the new law: in March 2014, Governor Rick Perry of Texas sent a letter to the DOJ stating his plans to ignore the law—which mandates monitoring and adherence to a zero-tolerance policy under threat of decreased federal prison funding—because it was unneeded. Editorial, "Grandstanding on Prisons in Texas," *New York Times*, April 4, 2014, http://www.nytimes.com/2014/04/05/opinion/grandstanding-on-prisons-in-texas.html.

219 Nor is it only the "worst": There is little or no acknowledgment, let alone responsive action, to the fact that some people are much more psychologically resilient than others. For one prisoner, solitary might be excruciating, while for another it might not seem significantly different from imprisonment in the general population. The result of failing to assess individual differences in experience is that neither inmate receives what he truly deserves in proportion to the gravity of his crime.

219 In some prisons, it is enough to: Tapley, "The Worst of the Worst."

219 It is particularly unsettling to: Tapley, "The Worst of the Worst."

219 The percentage of inmates who meet: Doris J. James and Lauren E. Glaze, U.S. Department of Justice, *Mental Health Problems of Prison and Jail Inmates* (Washington, DC: Bureau of Justice Statistics, September 2006), 1 http://www.bjs.gov/content/pub/pdf/mhppji.pdf. More than half of those locked up in our jails and prisons suffer from mental illness, while only 11 percent of the adult U.S. population meets the criteria for symptoms of a mental-health disorder. James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 3. Mentally ill

women are particularly overrepresented: more than 70 percent of female prisoners have mental-health problems. James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 4.

219 More than half of the prisoners: Mears, "Supermax Prisons," 691–92; Tapley, "The Worst of the Worst." A study of New York City jails showed that roughly four out of every ten inmates suffered from mental illness and that such inmates spent about twice as long locked up. "Improving Outcomes for People with Mental Illnesses Involved with New York City's Criminal Court and Correction Systems," Justice Center: The Council of State Governments, December 2012, http://csgjusticecenter.org/wp-content/uploads/2013/05/CTBNYC-Court-Jail_7-cc.pdf.

219 Psychologists have documented that: Tapley, "The Worst of the Worst."

219 That, however, is the reality: E. Fuller Torrey et al., *More Mentally Ill Persons Are in Jails and Prisons Than Hospitals: A Survey of the States* (Arlington, VA: Treatment Advocacy Center, 2010), 1, http://www.treatmentadvocacycenter.org/storage/documents/final_jails_v_hospitals_study.pdf.

220 And only about a third: James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 9.

220 When it comes to being model prisoners: Tapley, "The Worst of the Worst."

220 State inmates with mental illness: James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 1, 10. In one survey, while 14 percent of those without mental illness had been charged with an assault on either prison guards or other inmates, 24 percent of those with mental illness had faced such charges. James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 10.

220 When that happens, they can be: Tapley, "The Worst of the Worst." Guards often mistake those with mental problems as deliberately noncompliant. Katherine Harmon, "Brain Injury Rate

7 Times Greater Among U.S. Prisoners," *Scientific American*, February 4, 2012, http://www.scientificamerican.com/article/traumatic-brain-injury-prison/. For instance, those with traumatic brain injuries commonly have memory and attention problems, as well as heightened anger and impulsivity, which can appear to prison officials as intentional refusal to follow known regulations. Harmon, "Brain Injury Rate 7 Times Greater Among U.S. Prisoners."

220 More egregious still, when that: Tapley, "The Worst of the Worst." In general, state inmates with mental illness spend about four more months locked up than those without. James and Glaze, "Mental Health Problems of Prison and Jail Inmates," 9.

220 So, it is not only that severity: John J. Donohue III, "Capital Punishment in Connecticut, 1973–2007: A Comprehensive Evaluation from 4866 Murders to One Execution" (working paper, Stanford Law School, National Bureau of Economic Research, June 8, 2013), http://works.bepress.com/cgi/viewcontent.cgi?article=1095&context=john_donohue, 9.

220 In 2005, the Supreme Court held that: Roper v. Simmons, 543 U.S. 551, 568 (2005) (quoting Atkins v. Virginia, 536 U.S. 304, 319 [2002]); Donohue, "Capital Punishment in Connecticut," 2.

220 But in a recent survey of all: Lincoln Caplan, "The Random Horror of the Death Penalty," *New York Times*, January 7, 2012, http://www.nytimes.com/2012/01/08/opinion/sunday/the-random-horror-of-the-death-penalty.html; Donohue, "Capital Punishment in Connecticut," 1, 3–5.

220 And it is with those aims: Paul H. Robinson, Sean E. Jackowitz, and Daniel M. Bartels, "Extralegal Punishment Factors: A Study for Forgiveness, Hardship, Good Deeds, Apology, Remorse, and Other Such Discretionary Factors in Assessing Criminal Punishment," *Vanderbilt Law Review* 65 (2012): 741–42.

221 But in fact we still punish: Donohue, "Capital Punishment in Connecticut," 5–6.

221 On a very general level: Robinson and Darley, "The Role of Deterrence," 951.

221 The rise of mass imprisonment: Liptak, "Inmate Count in U.S. Dwarfs Other Nations'."

221 Over the last twenty or so years: Miguel Llanos, "Crime in Decline, But Why? Low Inflation Among Theories," NBC News, September 20, 2011, http://www.nbcnews.com/id/44578241/ns/us_news-crime_and_courts/t/crime-decline-why-low-inflation-among-theories/#.U4EH_V4tpcN.

221 A savvy visitor to the Big Apple: Liptak, "Inmate Count in U.S. Dwarfs Other Nations'."

221 It seems clear that the get-tough-on-crime: Liptak, "Inmate Count in U.S. Dwarfs Other Nations'."

221 First, there are many other: Miguel Llanos, "Crime in Decline"; Gopnik, "The Caging of America." One particularly important innovation in reducing crime seems to be the practice of increasing the numbers of cops in particular crime hot spots in order to prevent incidents before they happen. Gopnik, "The Caging of America."

221 But for the last twenty years: PEW Center on the States, *State of Recidivism: The Revolving Door of America's Prisons* (Washington, DC: PEW Center on the States, 2011), https://www.michigan.gov/documents/corrections/Pew_Report_State_of_Recidivism_350337_7.pdf, 1, 2, 10–11; Subramanian and Shames, *Sentencing and Prison Practices*, 3.

222 Three-strikes laws, in particular: Erwin Chemerinsky, "3 Strikes Reform in CA: 'Victory for Common Sense,'" *Crime Report*, December 6, 2012, http://www.thecrimereport.org/viewpoints/2012-12-three-strikes-reform-in-california-a-victory-for-hum.

222 But that is not the case either: Liptak, "Inmate Count in U.S. Dwarfs Other Nations'." With respect to the United States, it is worth noting that all the states that cut their imprisonment rates in recent years also experienced a decline in their levels of crime just like states that increased their imprisonment rates. PEW Center on the States, *State of Recidivism*, 5.

222 And although the top thirty-five: PEW Charitable Trusts*, Collateral Costs: Incarceration's Effect on Economic Mobility* (Washington, DC: PEW Charitable Trusts, 2010), http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2010/CollateralCosts1pdf.pdf, 7.

222 Second, these statistics often omit: Glazek, "Raise the Crime Rate."

222 Indeed, some scholars and journalists: Glazek, "Raise the Crime Rate."

222 Prisons are rife with drug dealing: Glazek, "Raise the Crime Rate."

222 This problem has long plagued: National Research Council, *Deterrence and the Death Penalty*, ed. Daniel S. Nagin and John V. Pepper (Washington, DC: The National Academies Press, 2012), 1.

222 When the Supreme Court reinstated: Gregg v. Georgia, 428 U.S. 153 (1976); National Research Council, *Deterrence and the Death Penalty*, 1; "The Myth of Deterrence," *New York Times*, April 27, 2012, http://www.nytimes.com/2012/04/28/opinion/the-myth-of-deterrence.html.

222 A number of empirical studies since then: National Research Council, *Deterrence and the Death Penalty*, 1.

222 But when the National Research Council: National Research Council, *Deterrence and the Death Penalty*, 3.

222 For proof of deterrence, you really need: As the Council explained, “there is no way to determine what would have occurred if a given state had a different sanction regime”: “the outcomes of counterfactual sanction policies are unobservable.” National Research Council, *Deterrence and the Death Penalty*, 7.

222 Instead of trying to find the answer by: Chemerinsky, “Cruel and Unusual,” 1–2.

223 The idea was that a repeat offender: The legislation was also justified on incapacitation grounds. Ewing v. California, 538 U.S. 11, 24–28 (2003).

223 Understanding the law is the starting point: Robinson and Darley, “The Role of Deterrence,” 989.

223 Here, Leandro needed to know: Chemerinsky, “Cruel and Unusual,” 2.

223 And although two counts of such: Chemerinsky, “Cruel and Unusual,” 2–3.

223 In essence, Leandro needed to know: Chemerinsky, “Cruel and Unusual,” 2–3.

223 To conduct a true cost-benefit analysis: Robinson and Darley, “The Role of Deterrence,” 977.

224 Even those of us who don’t: Robinson and Darley, “The Role of Deterrence,” 955–56.

224 Add in optimism bias: Robinson and Darley, “The Role of Deterrence,” 992–93.

224 In a stunning finding: Kimberlee Weaver, Stephen M. Garcia, and Norbert Schwarz, “The Presenter’s Paradox,” *Journal of Consumer Research* 39 (2012): 450–51.

225 So, a legislature may aim to: Weaver, Garcia, and Schwarz, “The Presenter’s Paradox,” 456. Interestingly, when individuals take on the role of a legislator selecting penalties in order to deter crime, they adopt the logical position that adding consequences is likely to decrease the likelihood of people to break the law. Weaver, Garcia, and Schwarz, “The Presenter’s Paradox,” 450–51. To best decrease littering, for instance, they select a $750 fine and two hours of

community service over simply a $750 fine. Weaver, Garcia, and Schwarz, "The Presenter's Paradox," 450–51.

225 It doesn't help that none of us: Robinson and Darley, "The Role of Deterrence," 978.

225 And even if we could foresee: Robinson and Darley, "The Role of Deterrence," 954–55.

225 Indeed, the experience of imprisonment: Robinson and Darley, "The Role of Deterrence," 954–55.

225 This means that ten years: Robinson and Darley, "The Role of Deterrence," 954–55.

225 Many life changes: Robinson and Darley, "The Role of Deterrence," 954–55.

225 As Ellis Boyd "Red" Redding: *Shawshank Redemption*, directed by Frank Darabont (Burbank, CA: Warner Brothers Pictures, 1994); "The Shawshank Redemption (1994): Quotes," Internet Movie Database, accessed May 24, 2014, http://www.imdb.com/title/tt0111161/quotes?item=qt0470719.

225 The fact that people get "institutionalized": "Five Things About Deterrence," National Institute of Justice, September 12, 2014, http://nij.gov/five-things/Pages/deterrence.aspx?utm_source=eblast-govdelivery&utm_medium=eblast&utm_campaign=five+things-deterrence.

225 Deterrence works when potential offenders: "Five Things About Deterrence"; Daniel S. Nagin, "Deterrence in the 21st Century: A Review of the Evidence," in *Crime and Justice: An Annual Review of Research*, ed. Michael Tonry (Chicago: University of Chicago Press, 2013), 1; Robinson and Darley, "The Role of Deterrence," 954–55; Angela Hawken and Mark Kleiman, *Managing Drug Involved Probationers with Swift and Certain Sanctions: Evaluating Hawaii's Hope* (Washington, DC: National Criminal Justice Reference Services, 2009), 9.

225 Our system, by contrast: Robinson and Darley, "The Role of Deterrence," 954–55.

225 In the United States, only 40.3 percent: Federal Bureau of Investigation, "Offenses Cleared," in *Uniform Crime Report: Crime in the United States, 2010* (Washington, DC: U.S. Department of Justice, Federal Bureau of Investigation, 2011), 2, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/clearancetopic.pdf.

226 That's a real problem, given that: "Five Things About Deterrence."

226 It doesn't help that conviction rates: "FAQ Detail: What is the Probability of Conviction for Felony Defendants?," Bureau of Justice Statistics, accessed May 25, 2014, http://www.bjs.gov/index.cfm?ty=qa&iid=403.

226 The death penalty is a prime example: Lawrence Katz, Steven D. Levitt, and Ellen Shustorovich, "Prison Conditions, Capital Punishment, and Deterrence," *American Law and Economics Review* 5 (2003): 319.

226 In Brooklyn, the average wait time: William Glaberson, "For 3 Years After Killing, Evidence Fades as a Suspect Sits in Jail," *New York Times*, April 15, 2013, http://www.nytimes.com/2013/04/16/nyregion/justice-denied-after-a-murder-in-the-bronx-a-sentence-to-wait.html.

226 Some cases take three: Glaberson, "Evidence Fades as a Suspect Sits in Jail."

226 Even when punishment is certain: Robinson and Darley, "The Role of Deterrence," 994.

226 If we really wanted to deter crime: Nagin, "Deterrence in the 21st Century," 3.

226 We are almost always better served: Nagin, "Deterrence in the 21st Century," 3; "Five Things About Deterrence."

226 A punishment needs to be distasteful: "Five Things About Deterrence."

226 That's true both for deterring: Nagin, "Deterrence in the 21st Century," 3; "Five Things About Deterrence."

226 The added benefit of brevity is: For a nice review of the scientific literature, see Part I of Ehud Guttel and Doron Teichman, "Criminal Sanctions in the Defense of the Innocent," *Michigan Law Review* 110 (2012): 601–07.

227 The few judicial systems that have: Hawken and Kleiman, *Managing Drug Involved Probationers*, 9.

227 For many years, probation violations were: Hawken and Kleiman, *Managing Drug Involved Probationers*, 6.

227 But in 2004 the state launched: Hawken and Kleiman, *Managing Drug Involved Probationers*, 6.

227 In Hawaii's Opportunity Probation: National Institute of Justice, "Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE)," accessed May 25, 2014, http://www.crimesolutions.gov/ProgramDetails.aspx?ID=49; Friends of HOPE, "Hope—Hawaii's Opportunity Probation with Enforcement," accessed May 25, 2014, http://hopehawaii.net/index.html; Hawaii State Judiciary, "HOPE Probation," accessed May 25, 2014, http://www.courts.state.hi.us/special_projects/hope/about_hope_probation.html; Hawken and Kleiman, *Managing Drug Involved Probationers*; "A New Probation Program in Hawaii Beats the Statistics: Transcript," *PBS*, February 2, 2014, originally broadcast on November 24, 2013, http://www.pbs.org/newshour/bb/law-july-dec13-hawaiihope_11-24/.

227 Every morning they have to call: "Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE)."

227 If they test positive: "Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE)." If substance-abusing probationers fail to appear for a drug test, a bench warrant is

immediately written up for their immediate arrest. “Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE).”

227 The results have been impressive: Hawken and Kleiman, *Managing Drug Involved Probationers*, 64.

227 Seventeen states have now adopted: “A New Probation Program in Hawaii Beats the Statistics: Transcript.”

227 You’d imagine that taking a bunch: Gawande, “Hellhole.”

227 But the truth is that our prison: There is no data to show that supermax prisons actually decrease violence and rule breaking inside prisons. Chad S. Briggs, Jody L. Sundt, and Thomas C. Castellano, “The Effect of Supermaximum Security Prisons on Aggregate Levels of Institutional Violence,” *Criminology* 41 (2003): 1341; Gawande, “Hellhole.”

227 The influx of inmates: Gawande, “Hellhole.”

228 Pack people in and give them: Gawande, “Hellhole.”

228 When the U.S. attorney in Manhattan: United States Attorney, Southern District of New York, *CRIPA Investigation of the New York City Department of Correction Jails on Rikers Island* (New York: U.S. Department of Justice, 2014), 3.

228 Although the average daily adolescent: United States Attorney, SDNY, *CRIPA Investigation*, 6, 9.

228 Harsh abuse by staff: United States Attorney, SDNY, *CRIPA Investigation*, 8.

228 And many of the resulting injuries: United States Attorney, SDNY, *CRIPA Investigation*, 3.

228 Conditions were so bad that: United States Attorney, SDNY, *CRIPA Investigation*, 8.

228 In Georgia between 2010 and 2014: Southern Center for Human Rights, *The Crisis of Violence in Georgia's Prisons* (Atlanta, GA: Southern Center for Human Rights, 2014), 7.

228 This year, 13.5 million people: Gibbons and de B. Katzenbach, *Confronting Confinement*, 11; Subramanian and Shames, *Sentencing and Prison Practices*, 19.

228 Inmates in long-term isolation: Gawande, "Hellhole."

228 Many inmates acquire drug habits: Many previously unaffiliated individuals join gangs in order to gain protection from violence within the prison.

229 And the lone criminal may gain: There is evidence that inmates may learn how to be more effective criminals in prison. "Five Things About Deterrence."

229 Those kept in solitary usually: Keim, "Solitary Confinement."

229 It should come as no surprise: Gibbons and de B. Katzenbach, *Confronting Confinement*, 54; Gawande, "Hellhole"; "The Abuse of Solitary Confinement." It is worth noting that one study of several hundred supermax inmates showed that solitary confinement did not appear to increase the likelihood of recidivism beyond the effect of spending time in general lockup. Jesenia M. Pizarro, Kristen M. Zgoba, and Sabrina Haugebrook, "Supermax and Recidivism: An Examination of the Recidivism Covariates Among a Sample of Supermax Ex-Inmates," *Prison Journal* 94 (2014): 193–96. More research is needed, however, to assess whether this dynamic is present across jurisdictions and to understand it. If the findings hold up, one explanation may be that although solitary confinement promotes psychological problems linked to recidivism, it also hinders the ability of offenders to maintain and develop ties to criminal networks while locked up, such that those in the general prison population are socially better positioned to reoffend upon release.

229 This is one of the reasons that: Gibbons and de B. Katzenbach, *Confronting Confinement*, 54; Gawande, "Hellhole."

229 Losing the stimulation of: This is particularly true because we also regularly deprive a person in solitary of any preparation for reintegration.

229 One of the strangest side effects: John Darley et al., "Psychological Jurisprudence," in *Taking Psychology and Law into the Twenty-First Century*, ed. James R. P. Ogloff (New York: Kluwer Academic Publishers, 2004), 51–52.

230 But the extreme harshness: Darley et al., "Psychological Jurisprudence," 51–52.

230 If a couple of garage break-ins: Kevin M. Carlsmith and John M. Darley, "Psychological Aspects of Retributive Justice," *Advances in Experimental Psychology* 40 (2008): 230.

230 Research has shown that citizens: Darley et al., "Psychological Jurisprudence," 51–52.

230 In one study, a group of participants: Janice Nadler, "Flouting the Law," *Texas Law Review* 83 (2005): 1410–16.

230 Those who had read about: Nadler, "Flouting the Law," 1410–16.

230 One of the reasons that Hawaii's: Hawken and Kleiman, *Managing Drug Involved Probationers*, 9; "A New Probation Program in Hawaii Beats the Statistics: Transcript"; "Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE)."

230 And although the punishments are: Hawken and Kleiman, *Managing Drug Involved Probationers*, 9; "A New Probation Program in Hawaii Beats the Statistics: Transcript"; "Program Profile: Hawaii Opportunity Probation with Enforcement (HOPE)."

231 The total bill for our: Gibbons and de B. Katzenbach, *Confronting Confinement*, 11.

231 A year in a New Jersey prison: Brian Resnick, "Chart: One Year at Prison Costs More Than One Year at Princeton," *Atlantic*, November 1, 2011,

http://www.theatlantic.com/national/archive/2011/11/chart-one-year-of-prison-costs-more-than-one-year-at-princeton/247629/.

231 The trends are equally disheartening: Gopnik, "The Caging of America"; National Association for the Advancement of Colored People, *Misplaced Priorities: Over Incarcerate, Under Educate*, 2nd ed. (Baltimore: National Association for the Advancement of Colored People, 2011), 2.

231 And the cost of building: Mears, "Supermax Prisons," 696-97; Tapley, "The Worst of the Worst."

231 The irony is that spending money: Lance Lochner and Enrico Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests and Self-Reports," *American Economic Review* 94 (2004): 159–62; Alliance for Excellent Education, *Saving Futures, Saving Dollars: The Impact of Education on Crime Reduction and Earnings* (Washington, DC: Alliance for Excellent Education, 2013), 3; Stephen Machin, Olivier Marie, and Sunčica Vujič, "The Crime Reducing Effect of Education," *The Economic Journal* 121 (2011): 474; D. Mark Anderson, "In School and Out of Trouble? The Minimum Dropout Age and Juvenile Crime," *The Review of Economics and Statistics* 96 (2014): 318–31.

231 Time in the classroom reduces: Lochner and Moretti, "The Effect of Education on Crime," 155-89; Alliance for Excellent Education, *Saving Futures, Saving Dollars*, 3; Anderson, "In School and Out of Trouble?" 318–31.

231 As the Commission on Safety: Gibbons and de B. Katzenbach, *Confronting Confinement*, 11.

232 Halden is one of Norway's: Gentleman, "Inside Halden."

232 It houses murderers: Gentleman, "Inside Halden."

232 But there are no bars: Gentleman, "Inside Halden."

232 You cannot see the huge wall: Gentleman, "Inside Halden."

232 It was built to rehabilitate: Gentleman, "Inside Halden."

232 The facility has a sleek: Gentleman, "Inside Halden."

232 Each prisoner is given a room: Gentleman, "Inside Halden."

232 Linked to every ten or twelve rooms: Gentleman, "Inside Halden."

232 Prisoners are locked in their cells: Gentleman, "Inside Halden."

232 The prison has several workshops: Gentleman, "Inside Halden."

232 The inmates often save up: Gentleman, "Inside Halden."

232 There are tablecloths: Gentleman, "Inside Halden."

232 The prison staff aren't cast as unyielding: Gentleman, "Inside Halden."

232 And effort goes into fostering family ties: Gentleman, "Inside Halden."

232 It makes sense, according to Halden's governor: Gentleman, "Inside Halden."

232 Halden will never be repurposed: More than fifty paranormal investigation teams search for ghosts at Eastern State each year and the penitentiary has been the focus of SyFY's *Ghost Hunters*, Fox's *World's Scariest Places*, MTV's *FEAR*, and TLC's *America's Ghost Hunters*. "FAQ, Terror Behind the Walls."

232 When Eastern State's architect: Eastern State Penitentiary, "Facade: Online 360 Tour," accessed May 25, 2014, http://www.easternstate.org/explore/online-360-tour. By the instructions of the early-nineteenth-century building commissioners, the penitentiary was meant to "convey to the mind a cheerless blank indicative of the misery which awaits the unhappy being who enters within its walls." Johnston, *Crucible of Good Intentions*, 7.

232 And the grim fortress: Subramanian and Shames, *Sentencing and Prison Practices*, 3.

233 In 2013, more than 150 years: Subramanian and Shames, *Sentencing and Prison Practices*, 2, 4. Delegations from Colorado and Georgia also participated in the trip. Subramanian and Shames, *Sentencing and Prison Practices*, 4.

233 At the German and Dutch prisons: Subramanian and Shames, *Sentencing and Prison Practices*, 12–13. Inmates are also commonly allowed other privacy rights denied American prisoners, with guards knocking before entering a cell and walled toilets. In addition, the physical space of the prison in Germany and the Netherlands is not meant to be unpleasant like in the United States: there are plenty of windows and light. Subramanian and Shames, *Sentencing and Prison Practices*, 12.

233 Women with children under three: Subramanian and Shames, *Sentencing and Prison Practices*, 12.

233 And prisoners were provided with: Subramanian and Shames, *Sentencing and Prison Practices*, 13.

233 Solitary confinement was very rare: Subramanian and Shames, *Sentencing and Prison Practices*, 13.

233 To encourage proper conduct: Subramanian and Shames, *Sentencing and Prison Practices*, 12. In keeping with the research on optimal deterrence, when inmates violate a prison rule, discipline is quickly meted out and it is tailored specifically to the violation. Subramanian and Shames, *Sentencing and Prison Practices*, 13, 18.

233 And when offenders were released: Subramanian and Shames, *Sentencing and Prison Practices*, 13.

233 The reason is simple: Subramanian and Shames, *Sentencing and Prison Practices*, 7.

233 It's right there: Subramanian and Shames, *Sentencing and Prison Practices*, 7.

233 Germany's Prison Act, for example: Subramanian and Shames, *Sentencing and Prison Practices*, 7.

233 To help inmates with that eventual transition: Subramanian and Shames, *Sentencing and Prison Practices*, 7. The Netherlands 1998 Penitentiary Principles Act places a similar emphasis on encouraging and maintaining connections between those outside the prison and those inside the prison. Subramanian and Shames, *Sentencing and Prison Practices*, 7.

233 Incarcerating them makes little sense: Subramanian and Shames, *Sentencing and Prison Practices*, 14.

234 Norway has one of the lowest: William Lee Adams, "Norway Builds the World's Most Humane Prison," *Time*, May 10, 2010, http://content.time.com/time/magazine/article/0,9171,1986002,00.html#ixzz0n9t8l6FT.
Different countries use different ways to measure reoffending, which makes direct comparisons between countries difficult. Subramanian and Shames, *Sentencing and Prison Practices*, 6. That said, it is clear that the rate is far lower than in the United States. Adams, "Norway Builds the World's Most Humane Prison." In addition, it is worth noting that because Halden only opened in 2010, there is not sufficient data yet to draw any conclusions about reoffending at the specific prison. Jan R. Strømnes, deputy governor of Halden prison, e-mail message to author, February 11, 2014.

234 In Germany, only one percent: Subramanian and Shames, *Sentencing and Prison Practices*, 13.

234 And it's true that the success: Gopnik, "The Caging of America"; Liptak, "Inmate Count in U.S. Dwarfs Other Nations'."

234 Britain, which managed to turn away: Gawande, "Hellhole."

234 But British leaders found the courage: Gawande, "Hellhole."

234 Even stronger evidence that American: Subramanian and Shames, *Sentencing and Prison Practices*, 15–18.

234 In just the last five years: Jacob McCleland, "The High Costs of High Security at Supermax Prisons," NPR, June 19, 2012, http://www.npr.org/2012/06/19/155359553/the-high-costs-of-high-security-at-supermax-prisons. In 2014, the New York State prison and jail systems enacted reforms directly targeting the overuse of solitary confinement, including limiting (or, in some cases, barring) the use of isolation for those with mental illness or developmental disabilities. "New York Rethinks Solitary Confinement," *New York Times*, February 20, 2014, http://www.nytimes.com/2014/02/21/opinion/new-york-rethinks-solitary-confinement.html; Benjamin Weiser, "New York State in Deal to Limit Solitary Confinement," *New York Times*, February 19, 2014, http://www.nytimes.com/2014/02/20/nyregion/new-york-state-agrees-to-big-changes-in-how-prisons-discipline-inmates.html.

234 For a country that trumpets its: Some scholars have suggested expanding the text of the Eighth Amendment to ban prolonged solitary confinement, as well as the death penalty. Resnick and Curtis-Resnick, "Abolish the Death Penalty and the Supermax, Too."

11. What We Must Overcome ~ The Challenge

239 The first step was to fill out: Juror Information Questionnaire, 234 Pa. Code Rule 632, http://www.pacode.com/secure/data/234/chapter6/s632.html.

239 "Would you be more likely": Juror Information Questionnaire.

239 "Would you have any problem": Juror Information Questionnaire.

239 "Is there any other reason": Juror Information Questionnaire.

240 And this puts us in a worse: To see why that is the case, consider a medical system that instead of testing people, simply asked them "Do you have HIV?" and then advised those who said "yes" to cure themselves by choosing to "turn off" the virus. Though intended to reduce the transmission of the disease, the system would have the exact opposite effect: initial infection with HIV cannot be identified through introspection nor cured through positive thinking, and this approach would lead asymptomatic people infected with the virus to conclude that they were healthy and those who were sick to believe that they were cured, increasing the likelihood that they would engage in behaviors likely to spread the affliction.

241 In the Third Circuit, for instance: Model Criminal Jury Instructions, United States Court of Appeals for the Third Circuit § 1.01, http://www.ca3.uscourts.gov/sites/ca3/files/2012%20Chapter%201_0.pdf.

241 "Do not allow sympathy": Model Criminal Jury Instructions § 1.02.

241 Likewise, whenever the judge sustains an objection: Model Criminal Jury Instructions § 1.08.

241 And if the judge orders evidence: Model Criminal Jury Instructions § 1.08.

242 Out of thin air, the Third Circuit: During the second-degree murder trial of George Zimmerman, the prosecution's claim was that Zimmerman had racially profiled seventeen-year-old Trayvon Martin before killing him and that he was the aggressor, stalking Martin as he walked back to his father's fiancée's townhouse. Cara Buckley, "State's Witnesses in Zimmerman Trial Put the Prosecution on the Defensive," *New York Times*, July 2, 2013, http://www.nytimes.com/2013/07/03/us/prosecutors-in-zimmerman-trial-ask-jury-to-disregard-comments.html?_r=0; Yamiche Alcindor, "Officer Testimony No Slam Dunk for Zimmerman Prosecutors," *USA Today*, July 2, 2013,

http://www.usatoday.com/story/news/nation/2013/07/02/zimmerman-trayvon-martin-murder-trial/2482325/. However, in a critical moment at trial, Officer Chris Serino of the Sanford Police stated that, in interviewing the defendant following the incident, Zimmerman appeared to be truthful in recounting that he had shot seventeen-year-old Trayvon Martin in self-defense. Buckley, “State’s Witnesses Put Prosecution on Defense.” Having your own witness confirm the central account of the other side can lose a case, but the prosecution did not object immediately. Buckley, “State’s Witnesses Put Prosecution on Defense.” By the next day, though, having considered its options, the prosecution decided to argue that Serino’s testimony on Zimmerman’s credibility ought to be excluded. Alcindor, “Officer Testimony No Slam Dunk.” The judge agreed and the jurors were simply told to ignore what they had heard and considered in the intervening hours. Alcindor, “Officer Testimony No Slam Dunk.” While we cannot know exactly why the prosecution went on to lose the case, as discussed earlier, experimental evidence casts serious doubt on the effectiveness of the judge’s admonition. Matthew Hutson, “Unnatural Selection,” *Psychology Today* 40 (2007): 95. Our judicial procedures have conjured up a magical delete button in jurors’ brains that simply does not exist. Hutson, “Unnatural Selection,” 95.

243 When significant injustice has come: University of Virginia School of Law, “Promoting Policing at Its Best,” *Virginia Journal* 15 (2012): 39.

243 In the 1960s, for instance: University of Virginia School, “Promoting Policing at Its Best,” 39.

243 Faced with the specter of coerced confessions: Miranda v. Arizona, 384 U.S. 436, 479 (1966).

243 Does the Constitution’s prohibition: Bond v. United States, 529 U.S. 334 (2000); State v. Sobczak, 347 Wis.2d 724 (2013).

243 In the case of *Miranda* rights: Salinas v. Texas, 133 S.Ct. 2174 (2013).

244 If the police begin to interrogate: *Salinas*, 133 S.Ct. at 2180; *Miranda*, 384 U.S. at 479.

244 Likewise, the Supreme Court has stated: *Salinas*, 133 S.Ct. at 2180.

244 If the police ask you to come: *Salinas*, 133 S.Ct. at 2180.

244 Far from ensuring our goal: Is it true that the Fourth, Fifth, and Sixth Amendments are the major influences governing police officer and prosecutor interactions with members of the public—and that they have shielded the innocent, while exposing the guilty to the sword of the law? Is it true that the Eighth Amendment is the primary factor impacting the treatment of prisoners? I would suggest that the answer to these questions is a strong no. Procedural protections are important, but the best evidence from social science is that they are not the major movers of our legal actors and that they are insufficient, in and of themselves, to secure the justice that we seek. University of Virginia School, "Promoting Policing at Its Best," 41.

244 The Supreme Court's handling of: Joel D. Lieberman, "The Utility of Scientific Jury Selection: Still Murky After 30 Years," *Current Directions in Psychological Science* 20 (2011): 48.

244 Allowing counsel on both sides: Jennifer K. Robbennolt and Matthew Taksin, "Jury Selection, Peremptory Challenges and Discrimination," *APA Monitor on Psychology* 40 (2009): 18.

244 But in practice the rule was often used: Samuel Sommers and Michael Norton, "Race-Based Judgments, Race-Neutral Justifications: Experimental Examination of Peremptory Use and the *Batson* Challenge Procedure," *Law and Human Behavior* 31 (2007): 262–64.

244 Facing significant criticism, the Supreme Court finally: Equal Justice Initiative, "Illegal Racial Discrimination in Jury Selection: A Continuing Legacy" (2010): 12,

http://www.law.berkeley.edu/files/thcsj/IllegalRacialDiscriminationJurySelection.pdf; Sommers and Norton, “Race-Based Judgments,” 263–64. When Robert Swain, a black man, unsuccessfully challenged his death penalty conviction based on the fact that there were no black people on his jury (all six African Americans on the panel were struck by the prosecutor), the Supreme Court dissent noted that, despite African Americans making up 26 percent of the jury-eligible population, no African American “within the memory of persons [then] living [had] ever served on any petit jury in any civil or criminal case tried in Talladega Country, Alabama.” Swain v. Alabama, 380 U.S. 202, 231–32 (1965) (Goldberg, J., dissenting).

244–45 Unfortunately, it has not been much: Lieberman, “The Utility of Scientific Jury Selection,” 48.

245 The problem, as Justice Thurgood Marshall: Equal Justice Initiative, “Illegal Racial Discrimination in Jury Selection,” 12.

245 “The juror worked as a plumber”: Equal Justice Initiative, “Illegal Racial Discrimination in Jury Selection,” 30.

245 It need not be persuasive: Equal Justice Initiative, “Illegal Racial Discrimination in Jury Selection,” 15; Sommers and Norton, “Race-Based Judgments,”269.

245 Experimental research involving practicing attorneys: Sommers and Norton, “Race-Based Judgments,” 261.

245 As a result, in many areas: Lieberman, “The Utility of Scientific Jury Selection,” 48; Sommers and Norton, “Race-Based Judgments,” 261-64.

245 Between 2005 and 2009: Equal Justice Initiative, “Illegal Racial Discrimination in Jury Selection,” 14.

245 About half of the resulting juries: Equal Justice Initiative, "Illegal Racial Discrimination in Jury Selection," 14.

245 Despite all of the effort: University of Virginia School, "Promoting Policing at Its Best," 41–42.

246 But if you *waive* your *Miranda* rights: Dan Simon, *In Doubt: The Psychology of the Criminal Justice Process* (Cambridge, MA: Harvard University Press, 2012), 138–39; Saul M. Kassin et al., "Police Interviewing and Interrogation: A Self-Report Survey of Police Practices and Beliefs," *Law and Human Behavior* 31, no. 4 (2007): 381–400; Richard A. Leo, "Inside the Interrogation Room," *Journal of Criminal Law and Criminology* 86 (1996): 266–303; Brandon Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Cambridge, MA: Harvard University Press, 2011), 36–37, 42; Richard A. Leo et al., "Bringing Reliability Back In: False Confessions and Legal Safeguards in the Twenty-First Century," *Wisconsin Law Review* 2 (2006): 479–86.

246 To begin with, it would matter: Richard Rogers, "Getting It Wrong About Miranda Rights: False Beliefs, Impaired Reasoning, and Professional Neglect," *American Psychologist* 66, no. 8 (2011): 731.

246 We would address the fact that roughly: Rogers, "Getting It Wrong About Miranda Rights," 729.

246 And we would care that the vast majority: Simon, *In Doubt*, 140; Rogers, "Getting It Wrong About Miranda Rights," 730–31.

246 Most critically, we would pay attention: Simon, *In Doubt*, 139.

247 And that allows for truly absurd results: Garrett, *Convicting the Innocent*, 37; Trial Transcript at 20, People v. Lloyd, No. 85-00376 (Mich. Rec. Ct. May 2, 1985).

247 Police departments, for instance: David Shipler, "Why Do Innocent People Confess?" *New York Times*, February 23, 2012, http://www.nytimes.com/2012/02/26/opinion/sunday/why-do-innocent-people-confess.html?pagewanted=all.

247 Officers are encouraged to bring up: Shipler, "Why Do Innocent People Confess?"

247 When the *Miranda* doctrine was first introduced: Simon, *In Doubt*, 138.

247 The same may be said of the historic: Devon W. Carbado, Cheryl I. Harris, and Kimberle Williams Crenshaw, "Racial Profiling Lives On," *New York Times*, August 14, 2013, http://www.nytimes.com/2013/08/15/opinion/racial-profiling-lives-on.html?hp&_r=0.

247 There is nothing preventing: Carbado, Harris, and Crenshaw, "Racial Profiling Lives On." What does seem to matter is when those in charge make it clear that stopping and frisking people should stop, whether or not a police officer is technically within the rules. New York Mayor Bill de Blasio made that a major campaign promise and the number of such encounters fell drastically after he entered office. Rocco Parascandola, Jenna O'Donnell, and Larry McShane, "NYPD Stop-and-Frisks Drop 99% in Brooklyn, While Shootings Increase in Brownsville, East New York," *New York Daily News*, August 16, 2014, http://www.nydailynews.com/new-york/nyc-crime/nypd-stop-and-frisks-drop-99-percent-shootings-increase-brooklyn-article-1.1905456.

248 If we heeded the evidence: Rogers, "Getting It Wrong About Miranda Rights," 729.

248 And it is revealing that most: Rogers, "Getting It Wrong About Miranda Rights," 729.

249 In recent decades, large companies: Simon Owens, "Is the Academic Publishing Industry on the Verge of Disruption?" *U.S. News and World Report*, July 23, 2012, 2, http://www.usnews.com/news/articles/2012/07/23/is-the-academic-publishing-industry-on-the-verge-of-disruption?page=2.

249 When a single journal subscription: Owens, "Academic Publishing Industry," 1. To make it through, you have to be a member of a university or big business—and even universities are now struggling with the financial burden. This is particularly galling because, each year, billions in taxpayer revenue goes to funding scientific research that ends up being published in journals that deny access to the people who made the research possible in the first place. Owens, "Academic Publishing Industry," 4.

249 And there will always be a danger: Alva Noë, "When Science Becomes News, the Facts Can Go Up in Smoke," NPR, May 4, 2014, accessed May 4, 2014, http://www.npr.org/blogs/13.7/2014/05/04/308926616/when-science-becomes-news-the-facts-can-go-up-in-smoke?utm_source=facebook.com&utm_medium=social&utm_campaign=npr&utm_term=nprnews&utm_content=20140504.

249 A scientist who advocates changes: Tamsin Edwards, "Climate Scientists Must Not Advocate Particular Policies," *Guardian*, July 31, 2013, http://www.theguardian.com/science/political-science/2013/jul/31/climate-scientists-policies; Robert T. Lackey, "Science, Scientists, and Policy Advocacy," *U.S. Environmental Protection Agency Papers*, Paper 142 (2007), http://digitalcommons.unl.edu/usepapapers/142; Robert A. Pielke, Jr., *The Honest Broker: Making Sense of Science in Policy and Politics* (Cambridge, UK: Cambridge University Press, 2007).

249 They are trial consultants: Nicole LeGrande and Kathleen Mierau, "Witness Preparation and the Trial Consulting Industry," *Georgetown Journal of Legal Ethics* 17 (2004): 947–48; Richard L. Wiener and Brian H. Bornstein, "Introduction: Trial Consulting from a Psycholegal

Perspective," in *Handbook of Trial Consulting*, eds. Richard L. Wiender and Brian H. Bornstein (New York: Springer, 2011), 1.

249 Before the 1970s there was: LeGrande and Mierau, "Witness Preparation and the Trial Consulting Industry," 947–48. They even have a dedicated professional organization, the American Society of Trial Consultants. American Society of Trial Consultants, "History and Goals of the American Society of Trial Consultants," accessed May 4, 2014, http://www.astcweb.org/public/article.cfm/society-goals.

249 In major litigation, trial consultants: Lieberman, "The Utility of Scientific Jury Selection," 48.

249 Interestingly, these consultants are not: Joel D. Lieberman and Bruce D. Sales, *Scientific Jury Selection* (Washington, DC: American Psychological Association, 2007), 9.

250 Rather, they are social scientists: Lieberman and Sales, *Scientific Jury Selection*, 9.

250 As one litigation consultant explained: Matthew Hutson, "Unnatural Selection," 95.

250 One of the first and most prominent: Caroline B. Crocker and Margaret Bull Kovera, "Systematic Jury Selection," in *Handbook of Trial Consulting*, eds. Richard L. Wiender and Brian H. Bornstein (New York: Springer, 2011), 25–26; J. T. Frederick, "Social Science Involvement in Voir Dire: Preliminary Data on the Effectiveness of 'Scientific Jury Selection,'" *Behavioral Sciences and Law* 2 (1984): 375–94.

250 Little claimed that the guard had: Neil J. Kressel and Dorit F. Kressel, *Stack and Sway: The New Science of Jury Consulting* (Cambridge, MA: Westview Press, 2002): 62–63.

250 A group of scientists led by: Kressel and Kressel, *Stack and Sway*, 62–63.

250 In addition, the team collected: The scientists identified other factors, as well, that correlated with a pro-prosecution disposition. Kressel and Kressel, *Stack and Sway*, 62–63;

Crocker and Kovera, *Systematic Jury Selection*, 25–26; Frederick, *Social Science Involvement*, 375–94.

250 Although the trial dragged on: Kressel and Kressel, *Stack and Sway*, 62–63.

250 Some critics now question: Kressel and Kressel, *Stack and Sway*, 82–83.

251 It is still standard practice: Lieberman, "The Utility of Scientific Jury Selection," 49.

251 Actual jurors are generally scored: Hutson, "Unnatural Selection," 93; Kate Early, "The Impact of Pretrial Publicity on an Indigent Capital Defendant's Due Process Right to a Jury Consultant," *Roger Williams University Law Review* 16 (2011): 694–95. Although they are not always permitted, in the search for deeper insight into potential jurors, questionnaires can sometimes push past a hundred questions: the one in O.J. Simpson's trial had some three hundred questions or, put differently, roughly 50 percent more questions than on the Multistate Bar Exam that Simpson's lawyers had to pass in order to practice law. Hutson, "Unnatural Selection," 93; National Conference of Bar Examiners, "The Multistate Bar Examination (MBE)," http://www.ncbex.org/about-ncbe-exams/mbe/.

251 Today, though, trial consultants provide: American Society of Trial Consultants, "Areas of Consulting," accessed May 4, 2014, http://www.astcweb.org/public/article.cfm/areas-of-consulting.

251 Trial consultants may put together: Lieberman and Sales, *Scientific Jury Selection*, 11, 39; Hutson, "Unnatural Selection," 93.

251 Historically, the big concern has been: There has always been a danger of bogus expertise and advice from those offering to reveal the secret tricks for wining trials. Amy J. Posey and Lawrence S. Wrightsman, *Trial Consulting* (New York: Oxford University Press, 2005): 22. Although the notion, back in the 1950s, that a New York prosecutor should go for Yankee fans

and strike Brooklyn Dodger fans is a close second, my favorite bit of historical flimflam is that it is best to get rid of all jurors who work in professions that start with the letter p, including "pimps, prostitutes, preachers, plumbers, procurers, psychologists, physicians, psychiatrists, printers, painters, philosophers, professors, phonies, parachutists, pipe-smokers, or part-time anything." Lieberman and Sales, *Scientific Jury Selection*, 58 (quoting William Jennings Bryan, *The Chosen Ones: The Psychology of Jury Selection* [New York: Vantage Press, 1971], 28). Such advice seems clearly absurd, but the desperation of those facing criminal punishment can make them easy marks, even today.

A related issue is that efforts to predict jury behavior, *in general*, based on personality traits or demographic factors such as race, gender, age, and income have produced decidedly mixed results. Lieberman and Sales, *Scientific Jury Selection*, 79–80. Certain personal characteristics and preferences have shown promise, including an individual's preference for clear rules, order, and authoritarian leadership, which appears to be linked to having a pro-prosecution bent (that is, being more inclined to find a defendant guilty and support a harsher sentence). Lieberman and Sales, *Scientific Jury Selection*, 80–81. Yet, for many factors, there appears to be a lot of within-group variation and the correlations are often highly dependent on the particular facts of a case. Lieberman, "The Utility of Scientific Jury Selection," 49. For instance, consultants are aware that the influence of juror race appears to turn on whether the juror and the defendant are the same race: we favor our fellow ingroup members, in part, because we are motivated to see those who are "like us" in positive lights. Lieberman, "The Utility of Scientific Jury Selection," 49. But if the defendant is clearly guilty of a quite significant harm, and the other jurors happen to be of a different race, the effect may flip, with harsher resulting judgments of the defendant (scientists refer to this, rather aptly, as "the black sheep effect").

Lieberman, "The Utility of Scientific Jury Selection," 49; Crocker and Kovera, "Systematic Jury Selection," 20. As a result, it can be tricky to figure out how known predictive factors will interact in a particular case.

That said, as additional research is conducted, and trial consultants continue to incorporate insights from psychology into their practice, it is likely that a lot of the current haziness may clear and trial consultants will become more adept at predicting general jury behavior.

251 The expansion of the industry: Stephen J. Paterson and Norma J. Silverstein, "Jury Research—How to Use It," *United States Attorneys' Bulletin* 48, no. 3 (2000), 1, http://www.justice.gov/usao/eousa/foia_reading_room/usab4803.pdf; Early, "The Impact of Pretrial Publicity," 692–93.

251 The result is that trial services: Crocker and Kovera, "Systematic Jury Selection," 27.

251 Jury consultants are commonplace: "Trial Consulting for Criminal Cases," NJP Litigation Consulting, accessed May 4, 2014, http://www.njp.com/notable_CriminalCases_cases.html; Rachel Hartje, "A Jury of Your Peers?: How Jury Consulting May Actually Help Trial Lawyers Resolve Constitutional Limitations Imposed on the Selection of Juries," *California Western Law Review* 41 (2005): 493.

252 And it's part of the standard defense: For example, former McKinsey and Company managing director Rajat Gupta, former Credit Suisse First Boston banker Frank Quattrone, and former Tyco chief executive L. Dennis Kozlowski all hired trial consultants. Peter Lattman, "Jury Is Seated in Rajat Gupta Trial," *New York Times*, May 21, 2012, http://dealbook.nytimes.com/2012/05/21/jury-is-seated-in-rajat-gupta-trial/; Bloomberg News, "Stewart Sued by Jury Consultant for $74,047 in Fees," *Chicago Tribune*, November 18, 2005,

accessed May 4, 2014, http://articles.chicagotribune.com/2005-11-18/business/0511180118_1_martha-stewart-living-omnimedia-investment-banker-frank-quattrone-jury-consultant.

252 But those with fewer resources: Hartje, "A Jury of Your Peers?" 503. Judges have rarely sought to even the playing field. In the voir dire of Rajat Gupta's insider trading trial, for example, although the prosecution objected to the use by the defense of jury consultants and lawyers outside of the courtroom who analyzed potential jurors as their names were called out, Judge Jed S. Rakoff allowed it on the grounds that finding out potential juror conflicts earlier in the trial would improve the efficiency of the proceedings. Lattman, "Jury Is Seated in Rajat Gupta Trial."

Some scholars have made the claim that a poor defendant ought to be provided with a trial consultant if he cannot afford to hire one on his own as a basic due process right. Steven C. Serio, "A Process Right Due? Examining Whether a Capital Defendant Has a Due Process Right to a Jury Selection Expert," *American University Law Review* 53 (2004): 1186. And at least one court has provided a consultant for an indigent defendant when there was significant damaging pretrial publicity. Corenevsky v. Superior Court, 682 P.2d 360, 369 (Cal. 1984); Serio, "A Process Right Due?" 1186. As much as I agree that justice should not depend on one's wealth, I am skeptical that recognizing an ineffective assistance of counsel claim brought by defendants whose public defender did not employ a trial consultant is the right approach. Kressel and Kressel, *Stack and Sway*, 75. In such a scenario, many low-income (but not destitute) individuals will still be denied access.

252 Justice Hugo Black was right when: National Legal Aid and Defender Association, "Collected Quotes Pertaining to Equal Justice," *Communication Resources*, accessed May 4, 2014, http://www.nlada.org/News/Equal_Justice_Quotes.

252 Like those who assisted Joan Little: This is generally considered the first instance of modern trial consulting, but that may partially be due to the high-profile nature of the case. Myrna Oliver, "R.D. Herman; 'Harrisburg 7' Trial Judge," *Los Angeles Times*, April 9, 1990, http://articles.latimes.com/1990-04-09/news/mn-674_1_trial-judge; William O'Rourke, *The Harrisburg 7 and the New Catholic Left* (Notre Dame, IN: University of Notre Dame, 2012): 266; Crocker and Kovera, "Systematic Jury Selection," 15.

252 Seven antiwar activists: Oliver, "R.D. Herman."

253 The government elected to stage: Lieberman and Sales, *Scientific Jury Selection*, 4.

253 Jay Schulman and his team: Lieberman and Sales, *Scientific Jury Selection*, 4. Over the next decade and a half, Jay Schulman's focus shifted from solely assisting the less fortunate—Attica inmates, radicals, battered woman—to also providing services to the wealthy and powerful, including the socialite Claus von Bulow and Wall Street bigwigs accused of insider trading. E. R. Shipp, "Jay Schulman, Expert on Juries," *New York Times*, December 3, 1987.

253 With clients paying tens of thousands: Tricia McDermott, "The Jury Consultants," CBS News, June 2, 2004, http://www.cbsnews.com/8301-18559_162-620794.html; "Use of Jury Consultants," USLegal.com, accessed May 4, 2014, http://courts.uslegal.com/jury-system/selection-process-at-the-courthouse/use-of-jury-consultants/.

253 It presents a golden: What is for sale is not truth or accuracy—it is the keys to manipulating the system and its central players. The product at The Advocates—the leading jury and trial consulting firm in the United States—is influence: "successfully **persuading judges,**

juries and arbitrators in trial and arbitration," and the means are an understanding of human psychology. "About The Advocates," The Advocates, accessed May 4, 2014, http://www.theadvocates.com/philosophy.htm. As DecisionQuest—another leading trial research company—explains in its promotional materials, "Our job is to arm you with an understanding of what, why and how the decision-makers are thinking as your case evolves." "Trial Consulting and Research," DecisionQuest, accessed May 4, 2014, http://www.decisionquest.com/utility/showArticle/?objectID=1536.

254 Today, witness preparation is a key service: LeGrande and Mierau, "Witness Preparation and the Trial Consulting Industry," 949–50.

254 This preparation carries a number of benefits: LeGrande and Mierau, "Witness Preparation and the Trial Consulting Industry," 953; Richard C. Wydick, "The Ethics of Witness Coaching," *Cardozo Law Review* 17 (1995): 12–13; Peter A. Joy and Kevin C. McMunigal, "Witness Preparation: When Does It Cross the Line?" *Criminal Justice* 17 (2002): 48.

254 Lawyers are responsible for the: As the Maryland Court of Appeals explained, "Attorneys have not only the right but also the duty to fully investigate the case and to interview persons who may be witnesses." State v. Earp, 571 A.2d 1227, 1234–36 (Md. 1990).

254 In fact, a defendant can actually bring: See, e.g., Gilliam v. State, 629 A.2d 685, 694 (Md. 1993).

254 The American Bar Association: Model Rules of Professional Conduct R. 3.4(b); LeGrande and Mierau, "Witness Preparation and the Trial Consulting Industry," 947, 951.

254–55 As the North Carolina Supreme Court explained: State v. McCormick, 259 S.E.2d 880, 882–83 (N.C. 1979). A large majority of judges and attorneys see nothing wrong with a lawyer or consultant refreshing the memory of a witness during trial preparation. As the

Appellate Court of Illinois articulated, "An attorney is bound by the testimony of his witnesses and there is nothing improper in refreshing their memories before they take the stand. Reviewing their testimony before trial makes for better direct examination, facilitates the trial and lessens the possibility of irrelevant and perhaps prejudicial interpolations." People v. McGuirk, 245 N.E.2d 917, 922 (Ill.App. 1969).

255 Members of the United States Supreme Court: United States. v. MacDonald, 456 U.S. 1, 23 (1982).

255 And they have repeatedly emphasized: *MacDonald*, 456 U.S. at 23; Geders v. United States, 425 U.S. 80, 89–91 (1976). As the Ninth Circuit has explained, "Cross-examination and argument are the primary tools for addressing improper witness coaching." United States v. Sayakhom, 186 F.3d 928, 945 (1999).

255 All of this means that: Interestingly, although a lawyer is responsible for the trial consultants that he or she hires, trial consultants are not regulated—you can call yourself a trial consultant and go to work without any particular qualifications at all. LeGrande and Mierau, "Witness Preparation and the Trial Consulting Industry," 951, 957. The American Society of Trial Consultants does have a professional code, with standards enforceable by the society, as well as purely advisory guidelines. American Society of Trial Consultants, *The Professional Code of the American Socidety of Trial Consultants* (2013), http://www.astcweb.org/userfiles/image/ASTCFullCodeFINAL20131.pdf. But the standards are extremely general and easily met, even when an attorney engages in conduct that is very likely to distort witness memory and testimony: for example, "Trial consultants shall advocate that a witness tell the truth." American Society of Trial Consultants, *The Professional Code*, 31. The guidelines also leave an incredible amount of latitude to the trial consultant: they suggest not

scripting “specific answers” or censoring “appropriate and relevant answers based solely on the expected harmful effect on case outcome.” American Society of Trial Consultants, *The Professional Code*, 32. Moreover, the guidelines approve of methods of witness preparation that have been shown to lead to distortion including “[w]ork[ing] to increase witness comfort and confidence in testimony” and “conduct[ing] and review[ing] a sufficient number of mock examinations to encourage the greatest improvement.” American Society of Trial Consultants, *The Professional Code*, 33.

255 And because such preparation invariably: LeGrande and Mierau, “Witness Preparation and the Trial Consulting Industry,” 954–55.

255 Take a recent set of experiments: Sarah G. Moore et al., “Wolves in Sheep’s Clothing: How and When Hypothetical Questions Influence Behavior,” *Organizational Behavior and Human Decision Processes* 117 (2012): 175.

255 In the experiment, every mock juror: Moore et al., “Wolves in Sheep’s Clothing,” 175.

255 Even when it was made explicit: Moore et al., “Wolves in Sheep’s Clothing,” 176.

256 According to the researchers: Moore et al., “Wolves in Sheep’s Clothing,” 175.

256 Is it any surprise, then: James J. Gobert, Ellen Kreitzberg, and Charles H. Rose III, *Jury Selection: The Law, Art and Science of Selecting a Jury* (Eagen, MN: West, 2009): § 14:3; Twila Wingrove et al., “The Use of Survey Research in Trial Consulting,” in *Handbook of Trial Consulting*, eds. Richard L. Wiender and Brian H. Bornstein (New York: Springer, 2011): 100–01.

256 In some ways, research like this: As another example, one of the fascinating ways that scientific jury analysis is employed is for identifying potentially helpful jurors who the other side might try to remove for an impermissible reason, like the fact that they are African American.

Paterson and Silverstein, "Jury Research—How to Use It." However, it can also have a dark side: coming up with alternative reasons for preemptively challenging someone that you want to remove based on race or gender. Indeed, an article in the *United States Attorneys' Bulletin* more than a decade ago suggested that U.S. prosecutors already had the capacity to employ questionnaire data and statistical analysis to do exactly that. As the two government attorney authors explained, "for each juror the government was likely to strike, the computer identified and included in the report those areas of the questionnaire that could be used to defend against a potential *Batson* challenge made by the defense." Paterson and Silverstein, "Jury Research—How to Use It."

12. What We Can Do ~ The Future

257 A little over one hundred years ago: G. K. Chesterton, "G. K. Chesterton Empanels a Jury," *Lampham's Quarterly*, accessed May 20, 2014, http://www.laphamsquarterly.org/voices-in-time/g-k-chesteron-empanels-a-jury.php?page=all.

257 After taking his oath: Chesterton, "G. K. Chesteron Empanels a Jury."

257 From that intimate vantage point: Chesterton, "G. K. Chesteron Empanels a Jury."

257 As he explained, the problem: Chesterton, "G. K. Chesteron Empanels a Jury."

257 For Chesterton, the solution was: Chesterton, "G. K. Chesteron Empanels a Jury."

258 The good news is that: Calvin K. Lai et al., "Reducing Implicit Racial Preferences: I. A Comparative Investigation of 17 Interventions," *Journal of Experimental Psychology: General* 143, no. 4 (2014): 2; Calvin K. Lai, Kelly M. Hoffman, and Brian A. Nosek, "Reducing Implicit Prejudice," *Social and Personality Psychology Compass* 7 (2013): 315–30. doi: 10.1111/spc3.12023; Rajees Sritharan and Bertram Gawronski, "Changing Implicit and Explicit

Prejudice: Insights from the Associative-Propositional Evaluation Model," *Social Psychology* 41 (2010): 113–23, doi: 10.1027/1864-9335/a000017; Leon Neyfakh, "The Bias Fighters," *Boston Globe*, September 21, 2014, http://www.bostonglobe.com/ideas/2014/09/20/the-bias-fighters/lTZh1WyzG2sG5CmXoh8dRP/story.html.

258 There's now evidence, for example: People show racial bias both in how quickly they make decisions to shoot or hold their fire and in how accurate those decisions turn out to be (that is, whether they fire at those pointing guns and don't fire at those holding wallets or cell phones). So, when presented with an unarmed black man, experimental participants are more likely to shoot him than if he is white, and they are also more hesitant in responding to armed and dangerous white men. For an overview of the research, see Adam Benforado, "Quick on the Draw: Implicit Bias and the Second Amendment," *Oregon Law Review* 89: 42–44. For a sample of some of the research studies investigating the role of race in shooter decision-making, see Joshua Correll et al., "Across the Thin Blue Line: Police Officers and Racial Bias in the Decision to Shoot," *Journal of Personality and Social Psychology* 92, no. 6 (2007): 1006; Joshua Correll et al., "Event-Related Potentials and the Decision to Shoot: The Role of Threat Perception and Cognitive Control," *Journal of Experimental Social Psychology* 42 (2006): 120; E. Ashby Plant and B. Michelle Peruche, "The Consequences of Race for Police Officers' Responses to Criminal Suspects," *Psychological Science* 16 (2005): 180; Anthony G. Greenwald et al., "Targets of Discrimination: Effects of Race on Responses to Weapons Holders," *Journal of Experimental Social Psychology* 39 (2003): 399; Joshua Correll et al., "The Police Officer's Dilemma: Using Ethnicity to Disambiguate Potentially Threatening Individuals," *Journal of Personality and Social Psychology* 83 (2002): 1314. For discussion of the positive effects of

simulator training, see Benforado, “Quick on the Draw,” 46–48; Correll et al., “Across the Thin Blue Line,” 1007, 1020–21.

258 The training doesn’t remove: Benforado, “Quick on the Draw,” 48; Correll et al., “Across the Thin Blue Line,” 1020.

258 To do that, scientists have been: Calvin K. Lai et al., “Reducing Implicit Racial Preferences: I. A Comparative Investigation of 17 Interventions,” *Journal of Experimental Psychology: General* 143, no. 4 (2014): 1–21; Leon Neyfakh, “The Bias Fighters,” *Boston Globe*, September 21, 2014, http://www.bostonglobe.com/ideas/2014/09/20/the-bias-fighters/lTZh1WyzG2sG5CmXoh8dRP/story.html.

258 One successful approach is to: Lai et al., “Reducing Implicit Racial Preferences,” 7, 15–16; Neyfakh, “The Bias Fighters.” Of course, stereotypes can also be reinforced: in one experiment, people exposed to newspaper stories about black criminals subsequently showed greater racial bias in their shooting behavior. Joshua Correll et al., “The Influence of Stereotypes on Decisions to Shoot,” *European Journal of Social Psychology* 37 (2007): 1102, 1107.

258 Another involves presenting a vivid story: Lai et al., “Reducing Implicit Racial Preferences,” 7, 15–16; Neyfakh, “The Bias Fighters.”

258 Now that we know some: Lai et al., “Reducing Implicit Racial Preferences,” 17–18; Neyfakh, “The Bias Fighters.”

260 Visit the Martin guitar factory: “Martin Guitar Factory Tour Part 3 (of 6),” YouTube video, 13:57, posted by “Musician’s Friend,” April 14, 2010, http://www.youtube.com/watch?v=e4K1ec2n_M8.

260 The lacquer on the exterior: “Martin Guitar Factory Tour.”

260 With its pressure-sensitive wheel: “Martin Guitar Factory Tour.”

260 As Dick Boak, a longtime employee, explains: "Martin Guitar Factory Tour"; Dick Boak, "Welcome," 2008, accessed May 20, 2014, http://www.dickboak.com/dickboak_website/Home.html.

260 We need to be similarly flexible: Whether the focus has been on building instruments, diagnosing illnesses, or racing cars, naysayers have inevitably emerged to suggest that human intuitions, decision-making, and execution are just fine (even optimal), and that the latest research that suggests that they are not is just a fad or a conspiracy or worse. When sabermetrics—the statistical study of baseball—was first introduced, there were numerous skeptics who believed that the best way to tell a good player was by watching him swing a bat and throw a ball, and, even today, there are many who remain wary of replacing or supplementing the intuitions of scouts with mathematical calculations of dynamics that you can't pick up from just watching games. Phil Birnbaum, "A Guide to Sabermetric Research," Society for American Baseball Research, accessed May 20, 2014, http://sabr.org/sabermetrics. It is unpleasant to imagine that a computer might be better at selecting a team than a human being. And it is equally disquieting to think that a machine might do a better job polishing a fine Martin guitar—objects made with human hands, we imagine, are necessarily superior. Yet, in each case, the backlash has been largely overcome by the results.

261 Little would be lost: If eliminating the right to remove jurors without cause proved politically untenable, we might consider replacing it with a more vigorous disqualification for cause. In any case, people should not lose their ability to participate in a vital part of our civic process because of the clothes they are wearing, the color of their fingernail polish, or their posture, let alone the color of their skin or their gender.

261 Although, as we've seen, videos are not: Of course, as discussed previously, we must be cautious about how we employ video footage, conscious that it can create its own biases.

261 The closer we come to a world: One long-term project may be to develop technology that can create rough images or models of people's faces from DNA left at a crime scene. That possibility has been raised by recent research focused on using interpersonal differences in certain genes believed to be implicated in facial development to produce predictive 3D models of what a person looks like. Sara Reardon, "Mugshots Built from DNA Data," *Nature*, March 20, 2014, http://www.nature.com/news/mugshots-built-from-dna-data-1.14899. The challenge is that there is no one gene that determines the shape of your nose and environmental influences can have a big impact on your ultimate visage. But researchers are not daunted and other projects are underway focused on using DNA to predict height and eye color, among other personal features.

262 A few cities, for example: Only about one out of five incidents of gunfire is reported to the police. David S. Fallis, "ShotSpotter Detection System Documents 39,000 Shooting Incidents in the District," *Washington Post*, November 2, 1013, http://www.washingtonpost.com/investigations/shotspotter-detection-system-documents-39000-shooting-incidents-in-the-district/2013/11/02/055f8e9c-2ab1-11e3-8ade-a1f23cda135e_story.html; Yann Ranaivo, "Wilmington to Lease $415,000 Gunshot Sensor Network," *News Journal*, February 19, 2014, http://www.delawareonline.com/story/news/crime/2014/02/19/wilmington-to-lease-415000-gunshot-sensor-network/5625179/.

262 Likewise, knowing that detectives often: Michael Wilson, "Crime Scene Investigation: 360 Degrees," *New York Times*, November 18, 2011, http://lens.blogs.nytimes.com/2011/11/18/crime-scene-investigation-360-degrees/?_r=0.

262 Months after a man is found: "A New Perspective on Crime Scenes: The Man on the Bed," *New York Times*, November 18, 2011, http://www.nytimes.com/interactive/2011/11/20/nyregion/nypd-crime-scene-panoramas.html; Wilson, "Crime Scene Investigation."

262 In another New York City innovation: Wendy Ruderman, "New Tool for Police Officers: Records at Their Fingertips," *New York Times*, April 11, 2013, http://www.nytimes.com/2013/04/12/nyregion/new-tool-for-police-officers-quick-access-to-information.html.

262 Coming across an individual on the street: Ruderman, "New Tool for Police Officers."

263 *This* apartment, according to the details: Ruderman, "New Tool for Police Officers."

263 Such technology does raise civil liberties concerns: We will have to engage in a similar balancing calculation when it comes to new tracking technology, like the StarChase system, which allows officers to shoot a small sticky GPS device from the front of their squad car at a fleeing vehicle. Mike Riggs, "The End of Car Chases," *The Atlantic*, October 31, 2013, http://www.theatlanticcities.com/technollogy/2013/10/end-car-chases/7425/; StarChase, "How it Works—Overview," 2013, accessed May 21, 2014, http://www.starchase.com/howitworks.html. Already being used in Florida and Iowa, the hope is that the system will eliminate the need for dangerous police chases that lead to loss of life and significant property damage, as we saw in Victor Harris's case. Riggs, "The End of Car Chases." Critics, though, worry that such warrantless tracking presents a significant threat to citizens' privacy rights. Riggs, "The End of Car Chases."

263 All that said, the best way to: Indeed, the best solution to a problem is not always the obvious one and we should be creative. One of my favorite demonstrations of this principle

relates to an unexpected way that researchers discovered to cut down on illiteracy in the developing world. Amy Yee, "In India, a Small Pill with Positive Side Effects," *New York Times*, April 4, 2012, http://opinionator.blogs.nytimes.com/2012/04/04/in-india-a-small-pill-with-positive-side-effects/?hp. It wasn't hiring better teachers or instituting monetary rewards for learning milestones; it was deworming pills. Yee, "In India, a Small Pill." It turns out that 600 million children suffer from worms and it is a leading reason why they miss school. Yee, "In India, a Small Pill." For less than the cost of a coffee per student, however, the parasites can be wiped out, resulting in a big boost in attendance and a significantly increased chance that a child will learn to read and write. Yee, "In India, a Small Pill."

263 For example, a city could invest in trauma kits: Tammy Kastre and David Kleinman, "Providing Trauma Care," *Police*, January 24, 2013, http://www.policemag.com/channel/patrol/articles/2013/01/trauma-care-the-first-five-minutes.aspx; Katie Emmets, "Local Police Use Blood-Clotting Agent to Save Lives," *Alligator*, January 30, 2009, http://www.alligator.org/news/local/article_7a650a65-dfa9-58c5-aef5-384499ff0ed5.html.

263 Or we could have all hospitals: Donald G. McNeil, Jr., "A Cheap Drug Is Found to Save Bleeding Victims," *New York Times*, March 20, 2012, http://www.nytimes.com/2012/03/21/health/tranexamic-acid-cheap-drug-is-found-to-staunch-bleeding.html.

264 Researchers recently found that: Richard Wright et al., "Less Cash, Less Crime: Evidence from the Electronic Benefit Transfer Program" (working paper no. 19996, NBER, March 2014), http://www.nber.org/papers/w19996; Cass R. Sunstein, "Fighting Crime by Going

Cashless," *BloombergView*, April 29, 2014, http://www.bloombergview.com/articles/2014-04-29/fighting-crime-by-going-cashless.

264 The federal government had begun requiring: Looking at the state of Missouri, the authors surmised that taking about $55.9 million of cash out of circulation each month produced a 9.8 percent reduction in crime. Wright et al., "Less Cash," 25.

264 Less cash in circulation meant: Sunstein, "Fighting Crime by Going Cashless."

264 So why not create an: Allison Orr Larsen, "Confronting Supreme Court Fact Finding," *Virginia Law Review* 98 (2012): 1310.

264 Indeed, when a defendant: *West's Encyclopedia of American Law*, s.v. "Insanity Defense," accessed May 22, 2014, http://legal-dictionary.thefreedictionary.com/Insanity+Defense.

265 Responding to the scene of: Similarly, during an interrogation, a detective could depart from protocol established to diminish the likelihood of false confessions and lie to the suspect about evidence found at the scene of the crime, but that officer would do so knowing that he would later have to articulate his reasons and knowing that if such reasons were deemed insufficient, it would seriously undermine the validity of any confession that was obtained.

265 All too often people end up: Dan Simon, *In Doubt: The Psychology of the Criminal Justice Process* (Cambridge, MA: Harvard University Press, 2012), 83.

265 We need to disrupt automatic behavior: The good news is that this is unlikely to require much of a shift in practice. Police officers already follow numerous rules of conduct. And while there may be some resistance based on the notion that protocols are for "low level" functionaries and that judges and lawyers cannot possibly be expected to follow them, these legal actors already operate based on established scripts, from the rules of procedure in the courtroom to the

way they write their briefs or opinions constrained by statutory law and precedent. The difference is simply that the new protocols will be based in empirical research, not untested intuitions. As the science becomes more and more settled, some of the defaults could be changed into absolute prohibitions.

266 If jurors and judges can be swayed: In the future, a juror might put on a pair of "trial" glasses that linked up to a virtual environment. In this environment, every person could be represented by a neutral avatar with the same facial features, blended skin tone, ambiguous gender, and other physical characteristics. When judges, attorneys, witnesses, and jurors needed to speak, their voices could be modulated to create uniformity.

267 Introducing virtual trials would also be: Courtroom violence, especially against courtroom staff, judges, and lawyers, has been on the rise. Caroline Cournoyer, "Courtroom Violence on the Rise," *Governing the States and Localities*, January 19, 2012, http://www.governing.com/blogs/view/courtroom-violence-on-the-rise.html.

268 All virtual trials could be recorded: In addition, another significant benefit of establishing carefully controlled uniformity would be that it would allow for much more effective scientific research in the future. Psychologists and neuroscientists always struggle to simulate a real trial environment, but with the use of virtual courtrooms, that problem might be largely eliminated. Every experiment on juror perceptions or witness testimony or attorney behavior could employ the same virtual environment used in real cases. Indeed, by recording virtual trials, study participants could be presented with the exact same experience as actual judges and jurors in real cases.

268 Today, they usually get only: The law varies by state as to whether courts permit video-recording devices in the courtroom. Digital Media Law Project, "Recording Public Meetings and

Court Hearings," accessed May 23, 2014, http://www.dmlp.org/legal-guide/recording-public-meetings-and-court-hearings; Digital Medial Law Project, "State Law: Recording," accessed May 23, 2014, http://www.dmlp.org/legal-guide/state-law-recording.

269 That way, if a lawyer's objection: This wouldn't prevent the judge from being influenced, of course, but it would be a clear step in the right direction.

269 Indeed, when Pennsylvania officials elected to: Christopher Danzig, "Video Arraignments Save Money and Make Judges Feel Safer," *Above the Law*, June 17, 2011, http://abovethelaw.com/2011/06/video-arraignments-save-money-and-make-judges-feel-safer/; Valerie Werse, "The Confrontation Clause in Video Conferencing," *Rutgers Computer and Technology Law Journal* (October 11, 2012): 2, http://www.rctlj.org/2012/10/the-confrontation-clause-in-video-conferencing/.

269 A soldier sitting at a computer: Mark Bowden, "The Killing Machines," *The Atlantic*, August 14, 2013, http://www.theatlantic.com/magazine/archive/2013/09/the-killing-machines-how-to-think-about-drones/309434/; Michael Hastings, "The Rise of the Killer Drones: How America Goes to War in Secret," *Rolling Stone*, April 16, 2012, http://www.rollingstone.com/politics/news/the-rise-of-the-killer-drones-how-america-goes-to-war-in-secret-20120416.

270 On a smaller scale, surgeons working: Joseph L. Flatley, "World's First Remote Heart Surgery Completed in Leicester, UK," *Engadget*, May 4, 2010, http://www.engadget.com/2010/05/04/worlds-first-remote-heart-surgery-completed-in-leicester-uk/; Stanford Lucile Packard Children's Hospital, "What Cardiothoracic Surgery at the Children's Heart Center Is Known For," accessed May 22, 2014, http://www.lpch.org/clinicalSpecialtiesServices/COE/ChildrensHeartCenter/ctSurgery/knownFor

.html. Videoconferencing is also increasingly common in more routine interactions, from chatting with friends and family using Skype or Apple FaceTime to conducting meetings with Microsoft NetMeeting to teaching online classes. In one recent survey, roughly half of MBA student job applicants and two out of three employers had experience using video conferencing technology. Greg J. Sears et al., "A Comparative Assessment of Videoconferencing and Face-to-Fact Employment Interviews," *Management Decision* 51 (2013): 1738. It is also worth noting that it is already common at trials for jurors to be presented with animations or virtual-reality reenactments of key events. Brian Bornstein and Edie Greene, "Jury Decision Making: Implications For and From Psychology," *Current Directions in Psychological Science* 20 (2011): 66.

270 So, we must ask ourselves: The legal obstacles—like the Sixth Amendment's guarantee that the accused "shall enjoy the right . . . to be confronted with the witnesses against him"—are more significant, but they are not insurmountable. U.S. Const. amend. VI. Courts have already carved out exceptions to the right to face-to-face confrontation, including allowing closed circuit video testimony by children in cases involving abuse. Werse, "The Confrontation Clause in Video Conferencing," 4. And the meaning of the Amendment may very well continue to evolve to permit a virtual courtroom as virtual interactions become more common in all fields.

270 The traditional justifications: Werse, "The Confrontation Clause in Video Conferencing," 12.

270 If our current legal rules prevent us: One important consideration in deciding whether increased virtual interactions make sense in the criminal justice system is whether they might introduce new biases or bring other unforeseen costs. There is some evidence, for example, that interviews using video conferencing result in lower ratings for job candidates and more negative

assessments of interviewers. Sears et al., “A Comparative Assessment of Videoconferencing and Face-to-Fact Employment Interviews,” 1733. That said, it seems likely that such effects will significantly dissipate or vanish completely with improved technology and increased virtual interactions, as lagging Internet connections, poorly placed cameras, and stress brought on by unfamiliarity with the format are not likely to be future problems. Sears et al., “A Comparative Assessment of Videoconferencing and Face-to-Fact Employment Interviews.”

270 Plus, with virtual technology: As with the virtual courtroom, virtual interrogations and interviews could all be recorded, which would allow researchers to identify more readily the best techniques for eliciting complete and uncorrupted testimonial evidence.

270 Some virtual spaces are already: Simon, *In Doubt*, 86. For example, the PC_Eyewitness computer program has been developed to facilitate more accurate eyewitness identifications. Otto H. MacLin, Christian A. Meissner, and Laura A. Zimmerman, “PC_Eyewitntess: A Computerized Framework for the Administration and Practical Application of Research in Eyewitness Psychology,” *Behavior Research Methods* 37 (2005): 324–34; Otto H. MacLin, Laura A. Zimmerman, and Roy S. Malpass, “PC_Eyewitness and the Sequential Superiority Effect: Computer-Based Lineup Administration,” *Law and Human Behavior* 29 (2005): 303–21.

270 Lineups created, chosen, and administered: Simon, *In Doubt*, 86; Maclin, Meissner, and Zimmerman, “PC_Eyewitness”; MacLin, Zimmerman, and Malpass, “PC_Eyewitness and the Sequential Superiority Effect.”

271 We need to stop viewing: John H. Ellard et al., “Just World Processes in Demonizing,” in *The Justice Motive in Everyday Life,* eds., Michael Ross and Dale T. Miller (New York: Cambridge University Press, 2002), 350–62; Roy F. Baumeister, *Evil: Inside Human Cruelty and Violence* (New York: W. H. Freeman, 1997); John M. Darley, “Social Organization for the

Production of Evil," *Psychological Inquiry* 3 (1992): 199–218; Leonard Berkowitz, "Evil Is More than Banal: Situationism and the Concept of Evil," *Personality and Social Psychology Review* 3 (1999): 246–53.

272 Some urban police forces have already: John Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other," *New York Times*, July 10, 2013, http://www.nytimes.com/2013/07/14/magazine/what-does-it-take-to-stop-crips-and-bloods-from-killing-each-other.html?pagewanted=all.

272 One recent example comes from: Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 Hoping to reverse the tide: Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 The two groups began coming together: Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 The new level of understanding: Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 In 2013, in fact, Los Angeles: "L.A. Now Live: First Homicides of 2014 and L.A.'s Crime Statistics," *L.A. Times*, January 6, 2014, http://www.latimes.com/local/lanow/la-me-ln-la-now-live-crime-stats-20140106-dto,0,5233748.story#axzz2tmpi2j2R. The crime statistics suggest that Los Angeles residents are now as safe as New Yorkers. Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 There are many factors at work: Buntin, "What Does It Take to Stop Crips and Bloods from Killing Each Other."

273 And we ought to rethink certain: The New York Police Department, for example, prohibits personnel from residing in the same precinct to which they are assigned. Brian Lehrer, "Following Up: Should Cops Live in the Same Neighborhoods they Police?," *WNYC*, April 18, 2013, http://www.wnyc.org/story/287583-following-beat-cops-and-community-policing/.

273 The resulting interrogations tend to: It is noteworthy that the first of the Reid technique's "nine steps of interrogation" is "confrontation of the suspect with a statement that he is considered to be the person who committed the offense." Fred E. Inbau et al., *Criminal Interrogation and Confessions* (Burlington, MA: Jones & Bartlett Learning, 2011), 188.

273 So, what if we recast: Simon, *In Doubt*, 141; Saul M. Kassin et al., "Police-Induced Confessions: Risk Factors and Recommendations," *Law and Human Behavior* 34 (2019): 27–28.

273 That's why detectives are permitted: Inbau et al., *Criminal Interrogation and Confessions*, 205. The Reid technique manual states that "the purpose of an interrogation is to learn the truth." Inbau et al., *Criminal Interrogation and Confessions*, 5. But that's contradicted by the focus on minimization approaches that direct investigators to, for example, "Suggest a Less Revolting and More Morally Acceptable Motivation or Reason for the Offense Than That Which Is Known or Presumed." Inbau et al., *Criminal Interrogation and Confessions*, 214. Someone who is believed to have sexually assaulted a child is to be given the opportunity "to 'save face' by blaming alcohol for his conduct." Inbau, et al., *Criminal Interrogation and Confessions*, 214. Likewise, an investigator should suggest to a suspect in a fatal robbery "that the suspect had not intended, or had not planned, the killing, and that the only motive was to get some needed money; nevertheless, the shooting was necessary when the victim resisted the robbery attempt." Inbau et al., *Criminal Interrogation and Confessions*, 215. In other words, the goal is getting an admission of guilt, facts be damned. And this is extraordinarily problematic,

not only because in suggesting these "themes" investigators are liable to interfere with levels of criminal intent relevant during the guilt phase of trial but also because these false justifications may sway the punishment phase of trial. The Reid manual's suggestion that such problems can be dealt with by investigators going back later in the interrogation process to solicit additional corroborative details to prove the required element of criminal intent or by police testifying at trial about the nature of the confession seem weak countermeasures indeed. Inbau et al., *Criminal Interrogation and Confessions*, 217–18.

274 During the initial stages of: We need detectives to approach an interview with the mindset that the suspect may or may not be guilty and that information gained under coercion is not useful. Simon, *In Doubt*, 141; Kassin et al., "Police-Induced Confessions," 27–28.

274 Even if the story begins to sound: Simon, *In Doubt*, 141; Kassin et al., "Police-Induced Confessions," 27–28.

274 Those who are most vulnerable: Simon, *In Doubt*, 141; Kassin et al., "Police-Induced Confessions," 30–31.

274 The reforms have not only: Simon, *In Doubt*, 140–42; Kassin et al., "Police-Induced Confessions," 27–28.

275 In Germany, for instance, a prosecutor: Volker F. Krey, "Characteristic Features of German Criminal Proceedings—An Alternative to the Criminal Procedure Law of the United States?" *Loyola of Los Angeles International and Comparative Law Review* 21 (1999): 603; Markus Dirk Dubber, "American Plea Bargains, Germany Lay Judges, and the Crisis of Criminal Procedure," *Stanford Law Review* 49 (1997): 578.

275 The adversarial approach is not: John H. Langbein, "Torture and Plea Bargaining," *University of Chicago Law Review* 46 (1978): 10–11.

275 It was developed to ensure fairness: Langbein, “Torture and Plea Bargaining,” 11.

275 And with lawyers constantly wrangling: Langbein, “Torture and Plea Bargaining,” 11.

275 We just don’t have the resources: Langbein, “Torture and Plea Bargaining,” 8.

275 In nine out of ten cases today: Langbein, “Torture and Plea Bargaining,” 8.

275 That means that only one: Lindsey Devers, “Plea and Charge Bargaining Research Summary,” U.S. Department of Justice, January 21, 2011, https://www.bja.gov/Publications/PleaBargainingResearchSummary.pdf.

275 Only one in ten enjoys the presumption: Langbein, “Torture and Plea Bargaining,” 21.

275 Only one in ten is provided: Langbein, “Torture and Plea Bargaining,” 21.

275 Constitutional protections do not apply: Langbein, “Torture and Plea Bargaining,” 21; Dubber, “American Plea Bargains,” 598.

275 And this is particularly consequential: Langbein, “Torture and Plea Bargaining,” 18.

275 Blacks taking pleas end up with: Devers, “Plea and Charge Bargaining Research Summary,” 3.

275 People committing: One district attorney may decide to crack down on an offense, while another offers leniency. Devers, “Plea and Charge Bargaining Research Summary,” 3.

276 And, as we’ve seen: This is exacerbated when prosecutors use threats to gain a conviction despite having insubstantial evidence to actually prevail before a jury. Devers, “Plea and Charge Bargaining Research Summary,” 1–2.

276 When that happens, not only: A related problem is that, with plea bargaining, we also end up falsely labeling the crimes that people did actually commit. Someone may commit murder, for instance, but then plea to the lesser offense of manslaughter. When that happens, the important distinctions between the crimes is lost, as is the truth-telling function of the legal system.

276 The plea bargain, then, is best likened: Langbein, "Torture and Plea Bargaining," 17.

276 This presents a profound irony: Langbein, "Torture and Plea Bargaining," 21.

276 It seems no coincidence that: Langbein, "Torture and Plea Bargaining," 21–22.

276 As part of this process, it may: Dubber, "American Plea Bargains," 579. In practice, prosecutors may still exhibit some bias toward gaining a conviction, like their counterparts in England and the United States, but the evenhanded conception of the office is likely to have an impact, as we discussed in the context of prosecutorial misconduct. Dubber, "American Plea Bargains," 579.

277 According to the Texas Department: Texas Department of Criminal Justice, "Correctional Officer Essential Functions," April 1, 2014, http://www.tdcj.state.tx.us/hrextra/coinfo/essentialfunctions.html. No background or experience is necessary to become a prison guard and any eighteen year old with a GED certificate and a clean record is eligible. Texas Department of Criminal Justice, "Correctional Officer Eligibility Criteria," January 9, 2014, http://www.tdcj.state.tx.us/hrextra/coinfo/emp-co.html.

277 They take courses in educational theory: Ram Subramanian and Alison Shames, *Sentencing and Prison Practices in Germany and the Netherlands: Implications for the United States* (New York: Vera Institute of Justice, 2013), 12 http://www.vera.org/sites/default/files/resources/downloads/european-american-prison-report-v3.pdf. Before taking a position, German prison staff, for instance, must undergo twelve months of theory and twelve months of practice. In Norway, guards all complete a two-year course while at university. Erwin James, "The Norwegian Prison Where Inmates Are Treated Like People," *Guardian*, February 24, 2013, http://www.theguardian.com/society/2013/feb/25/norwegian-prison-inmates-treated-like-people.

277 Rather than minimize direct contact: James, "The Norwegian Prison Where Inmates Are Treated Like People"; Subramanian and Shames, *Sentencing and Prison Practices*.

278 There is strong evidence that ensuring: Jeremy Travis, *But They All Come Back: Facing the Challenges of Prisoner Reentry* (Washington, DC: Urban Institute Press, 2005), 173; BI Incorporated, *Overview of the Illinois DOC High-Risk Parolee Reentry Program and 3-Year Recidivism Outcomes of Program Participants* (2002), 4.

278 Employment does more than: Christopher Uggen, "Work as a Turning Point in the Life Course of Criminals: A Duration Model of Age, Employment, and Recidivism," *American Sociological Review* 67 (2000): 529–31.

278 Day-pass employment of prisoners: Such privileges can also be great tools for positive reinforcement, offering inmates more of the freedoms that those on the outside enjoy as they demonstrate that they are prepared to handle the responsibilities of upright citizens. Although there are risks to this approach, the evidence from countries like the Netherlands, Norway, and Germany is that the benefits outweigh the costs and can be successfully managed. Subramanian and Shames, *Sentencing and Prison Practices.*

278 Roughly nine out of ten employers: Kimani Paul-Emile, "Beyond Title VII: Rethinking Race, Ex-Offender Status and Employment Discrimination in the Information Age," *Virginia Law Review* 100 (2014): 895. The criminal background check industry is thriving with thousands of companies and revenues of more than a billion dollars a year. Paul-Emile, "Beyond Title VII," 903. And researchers have documented that while both whites and blacks are less likely to receive a call-back interview when they have a criminal record, blacks are significantly more hurt by the record than whites. Indeed, in the study, a white *with* a criminal record was more likely to receive a call back than a black *without* a record. Devah Pager, "The Mark of a Criminal

Record," *American Journal of Sociology* 108 (2003): 959; Devah Pager, Bruce Western, and Bart Bonikowski, "Discrimination in a Low-Wage Labor Market: A Field Experiment," *American Sociological Review* 74 (2009): 785–86.

The scope of the problem is enormous: over 65 million individuals—just under a third of the total adult U.S. population—have some sort of criminal record. Paul-Emile, "Beyond Title VII," 895; Michelle Natividad Rodriguez and Maurice Emsellem, *65 Million "Need Not Apply": The Case for Reforming Criminal Background Checks for Employment* (New York: The National Employment Law Project, 2011), 3; U.S. Census Bureau, *Profile of General Population and Housing Characteristics: 2010*, 1. The added injustice for people of color is that they are arrested at vastly higher rates than whites. For instance, when it comes to minor offenses, blacks are some fifteen times more likely than whites to be arrested or receive a citation—both of which may show up in a criminal background check. Paul-Emile, "Beyond Title VII," 896; Council on Crime and Justice, *Low Level Offenses in Minneapolis: An Analysis of Arrests and their Outcomes* (2004), 4.

278 And criminal records are also used to: Jeremy Travis, Amy L. Solomon, and Michelle Waul, *From Prison to Home: The Dimensions and Consequences of Prisoner Reentry* (Washington, DC: Urban Institute, 2001), 40.

278 The problem is that although a person's: Alfred Blumstein and Kiminori Nakamura, "'Redemption' in an Era of Widespread Criminal Background Checks," *NIJ Journal* 263 (2009): 13, https://www.ncjrs.gov/pdffiles1/nij/226872.pdf.

278 Across a range of offenses, experts have tracked: "Written Testimony for Amy Solomon Senior Advisor to the Assistant Attorney General Office of Justice Programs, U.S. Department of Justice," U.S. Equal Employment Opportunity Commission, July 26, 2011,

http://www.eeoc.gov/eeoc/meetings/7-26-11/solomon.cfm; Blumstein and Nakamura, 'Redemption,' 10, 13.

279 Eliminating the sharp, adversarial divisions: Others, inside and outside legal academia, have raised similar questions. See, e.g., David Eagleman, "The Brain on Trial," *The Atlantic*, June 7, 2011, http://www.theatlantic.com/magazine/archive/2011/07/the-brain-on-trial/308520/?single_page=true; David Eagleman, *Incognito: The Secret Lives of the Brain* (New York: Vintage, 2011).

279 We're told that horrible acts reflect: Barbara H. Fried, "Beyond Blame," *Boston Review*, June 28, 2013, http://www.bostonreview.net/forum/barbara-fried-beyond-blame-moral-responsibility-philosophy-law.

279 But that just doesn't mesh with: Free will, as we have always thought of it, is a fantasy. Martha Farah, "Neuroethics: The Practical and the Philosophical," *Trends in Cognitive Sciences* 9 (2005): 37–38. The scientific evidence suggests that there is no independent causal agent that directs our actions: the neural activity that drives all behavior, including criminal actions, is *ultimately* determined entirely from genetic and environmental interactions over which we have no conscious control. Thomas Nadelhoffer and Walter Sinnot-Armstrong, "Neurolaw and Neuroprediction: Potential Promises and Perils," *Philosophy Compass* 7 (2012): 634–35. It is worth noting that there are a number of different conceptions of free will and I am focused on what is referred to as an "incompatibilist" view that assumes that the ultimate source or origin of a person's action is her own freely made choices and that determinism is false. Randolph Clarke and Justin Capes, "Incompatibilist (Nondeterministic) Theories of Free Will," *Stanford Encyclopedia of Philosophy*, August 17, 2000, http://plato.stanford.edu/entries/incompatibilism-

theories/; Cory J. Clark et al., "Free to Punish: A Motivated Account of Free Will Belief," *Journal of Personality and Social Psychology* 106 (2014): 509.

279 It is not a coincidence that roughly: Roughly 15 percent of prisoners experience delusions, hallucinations, and other psychotic symptoms. Fried, "Beyond Blame."

279 It is not a coincidence that those: Fried, "Beyond Blame."

279 We can start by acknowledging that: Fried, "Beyond Blame."

280 The idea that if we stopped: Gideon Rosen, "Beyond Blame," *Boston Review*, July 10, 2013, http://www.bostonreview.net/forum/beyond-blame/gideon-rosen-blame-necessary-law. It is true that, all things being equal, when we move away from believing in free will and having a system grounded in blameworthiness, there is a danger that people will actually commit more crimes. Research shows that reducing free-will beliefs can result in more dishonest behavior, more aggression, and less pro-social behavior. Clark et al., "Free to Punish: A Motivated Account of Free Will Belief," 502; Kathleen D. Vohs and Jonathon Schooler, "The Value of Believing in Free Will: Encouraging a Belief in Determinism Increases Cheating," *Psychological Science* 19 (2008): 49–54, doi: 10.1111/j.1467-9280.2008.02045.x; Roy F. Baumeister, E. J. Masicampo, and C. Nathan DeWall, "Prosocial Benefits of Feeling Free: Disbelief in Free Will Increases Aggression and Reduces Helpfulness," *Personality and Social Psychology Bulletin,* 35 (2009): 260–68, doi: 10.1177/0146167208327217; Tyler F. Stillman and Roy F. Baumeister, "Guilty, Free, and Wise: Belief in Free Will Facilitates Learning from Self-Conscious Emotions," *Journal of Experimental Social Psychology* 46 (2010): 951–60, doi: 10.1016/j.jesp.2010.05.012. But all things need not be equal: indeed, as we will discuss, we can replace these concepts with an approach that is likely to yield net crime-reduction benefits.

280 In the early twentieth century: *In re* Devon T., 584 A.2d 1287, 1291 (Md. Ct. Spec. App. 1991).

280 The moral responsibility of the child: *In re* Devon T., 584 A.2d at 1291.

280 Unfortunately, in the intervening decades: *In re* Devon T., 584 A.2d at 1292.

281 In response to the failure of our: David DeMatteo et al., "Community-Based Alternatives for Justice-Involved Individuals with Severe Mental Illness: Diversion, Problem-Solving Courts, and Reentry," *Journal of Criminal Justice* 41 (2013): 64.

281 One of the most notable developments: DeMatteo et al., "Community-Based Alternatives," 66; David DeMatteo et al., "Treatment Models for Clients Diverted or Mandated into Drug Treatment," in *Addictions: A Comprehensive Guidebook,* eds. Barbara S. McCrady and Elizabeth E. Epstein, ed. 2 (New York: Oxford University Press, 2013), 553. It is important to note that there are a number of community-based alternatives that may divert the offender from the normal criminal justice process at various points along the way, from the moment that he encounters law enforcement to just before trial to the time he is about to be released. DeMatteo et al., "Community-Based Alternatives," 65. For example, a police officer encountering an individual who has committed a low-level offense could divert that person toward mental-health treatment instead of arresting him. DeMatteo et al., "Community-Based Alternatives," 65. As with problem-solving courts, research suggests that officers specifically trained in handling those with mental illness and in making use of community behavioral health services enjoy better outcomes. DeMatteo et al., "Community-Based Alternatives," 66; H. Steadman and M. Naples, "Assessing the Effectiveness of Jail Diversion Programs for Persons with Serious Mental Illness and Co-Occurring Substance Use Disorders," *Behavioral Sciences and the Law* 23 (2005): 163–70.

281 The underlying theory is that you cannot: There has been a realization, for example, that drugs play a special role in shaping crime and any corrections approach that ignores that role is doomed to failure. Four out of five of those locked up at the state and federal level are there for a substance-abuse–related offense—using or selling, committing a crime to get money in order to buy, under the influence while acting—or have a clear history of alcohol or drug problems. DeMatteo et al., "Treatment Models," 551. Drugs are implicated in roughly half of all violent crimes and domestic abuse crimes. DeMatteo et al., "Treatment Models," 551. And those who have previously abused drugs are not only more likely to use drugs in the future but also more likely to be rearrested: at the state level, 95 percent of inmates with drug histories return to using within three years and 68 percent are rearrested. DeMatteo et al., "Treatment Models," 552; Steven S. Martin et. al., "Three-Year Outcomes of Therapeutic Community Treatment for Drug Involved Offenders in Delaware," *Prison Journal* 79 (1999): 194–320; Patrick A. Langan and David J. Levin, U.S. Department of Justice, *Recidivism of Prisoners Released in 1994* (Washington, DC: Bureau of Justice Statistics, 2002), http://www.bjs.gov/content/pub/pdf/rpr94.pdf; DeMatteo et al., "Community-Based Alternatives," 65.

Problem-solving courts don't ignore these realities; they accept and address them. Indeed, one of the underlying motivations for problem-solving courts is the notion that social science should be employed to understand how legal rules and processes actually impact the well-being of those who come under its command. DeMatteo et al., "Treatment Models," 555; Christopher Slobogin, "Therapeutic Jurisprudence: Five Dilemmas to Ponder," *Psychology, Public Policy, and Law* 1 (1995): 193–219.

281 So, rather than acting as adversaries: DeMatteo et al., "Community-Based Alternatives," 67; DeMatteo et al., "Treatment Models," 556. The role of the prosecutor may present the greatest shift: unlike in a traditional criminal law case, the prosecutor in a problem-solving court is not focused on high conviction rates and harsh sentences. DeMatteo et al., "Treatment Models," 556; Elaine M. Wolf, "Systemic Constraints on the Implementation of a Northeastern Drug Court," in *Drug Courts in Theory and in Practice*, ed. James L. Nolan, Jr. (New York: Aldine de Gruyter, 2002), 27–50.

281 Drugs courts, for example: DeMatteo et al., "Treatment Models," 555.

281 Problem-solving courts instead use: DeMatteo et al., "Treatment Models," 555; Michael C. Dorf and Charles Frederick Sabel, "Drug Treatment Courts and Emergent Experimentalist Government," *Vanderbilt Law Review* 53 (2000): 831–83.

281 Research shows that the more humane: DeMatteo et al., "Community-Based Alternatives," 69. That said, some critics have raised concerns that specialty courts lack the procedural rigors to deliver fair and equal justice, while others have suggested that judges and attorneys lack training and expertise in dealing with cases of mental illness, drug abuse, and other specialized problems. Leon Neyfakh, "The Custom Justice of 'Problem-Solving Courts,'" *Boston Globe*, March 23, 2014, http://www.bostonglobe.com/ideas/2014/03/22/the-custom-justice-problem-solving-courts/PQJLC758Sgw7qQhiefT6MM/story.html.

282 Those who come before: DeMatteo et al., "Community-Based Alternatives," 68. They also appear more likely to believe that they were treated with dignity. Neyfakh, "The Custom Justice of 'Problem-Solving Courts.'"

282 Drug courts get similarly high marks: DeMatteo et al., "Treatment Models," 558; C. West Huddleston, Douglas B. Marlowe, and Rachel Casebolt, *Painting the Current Picture: A*

National Report Card on Drug Courts and Other Problem Solving Court Programs in the United States (Alexandira, VA: National Drug Court Initiative, 2008); Douglas B. Marlowe, David S. DeMatteo, and David S. Festinger, "A Sober Assessment of Drug Courts," *Federal Sentencing Reporter* 16 (2003): 113–28; DeMatteo et al., "Community-Based Alternatives," 65. For instance, research suggests that every $1.00 invested in drug courts brings $3.36 in benefit to the criminal justice system for higher-risk offenders (and $2.21 in benefits overall). DeMatteo et al., "Community-Based Alternatives," 65.

282 With more than three thousand: Neyfakh, "The Custom Justice of 'Problem-Solving Courts'"; DeMatteo et al., "Treatment Models," 553.

282 Yet they still handle only: Although drug courts were first to arrive on the scene, today, they manage only about 5 percent of those who would be eligible to participate in them. DeMatteo "Treatment Models," 560.

282 And the major question is: One problem with problem-solving courts is that while they do a far better job at understanding and then treating the specific issues underlying an offender's criminal behavior than the standard incarceration approach, they still rely on overly general classifications and channeling. For instance, a significant number of those who end up before mental-health courts also have serious substance abuse problems that may not be actively treated. DeMatteo et al., "Community-Based Alternatives," 68. And those who find themselves before drug courts can have very different dependencies, yet they tend to all face the same general protocols. Most importantly, the categories of covered individuals naturally leaves many offenders stuck with the ineffective and cruel status quo.

282 Victims shouldn't be pushed to the side: Paul G. Cassell, "Standing for Victims: They Need Their Own Constitutional Amendment," *Slate*, June 14, 2012, http://hive.slate.com/hive/how-can-we-fix-constitution/article/standing-for-victims.

282 It makes little sense that: Cassell, "Standing for Victims."

282 They should be permitted an active role: Cassell, "Standing for Victims."

282 Recent research suggests that such actions: Julie Juola Exline et al., "Forgiveness and Justice: A Research Agenda for Social and Personality Psychology," *Personality and Social Psychology Review* 7, no. 4 (2003): 337–48; Michael Wenzel and Tyler G. Okimoto, "How Acts of Forgiveness Restore a Sense of Justice: Addressing Status/Power and Value Concerns Raised by Transgressions," *European Journal of Social Psychology* 40, no. 3 (2010): 401–17; Charlotte vanOyen Witvliet et al., "Retributive Justice, Restorative Justice, and Forgiveness: An Experimental Psychophysiology Analysis," *Journal of Experimental Social Psychology* 44, no. 1 (2008): 10–25. Some recent research, for instance, suggests that it is a perpetrator's change in moral attitude communicated to the victim that brings a victim satisfaction and closure, not simple punishment. Friederike Funk, Victoria McGeer, and Mario Gollwitzer, "Get the Message: Punishment Is Satisfying If the Transgressor Responds to Its Communicative Intent," *Personality and Social Psychology Bulletin* 40, no. 8 (2014): 993–95. Unfortunately, such communication is very rare.

282 In fact, granting forgiveness may provide: Charlotte vanOyen Witvliet, Thomas E. Ludwig, and Kelly L. Vander Laan, "Granting Forgiveness or Harboring Grudges: Implications for Emotion, Physiology, and Health," *Psychological Science* 12, no. 2 (2001): 117–23; Witvliet et al., "Retributive Justice, Restorative Justice, and Forgiveness," 10–25; Giacomo Bono, Michael E. McCullough, and Lindsey M. Root, "Forgiveness, Feeling Connected to Others, and

Well-Being: Two Longitudinal Studies," *Personality and Social Psychology Bulletin* 34, no. 2 (2008): 182–95.

283 A single death-penalty case: Amnesty International, "Death Penalty Cost," accessed May 27, 2014, http://www.amnestyusa.org/our-work/issues/death-penalty/us-death-penalty-facts/death-penalty-cost; National Coalition to Abolish the Death Penalty, "Cost," accessed May 27, 2014, http://www.ncadp.org/pages/cost.

283 The average cost of housing an inmate: Sal Rodriguez, *Fact Sheet: The High Cost of Solitary Confinement* (Washington, DC: Solitary Watch, 2011), http://solitarywatch.com/wp-content/uploads/2011/06/fact-sheet-the-high-cost-of-solitary-confinement.pdf.

284 In only 5 to 10 percent of all: Innocence Project, *Reevaluating Lineups: Why Witnesses Make Mistakes and How to Reduce the Chance of a Misidentification* (New York: Benjamin N. Cardozo School of Law, Yeshiva University), http://www.innocenceproject.org/docs/Eyewitness_ID_Report.pdf.

285 And yet we convince ourselves: J. D. Gowdy, "The Bill of Rights and James Madison's Statesmanship," *The Washington, Jefferson, and Madison Institute* (blog), June 9, 2013, http://wjmi.blogspot.com/2013/06/the-bill-of-rights-and-james-madisons.html.

285 Why should law be different: Imagine if we possessed the knowledge to light houses with electricity, make walls that didn't crack in earthquakes, and produce hot running water whenever we liked, but were told that such innovations were ill-advised because our dark and cold, wood slat houses had worked well enough (surprisingly, well, even) for the previous two hundred and fifty years. Would we accept that? Would we sit idly by, shivering in candlelight awaiting "the big one"? No—we would push ahead. It is true: not every building design innovation has been

successful (indeed, some have resulted in injuries or even deaths) and many core construction principles have lasted for decades if not centuries, but we have not resisted or feared progress.

285 In Montgomery, Alabama: Melissa Block, "Theodore Parker and the 'Moral Universe,'" NPR, September 2, 2010, http://www.npr.org/templates/story/story.php?storyId=129609461.

285 And ten years ago: Roper v. Simmons, 543 U.S. 551 (2005).

286 It disappeared because: Peter T. Leeson, "Ordeals," *Journal of Law and Economics* 55 (August 2012): 709-11; Robert Bartlett, *Trial by Fire and Water: The Medieval Judicial Order*, (New York: Oxford University Press, 1986), 80. In the early years of the thirteenth century, Pope Innocent III launched a wide-reaching effort to eradicate ordeals—with the Fourth Lateran Council banning priests from continuing to participate in them—largely on the grounds that they were uncanonical and violated the Christian dictate not to tempt the Lord. Leeson, "Ordeals," 709-11; Bartlett, *Trial by Fire and Water*, 80. With the religious backbone removed, the practice within secular judicial systems collapsed—in some places, like Denmark and England, following formal prohibitions and in other places, like France, as a matter of informal acceptance. Leeson, "Ordeals," 709–11. By 1300, in most of Europe, the pools had dried up and the irons had cooled. Robert Palmer, "Trial by Ordeal," *Michigan Law Review* 87 (1989): 1547, 1554.

286 And what replaced the ordeal: Langbein, "Torture and Plea Bargaining," 3-4; Palmer, "Trial by Ordeal," 1547, 1554. The trial by cold water, for instance, involved no significant physical harm, while even the person deemed innocent through judicial torture suffered immensely. Just as critically, there is reason to think that ordeals might very well have been more effective than torture at sorting the innocent from the guilty. One scholar has suggested that in a population that believed fervently in God's power to intervene in man's affairs, those who were guilty and those who were innocent would both have expected to be revealed as such during the

ordeal. Leeson, “Ordeals,” 691. So, the guilty were inclined to admit to their crimes to avoid suffering the ordeal *as well as the punishment* and, knowing that those who elected to undergo the ordeal would tend to be innocent, priests could manipulate the outcome toward exoneration by allowing a burning iron to cool or determining that a person had sunk to a sufficient distance in water. Leeson, “Ordeals,” 691. By contrast, with judicial torture, both the innocent and guilty parties faced the same calculation and optimal strategy: refuse to confess and hope that you were freed before the pain simply became too unbearable or, if the prospect of torture was worse than death, confess before proceedings began. As a result, the sorting effect of judicial torture was not between the upright citizen and the criminal, but between the extremely pain-tolerant and the extremely pain-sensitive. Langbein, “Torture and Plea Bargaining,” 7. And the seemingly robust checks built into the system to ensure that only parties who were very likely guilty were tortured and that confessions were true and voluntary turned out to be hopelessly ineffective. Langbein, “Torture and Plea Bargaining,” 7. Although a party had the ability to recant a confession as part of the required hearing after an admission of guilt under torture, if that happened, the person would be sent back to be examined under torture again. Langbein, “Torture and Plea Bargaining,” 7, 14. Furthermore, suspects undergoing interrogation often learned of facts about the crime inadvertently from those conducting the interrogation, jailers, and others—a problem that continues to plague our system today. Langbein, “Torture and Plea Bargaining,” 7.

286 For roughly the next half millennium: Langbein, “Torture and Plea Bargaining,” 4, 12. In Continental Europe, judicial torture was routinely administered and widely accepted. Langbein, “Torture and Plea Bargaining,” 3.

286 Like us, they constructed: Langbein, “Torture and Plea Bargaining,” 5. A threshold akin to “probable cause” had to exist before torture could be ordered and, as detailed in contemporary

treatises meant to guide judges, clerks, and other court actors, specific protocols had to be followed, such as ensuring that the questioning dealt with topics of which only the accused would know and barring suggestive questioning by the examining magistrate. Langbein, "Torture and Plea Bargaining," 5, 7. Likewise, any confession under torture had to be affirmed subsequently without torture and investigators were charged with confirming factual details elicited through torture (e.g., officials were meant to verify the disclosed location of the murder weapon to ensure that the accused's statements were true). Langbein, "Torture and Plea Bargaining," 5, 7. This was not brutality for brutality's sake: this seemed to be the just and ordered system, based in reason, that had evaded those who had relied on godly intervention to reveal innocence through supernatural miracles.

286 And what sets us apart: There is, indeed, an odd parallel between our modern mechanism of plea bargaining and the tortured confessions of many centuries ago. Langbein "Torture and Plea Bargaining," 12. Both seemingly short-circuit core legal principles that purportedly guide our criminal justice system, including transparency, shared adjudicatory responsibility and participation, freedom from coercion, and proof of guilt as a prerequisite to punishment. Langbein "Torture and Plea Bargaining," 18. The modern prosecutor deciding to offer a plea agreement enjoys an incredible amount of discretion and scope of power, in some ways more akin to the medieval magistrate—as accuser, investigator, and sanctioner, all in one—than to the modern trial judge, limited largely in his presiding role and constrained by precedent and statutory guidelines. Langbein, "Torture and Plea Bargaining," 18. And the contemporary prosecutor oversees a process that is unequivocally coercive: "admit your guilt or we will break your bones" is not so fundamentally different from "admit your guilt or we will seek the death penalty or nail you with life in prison without the possibility of parole." Langbein, "Torture and

Plea Bargaining," 12. Perhaps most critically, it is hard to see clear progress toward a world in which only people who have been proven guilty with objective evidence are subjected to punishment, when, in 90 to 95 percent of cases in the United States today, there is no trial at all and the sole trigger for punishment is—just as it was with judicial torture—an admission of guilt by the accused. Langbein, "Torture and Plea Bargaining," 12–13.

286 It would have taken an exceptional person: John F. Benton, ed., *Self and Society in Medieval France: The Memoirs of Abbot Guilbert of Nogent* (New York: Harper Torchbacks, 1970), 212–14.