

Neuro-Voir Dire and the Architecture of Bias

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Courts and commentators routinely assume that “bias” on the jury encompasses any source of influence upon jurors that does not come directly from the evidence presented at trial. This sweeping conception of juror bias is flawed because it fails to distinguish the prejudices and affinities that infect jury decisionmaking from the experiences and perspectives that enrich it. This Article uses a thought experiment informed by the neuroscience of bias to illuminate the complexity of juror influences that go by the name of bias. I distinguish four distinct categories of juror influence: personal interests, community interests, case-specific beliefs, and case-general beliefs. I apply this spectrum of juror bias to provide a sounder way to think about what kind of juries we want.

I argue that trial courts should limit the interrogation and disqualification of prospective jurors to personal interests in the case—whether social or financial—and to case-specific beliefs arising from pretrial facts or rumors about the parties or events. By contrast, I would permit no such wholesale exclusion, either for community interests, which range from principles of justice to desires for vengeance, or for case-general beliefs about social causes or groups, which span scruples to dogmatism, and empathy to bigotry. My proposal to abolish challenges for these latter categories of outside influence raises the serious concern that accommodating their presence on the jury risks facilitating unjust outcomes, jury nullification, and hung juries. Trial courts should mitigate these risks by adopting two bias-tempering measures. First, jury pools should be diversified in ways that social cognition research suggests would attenuate the influence of unreflexive or objectionable attitudes. Second, judges should instruct deliberating jurors to express, along with their own position, the strongest counterarguments to it, so as to disrupt exaggerated assumptions of division and facilitate openness to persuasion.

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INTRODUCTION

Impartiality is not a technical conception. It is a state of mind.

—Skilling v. United States, 130 S. Ct. 2896, 2917 (2010) (quoting United States v. Wood, 299 U.S. 123, 145 (1936)).

The acquittal of George Zimmerman for the shooting death of Trayvon Martin was more than a flashpoint for race relations in the United States. It also illustrated an enduring puzzle about what makes jury verdicts legitimate. Charges of bias were widespread after this “trial of a neighborhood watchman for shooting an unarmed black kid,” before “a jury with no black members.”¹ Many critics seem ultimately to have

1. William Saletan, *Jury Rigged: Did Racism Skew the Zimmerman Verdict?*, SLATE (July 17, 2013, 4:02 PM), http://www.slate.com/articles/news_and_politics/frame_game/2013/07/zimmerman_jury_bias_did_racism_or_stand_your_ground_skew_the_verdict.html. As this Article

accepted the jury's decision, however, either because "justice is defined by the verdict that follows a fair trial"² or because, as President Obama put it to the American public, "a jury has spoken."³

Why do we put such faith in the jury? The institutions whose decisions the government affords the force of law are usually thought to acquire their legitimacy from mechanisms designed to hold those decisionmakers responsible. Accordingly, legislators are beholden to their constituents; agency administrators answer to elected representatives; and even unelected judges must articulate the reasons that support their rulings.⁴ Within this system of democratic accountability, the institution of the jury looks like an anomaly.⁵

Juries render verdicts that determine liability, guilt, and even death. Yet jurors are neither rewarded for sound verdicts nor penalized for specious ones.⁶ Their deliberations are shrouded in secrecy and they provide no justification for the decisions they reach.⁷ "[I]nformation enters and legal conclusions are produced," as one court explained, but "[t]he methods and reasons for arriving at those conclusions are unknown."⁸ The black box that produces jury verdicts is often perceived as "almost-mystical,"⁹ or "akin to a religious revelation."¹⁰ Indeed, one of the few points of convergence among commentators following the Zimmerman trial is that "we look to jurors to be modern-day oracles."¹¹

went to press, another predominantly white Florida jury, in a case similar to the Zimmerman trial, declined to convict a white man, Michael Dunn, of first-degree murder after he fatally shot an unarmed black teenager, Jordan Davis. See Timothy Williams, *3 Opposed First-Degree Murder Conviction in Florida Trial*, N.Y. TIMES, Feb. 20, 2014, at A10.

2. Charles Krauthammer, *The Zimmerman Case: A Touch of Sanity*, WASH. POST (July 18, 2013), http://www.washingtonpost.com/opinions/charles-krauthammer-the-zimmerman-case--a-touch-of-sanity/2013/07/18/35f30c00-efdd-11e2-a1f9-ea873b7e0424_story.html.

3. Press Release, The White House, Office of the Press Sec'y, Statement by the President (July 14, 2013), available at <http://www.whitehouse.gov/the-press-office/2013/07/14/statement-president>.

4. See, e.g., Dov Fox, *Interest Creep*, 83 GEO. WASH. L. REV. 237 (2014).

5. See, e.g., JAMES Q. WHITMAN, THE ORIGINS OF REASONABLE DOUBT: THEOLOGICAL ROOTS OF THE CRIMINAL TRIAL 12-13, 56 (2008).

6. That jurors are convened to decide a single case before being disbanded, Calabresi and Bobbitt argue, equips them to disguise or diffuse the unpopular tradeoffs involved in "tragic choices" that sacrifice one human life or sacred value for another. GUIDO CALABRESI & PHILIP BOBBITT, TRAGIC CHOICES 57-62 (1978). For discussion of jury trade-offs as between a suspect law and the rule of law itself, see *infra* notes 233-237 and accompanying text.

7. See, e.g., Akhil Reed Amar, Note, *Choosing Representatives by Lottery Voting*, 93 YALE L.J. 1283, 1290 n.45 (1984) (calling "[u]naccountability . . . a hallmark of the American jury").

8. *Children Int'l v. Ammon Painting Co.*, 215 S.W.3d 194, 200 (Mo. Ct. App. 2006).

9. David Alan Sklansky, *Evidentiary Instructions and the Jury as Other*, 65 STAN. L. REV. 407, 410 (2013).

10. Julie A. Seaman, *Black Boxes*, 58 EMORY L.J. 427, 487 (2008).

11. Adam Cohen, *The Lessons of George Zimmerman's 'Not Guilty' Verdict*, TIME (July 14, 2013), <http://ideas.time.com/2013/07/14/the-lesson-of-george-zimmermans-not-guilty-verdict>.

In the absence of safeguards against arbitrary or unjust decisionmaking, the jury's legitimacy comes from the most salient constitutional requirement of its composition: that jurors be "impartial."¹² Jury doctrine says little, however, about what such impartiality requires beyond that jurors be "free[] from any bias."¹³

The word "bias" appears nowhere in those clauses of the Sixth or Seventh Amendments, which apply the jury impartiality mandate to criminal and many civil trials.¹⁴ But the jurisprudence of jury impartiality leans heavily on that concept. The Supreme Court has long emphasized that the aim to "prevent[] bias . . . lies at the very heart of the jury system."¹⁵ Courts have accordingly affirmed that the bias of "even a single juror would violate [the] right to a fair trial" by "impartial, indifferent jurors."¹⁶

We usually think of bias as a decidedly pejorative state of mind marked by odious prejudices or unfounded stereotypes. The Supreme Court, however, often talks about jury bias in more sweeping terms. The Court has repeatedly affirmed that bias constitutes "*any* influence" that jurors acquire outside of the "evidence and argument [presented] in open court."¹⁷ This blanket conception of jury bias as comprising "*any* outside influence" runs deep in the law.¹⁸ As far back as the treason trial of Aaron Burr, Chief Justice Marshall made clear that although "perhaps impossible" to obtain such a jury in practice, it would be "extremely

12. U.S. CONST. amend. VI. See Richard M. Re, Note, *Re-Justifying the Fair Cross Section Requirement: Equal Representation and Enfranchisement in the American Criminal Jury*, 116 YALE L.J. 1568, 1580 (2007) (arguing that jurors who lack special incentives or qualifications "acquire the information necessary to render legitimate verdicts *after* assuming their posts").

13. *Hayes v. Missouri*, 120 U.S. 68, 70 (1887). For discussion of the indeterminacy of jury impartiality in the doctrine, see Scott W. Howe, *Juror Neutrality or an Impartiality Array? A Structural Theory of The Impartial Jury Mandate*, 70 NOTRE DAME L. REV. 1173, 1176 (1995) ("The Court's opinions leave the concept of . . . impartiality murky."); William S. Laufer, *The Rhetoric of Innocence*, 70 WASH. L. REV. 329, 396 n.308 (1995) ("[C]ourts have been less than clear as to what is meant by the construct of impartiality."); Toni M. Massaro, *Peremptories or Peers? Rethinking Sixth Amendment Doctrine, Images, and Procedures*, 64 N.C. L. REV. 501, 529 (1986) (lamenting the doctrinal absence of a "meaningful standard" of jury impartiality).

14. The Sixth Amendment guarantee of an "impartial jury" has been extended from federal to state cases through the Fourteenth Amendment, *Ristaino v. Ross*, 424 U.S. 589, 595 n.6 (1976), and from criminal to civil cases under the Seventh. *Edmonson v. Leesville Concrete Co.*, 500 U.S. 614, 630 (1991) ("Civil juries, no less than their criminal counterparts, must . . . act as impartial factfinders."). My analysis applies to both criminal and civil juries, though their different sizes, voting rules, legal questions, and standards of proof make some of the proposals described in Part III more important for criminal than civil juries.

15. *J.E.B. v. Alabama ex rel. T.B.*, 511 U.S. 127, 154 (1994) (Kennedy, J., concurring) (quoting *Thiel v. S. Pac. Co.*, 328 U.S. 217, 220 (1946)) (internal quotation marks omitted).

16. *Dyer v. Calderon*, 151 F.3d 970, 973 (9th Cir. 1998) (en banc).

17. *Skilling v. United States*, 130 S. Ct. 2896, 2913 (2010) (quoting *Patterson v. Colorado*, 205 U.S. 454, 462 (1907) (emphasis added)).

18. *Id.* at 2948 (quoting *Patterson*, 205 U.S. at 462 (emphasis added)).

desirable” for courts to empanel only those individuals who come to trial altogether lacking in “any prepossessions whatever.”¹⁹

A thought experiment can help test the desirability of that aspiration to identify jurors who are thus unbiased in the sense that they are “induced *only* by evidence and argument in open court.”²⁰ Imagine a machine—something like a metal detector for your brain—that could effectively scan potential jurors as they wait at the courthouse to reveal the presence and magnitude of every such outside influence that much in jury law refers to as bias. Call it “neuro-voir dire.” The phrase is Hank Greely’s. He proposed some years ago that potential jurors might one day be “put in a scanner and shown images relevant to a possible bias in the case” while their “brains’ reactions” were examined for that bias as a ground upon which to disqualify them from jury service.²¹ Would the constitutional guarantee of an impartial jury permit or even require trial courts to adopt this perfect technology of bias detection?

I suspect that many of us would recoil at the prospect of brain scanning prospective jurors for signs of any outside influences in order to exclude from the jury those who harbor such influences with sufficient strength. Neuro-voir dire should give us pause, but not because it violates juror privacy. The wholesale exclusion of bias is troubling because it fails to recognize that outside mental influences are as diverse as the jurors who harbor them and the conditions under which they arise.

Treating all such non-evidentiary influences in the same way misses important normative and constitutional distinctions among them. Consider four types of outside influences that are captured in the juror statements reported in the following recent cases:

- “[W]hen Indians get alcohol, they all get drunk, and . . . when they get drunk, they get violent.”²²
- “I overheard today—other jurors talking” about how the defendants took out “an insurance policy that they could collect on” if convicted.²³
- “[I have had] good and bad experiences with [the] police . . . [in part] because [I am] a Latino, [and] because [I have] an accent.”²⁴
- “[I would want to] give that person a ‘lighter sentence’ [out of] . . . compassion, mercy . . . as a really good person, who has suffered [already].”²⁵

19. *United States v. Burr*, 25 F. Cas. 49, 50–51 (C.C.D. Va. 1807) (No. 14,692g).

20. *Skilling*, 130 S. Ct. at 2913 (quoting *Patterson*, 205 U.S. at 462 (emphasis added)).

21. Henry T. Greely, *Law and the Revolution in Neuroscience: An Early Look at the Field*, 42 AKRON L. REV. 687, 697 (2009).

22. *United States v. Benally*, 546 F.3d 1230, 1231 (10th Cir. 2008), cert. denied, 558 U.S. 1051 (2009) (internal quotations marks omitted).

23. *Skilling v. United States*, 130 S. Ct. 2896, 2957–58 (2010) (Sotomayor, J., concurring in part and dissenting in part).

24. *People v. Fowler*, 845 N.Y.S.2d 599, 601 (2007).

25. *State v. Stern*, No. A-4744-10T1, 2013 WL 1798908, at *3 (N.J. Super. Ct., Apr. 30, 2013).

The ethnic bigotry and backdoor rumors that are reflected in the first two statements exemplify corrosive juror influences that can make a trial categorically unfair. By contrast, the cultural perspectives and convictions about justice in the last two statements typify the benign or even constructive influences that inform a jury of peers and help it to speak in the voice of the community. Yet these perspectives and convictions are no less “outside” influences than are bigotry and rumors that jury impartiality doctrine tends to lump under the catchall of bias.

Legal scholars have examined the implications of brain imaging for two mental states that figure prominently in law: deception²⁶ and pain.²⁷ But there has been no such neuroscientifically informed legal inquiry into bias.²⁸ This Article offers the first. It uses neuro-voir dire as a motivating hypothetical or “intuition pump” that presses us to distinguish pernicious juror influences from desirable ones.²⁹

This Article makes two contributions. First, it discredits the dominant conception of juror bias that lacks the resources to distinguish good and bad sources of juror influence. Second, it develops a novel spectrum of cognitive bias with which to adjudicate complex questions of jury impartiality in more principled and practical ways.

Part I traces our confusion about juror bias to two irreconcilable ideals of the jury. The first expects jurors to maintain an *objective* point of view, detached from the idiosyncrasies that threaten erratic or specious decisionmaking. The second ideal insists that those *subjective* experiences or attitudes are precisely what qualify jurors as laypersons and peers to render a commonsense verdict that takes community norms of fairness into account. It will not do simply to say that we must balance these ideals of the jury by teasing the good kinds of bias apart from the

26. See, e.g., Amanda C. Pustilnik, *Neurotechnologies at the Intersection of Criminal Procedure and Constitutional Law*, in *THE CONSTITUTION AND THE FUTURE OF THE CRIMINAL LAW* (John T. Parry & L. Song Richardson eds., 2013); Nita A. Farahany, *Incriminating Thoughts*, 64 *STAN. L. REV.* 351 (2012); Dov Fox, *The Right to Silence as Protecting Mental Control*, 42 *AKRON L. REV.* 763 (2009); Henry T. Greely & Judy Illes, *Neuroscience-Based Lie Detection: The Urgent Need for Regulation*, 33 *AM. J.L. & MED.* 377 (2007); Michael S. Pardo, *Neuroscience Evidence, Legal Culture, and Criminal Procedure*, 33 *AM. J. CRIM. L.* 301 (2005); Julie Seaman, *Black Boxes: fMRI Lie Detection and the Role of the Jury*, 42 *AKRON L. REV.* 931 (2009); Francis X. Shen, *Neuroscience, Mental Privacy, and the Law*, 36 *HARV. J.L. & PUB. POL'Y* 653 (2013).

27. See, e.g., Adam J. Kolber, *Pain Detection and the Privacy of Subjective Experience*, 33 *AM. J.L. & MED.* 433 (2007); Adam J. Kolber, *The Experiential Future of the Law*, 60 *EMORY L.J.* 585 (2011); Adam J. Kolber, *The Subjective Experience of Punishment*, 109 *COLUM. L. REV.* 182 (2009); Amanda C. Pustilnik, *Pain as Fact and Heuristic: How Pain Neuroimaging Illuminates Moral Dimensions of Law*, 97 *CORNELL L. REV.* 801 (2012).

28. The only sustained legal inquiry that I have seen consider the neuroscience of bias mentions the jury just once in passing to suggest that “[t]he justice system might even go so far as to educate juries, in appropriate cases, regarding the role that race can play in shaping and misshaping the evidence presented to them.” Christian M. Halliburton, *Race, Brain Science, and Critical Decision-Making in the Context of Constitutional Criminal Procedure*, 47 *GONZ. L. REV.* 319, 339–40 (2011).

29. See, e.g., DANIEL C. DENNETT, *INTUITION PUMPS AND OTHER TOOLS FOR THINKING* (2013).

bad. The monolithic concept of bias that prevails in law and in science deprives courts of a conceptual vocabulary with which to strike a principled balance between the objective and subjective ideals of the jury.

Part II employs neuro-voir dire as a theoretical device to critically examine that conception of bias that treats all outside influences as if they were the same for purposes of achieving jury impartiality. It is easy to suppose that concerns about cognitive privacy distinguish neuro-voir dire from conventional juror questioning. But juror privacy interests are declined the constitutional status that is afforded to the impartiality right that voir dire is designed to vindicate.

The problem with neuro-voir dire is not that it would be a radical departure from existing practices of jury selection. To the contrary, it is similar in spirit to the methods of questioning jurors that we already accept. This resemblance to traditional voir dire does not, however, vindicate neurotechnological efforts to preserve “the purity of trial by jury” by attempting to ensure “that every juror shall be free from bias,”³⁰ or at least “as nearly” free from “potential and latent bias . . . as the lot of humanity will admit.”³¹ Both high-tech and low-tech methods of bias detection err to the extent that they collapse all possible sources of outside juror influence under the same uniform conception of bias.

This Article develops a new way of thinking about juror bias. It identifies four categories of outside influence: *personal interests*, *community interests*, *case-specific beliefs*, and *case-general beliefs*. This spectrum of cognitive biases helps to reconcile the objective and subjective ideals of the jury in principled and practical ways. Courts should restrict the interrogation and disqualification of jurors to two categories of juror bias: personal interests in the case, whether social or financial, and case-specific beliefs arising from pretrial facts or rumors about the parties or events.

This proposal would permit neither interrogation nor disqualification of jurors, by contrast, for community interests—which may range from conceptions of justice to desire for vengeance—or case-general beliefs about social causes or groups—ranging from scruples to dogmatism, from empathy to bigotry. This Article proposes two mechanisms designed to temper objectionable kinds of outside influence. The first is to diversify the jury pool by expanding the source lists of those eligible to be called for service. The second is to require judges to instruct jurors in ways that encourage them to admit ambivalence and appreciate competing views.

30. Aldridge v. United States, 283 U.S. 308, 312 n.2 (1931) (quoting State v. McAfee, 64 N.C. 339, 340 (1870)).

31. State v. Lumumba, 601 A.2d 1178, 1187 (N.J. Super. Ct. 1992) (citation omitted).

I. THE PICTURES IN OUR HEADS

Journalist Walter Lippmann explained in his 1922 book *Public Opinion* that modern existence had become “altogether too big, too complex, and too fleeting” for people to navigate contemporary society without bringing to bear on their decisions a range of simplifying “pictures” that “we carry about in our heads.”³² Lippmann explained that “we have to reconstruct” the world around us “before we can manage with it. To traverse the world men must have maps of the world.”³³ It is through these mental maps, he said, that “heroes are incarnated, devils are made.”³⁴

Lippmann was referring specifically to group “stereotypes,” a term that his book introduced to popular vernacular.³⁵ His reflections about the simplifying pictures in our heads, however, capture a much broader range of cognitive, cultural, perceptual, and motivational influences on the way that people, jurors included, process information and make decisions.³⁶

Of course, jurors do not reach verdicts as individuals in isolation. Jurors’ biases are filtered through the process of group deliberations. These deliberations might in particular cases reflect the sum of individual biases, amplify certain among those biases through the process of groupthink,³⁷ or blunt other such biases in a manner depicted by the film *Twelve Angry Men*.³⁸ The Supreme Court has made clear that the impartiality determinations about “[j]ury competence” are, as a constitutional matter, “an individual rather than a group or class matter.”³⁹ So jury impartiality must, according to the doctrine, be evaluated as a measure of individual bias.

A. TWO COMPETING IDEALS OF THE JURY

In the law and literature, we embrace two attractive yet incompatible ideals of the jury. The first demands objective finders of fact in the search for truth. This ideal directs trial courts to “aspire to” jurors who exhibit

32. WALTER LIPPMANN, *PUBLIC OPINION* 16, 89 (1922).

33. *Id.* at 16.

34. *Id.* at 10.

35. *Id.* at 79.

36. See, e.g., Sara Gordon, *Through the Eyes of Jurors: The Use of Schemas in the Application of ‘Plain-Language’ Jury Instructions*, 64 HASTINGS L.J. 643, 663–65 (2013) (examining social science findings that jurors’ preexisting attitudes about the law shape their use of jury instructions); Christine Jolls & Cass R. Sunstein, *The Law of Implicit Bias*, 94 CALIF. L. REV. 969, 975 (2006) (arguing that implicit race bias resembles other unconscious cognitive biases).

37. See generally IRVING L. JANIS, *GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOES* (1982) (examining psychological patterns of group dynamics).

38. 12 ANGRY MEN (United Artists 1957).

39. *Thiel v. S. Pac. Co.*, 328 U.S. 217, 220 (1946).

“child-like innocence,”⁴⁰ as Adrian Vermeule’s puts it, in the sense that they are, in Lisa Kern Griffin’s words, “as free from cognitive bias as possible.”⁴¹ Accordingly, any juror “preconceptions” that “derive from an ‘extrajudicial source’” constitute “bias in the pejorative sense” that “the law will find invidious.”⁴²

On this account, the blindfold worn by Lady Justice wards off the distorting influence of any factors that might compromise jurors’ consideration of the testimony and evidence alone. Trial courts have appealed to this concept when they instruct jurors, as Judge Garland E. Burrell did last year in the Eastern District of California, to “take all of the experiences that . . . have contributed to how you think about everything” and “lay those experiences aside” as what “we call . . . your biases.”⁴³ Call this the objective ideal of the jury.

The second ideal insists that jurors’ subjective viewpoints equip them to speak with “the voice of the community.”⁴⁴ Unlike the single, professional judge who decides a bench trial, “a jury, in exercising its collective wisdom, is expected to bring its opinions, insights, common sense, and everyday life experience into deliberations.”⁴⁵ This rival ideal of the jury regards Lady Justice’s blindfold not as enabling fair-minded integrity, but as an imperiling parochialism in need of context and perspective.⁴⁶ Here, jurors are enriched by their particular convictions and life circumstances.⁴⁷ These kinds of influences do not, under this alternative ideal of the jury, constitute “bias in need of silencing.”⁴⁸

The “deep-seated hunches . . . about social life”⁴⁹ and other lessons that “their human experience has taught them”⁵⁰ instead equip jurors, as Darryl Brown and Martha Minow have explained, to “empathize with

40. Adrian Vermeule, *Contra Nemo Iudex in Sua Causa: The Limits of Impartiality*, 122 YALE L.J. 384, 403 (2012).

41. Lisa Kern Griffin, *Narrative, Truth, and Trial*, 101 GEO. L.J. 281, 315 (2013).

42. Vermeule, *supra* note 40, at 403.

43. *Taylor v. Sisto*, 606 F.3d 622, 623 (9th Cir. 2010), *superseded by* 449 F. App’x 665 (9th Cir. 2011).

44. *See BMW of N. Am., Inc. v. Gore*, 517 U.S. 559, 600 (1996) (Scalia, J., dissenting); *see also Spaziano v. Florida*, 468 U.S. 447, 461 (1984) (“Since the jury serves as the voice of the community, the jury is in the best position to decide whether a particular crime is so heinous that the community’s response must be death.”).

45. *See State v. Briggs*, 776 P.2d 1347, 1355 (Wash. Ct. App. 1989); *see also Bibbins v. Dalsheim*, 21 F.3d 13, 17 (2d Cir. 1994) (praising “the fund of ordinary experience that jurors may bring to the jury room and may rely upon”).

46. *See* JUDITH RESNIK & DENNIS CURTIS, REPRESENTING JUSTICE: INVENTION, CONTROVERSY, AND RIGHTS IN CITY-STATES AND DEMOCRATIC COURTROOMS 62 (2011).

47. NEIL VIDMAR & VALERIE P. HANS, AMERICAN JURIES: THE VERDICT 66 (2007) (arguing that juries, besides finding facts, are “also supposed to represent the various views of the community”).

48. JEFFREY ABRAMSON, WE, THE JURY 195 (1994).

49. Darryl K. Brown, *The Role of Race in Jury Impartiality and Venue Transfers*, 53 MD. L. REV. 107, 122 (1994).

50. *Beck v. Alabama*, 447 U.S. 625, 642 (1980) (citation omitted).

others” and “know what is fair *in this world*, not in a laboratory.”⁵¹ Jurors’ preexisting values and idiosyncratic worldviews are on this conception precisely what afford the jury its special “capacity,” as Justice Thurgood Marshall has affirmed, “to render a commonsense, laymen’s judgment, as a representative body drawn from the community.”⁵² This is the subjective ideal of the jury.

Jury law clutches to both of these ideals in schizophrenic fashion. For example, jurors in criminal and civil trials alike are instructed before they deliberate to “decide the facts” based on nothing more than “the evidence” and at the same time to rely on their “common sense[] and experience.”⁵³ After a verdict has been announced, Federal Rule of Evidence 606(b) implicitly preserves space for the subjective ideal by forbidding jurors from testifying “about any statement made or incident that occurred during the jury’s deliberations.”⁵⁴ Yet it also reinforces the objective ideal by exempting post-verdict reports of any “outside influence . . . brought to bear on any juror.”⁵⁵

Jury impartiality and equal protection jurisprudence likewise reflect these irreconcilable ideals of the jury. The Supreme Court affirms a subjective ideal of “diffused impartiality”⁵⁶ when it requires measures designed to help the jury exercise “the commonsense judgment of the

51. Martha Minow, *Stripped Down Like a Runner or Enriched by Experience: Bias and Impartiality of Judges and Jurors*, 33 WM. & MARY L. REV. 1201, 1203 (1992).

52. *Johnson v. Louisiana*, 406 U.S. 356, 402 (1972) (Marshall, J., dissenting).

53. See, e.g., STATE BAR OF ARIZ. CIVIL JURY INST. COMM., REVISED ARIZONA JURY INSTRUCTIONS (CIVIL) Preliminary 1, Preliminary 5 (5th ed. 2013). See 27 CHARLES ALAN WRIGHT & VICTOR JAMES GOLD, FEDERAL PRACTICE AND PROCEDURE § 6075 (2d ed. 2007). Jury nullification is another example. The subjective ideal accounts in part for why we allow the jury in certain cases to refuse to enforce the law when doing so conflicts with their best understandings of justice, while the objective ideal explains why judges may not openly encourage such resistance to enact those outside perspectives. See *United States v. Navarro-Vargas*, 408 F.3d 1184, 1199 (9th Cir. 2005) (en banc).

54. FED. R. EVID. 606(b).

55. *Id.*; see *Tanner v. United States*, 483 U.S. 107, 127 (1987) (holding that voir dire and other trial safeguards leave Rule 606(b)’s prohibition on inquiry into jury verdicts consistent with the Sixth Amendment guarantee of an impartial jury). Circuit courts are split on how narrowly to interpret Rule 606(b)’s bar on the admissibility of post-verdict juror testimony about misconduct during jury deliberation. Compare *United States v. Benally*, 546 F.3d 1230, 1236–38 (10th Cir. 2008) (holding that post-verdict juror testimony about behavior during deliberations may be admitted only if it falls within Rule 606(b)’s manifest exceptions for “communicati[on] with third parties, bribes, and jury tampering”), and *Williams v. Price*, 343 F.3d 223, 225 (3d Cir. 2003) (holding that Rule 606(b) “categorically bar[s] juror testimony ‘as to any matter or statement occurring during the course of the jury’s deliberations’ even if the is not offered to explore the jury’s decision-making process in reaching the verdict” (quoting FED. R. EVID. 606(b))), with *United States v. Henley*, 238 F.3d 1111, 1121 (9th Cir. 2001) (citing *Hard v. Burlington N. R.R.*, 812 F.2d 482, 485 (9th Cir. 1987)) (“[E]vidence of that juror’s alleged racial bias is indisputably admissible for the purposes of determining whether the juror’s responses [during voir dire] were truthful”) and *United States v. Villar*, 586 F.3d 76, 87 (1st Cir. 2009) (“[T]he rule against juror impeachment cannot be applied so inflexibly as to bar juror testimony in those rare and grave cases where claims of racial or ethnic bias during jury deliberations implicate a defendant’s right to due process and an impartial jury.”).

56. *Thiel v. S. Pac. Co.*, 328 U.S. 217, 227 (1946).

community.”⁵⁷ Accordingly, it singles out for fair representation in the jury pool certain socially salient groups like sex or race whose membership tends to occasion valued “qualities of human nature and varieties of human experience,” and whose systematic exclusion would accordingly “deprive[] the jury of a perspective on human events that may have unsuspected importance in any case that may be presented.”⁵⁸

Meanwhile, the objective ideal helps explain the Supreme Court’s *Batson* line of cases that forbid the exercise of peremptory challenges to prevent a prospective juror from serving on the jury⁵⁹ based on the same assumption that those same socially salient group “differences may produce a difference in outlook.”⁶⁰ Each of these ideals has much to commend it. Yet neither is complete on its own. What leaves both the objective and subjective ideals deficient is the extent to which they presuppose a conception of juror bias that treats every outside source of juror influence the same. These two ideals of the jury share a fundamental flaw: failure to distinguish good influences from bad.

B. THE MONOLITHIC CONCEPTION OF BIAS

The Supreme Court has defined bias on the jury as an individual “state of mind,” suggesting that a juror “will not act with entire

57. *Taylor v. Louisiana*, 419 U.S. 522, 530 (1975). The Court appears to have cabined this concept of “diffused impartiality” to the context of death-qualified juries. See REID HASTIE ET AL., *INSIDE THE JURY 11* (1983).

58. *Peters v. Kiff*, 407 U.S. 493, 503–04 (1972) (citations omitted); see, e.g., *Taylor v. Louisiana*, 419 U.S. 522, 530 (1975) (invalidating law that exempted from jury service women who had not made declaration of willingness to serve); *Thiel*, 328 U.S. at 223 (striking down a jury selection method excluding low wage laborers). The Court has made clear that this fair cross-section mandate applies only to the venire of *potential* jurors, and not to the petit of *actual* jurors. See, e.g., *Apodaca v. Oregon*, 406 U.S. 404, 411–13 (1972). It serves as more than a democratic check, however, on the judges, prosecutors, and police who direct the criminal justice system. See *Taylor*, 419 U.S. at 530; *Lockhart v. McCree*, 476 U.S. 162, 174–75 (1986). It is also, the Court has affirmed, “a means of assuring . . . an impartial” jury. *Holland v. Illinois*, 493 U.S. 474, 480 (1990). This inclusionary element of impartiality, although it applies only to the venire, reinforces that “one of the most important functions any jury can perform . . . is to maintain a link between [its verdict and] contemporary community values.” *Witherspoon v. Illinois*, 391 U.S. 510, 519 n.15 (1968). This prohibition on empaneling a jury composed of people who come from “only special segments of the populace,” *Taylor*, 419 U.S. at 530, also helps to explain why just one state (Delaware) sanctions special expert juries in complex civil litigation, and even a Delaware court noted that exclusive juries are “contrary to fundamental concepts of jury trial and would substitute a method of selection that is inconsistent with established principles of justice.” See *Bradley v. A. C. & S. Co.*, 1989 WL 70834, at *3 (Del. Super. Ct. May 23, 1989); see also JAMES OLDHAM, *TRIAL BY JURY: THE SEVENTH AMENDMENT AND ANGLO-AMERICAN SPECIAL JURIES 177* (2006) (“Elite special juries surely are antithetical to the hard-fought, long-delayed goal of opening up jury service to everyone.”).

59. See generally *Batson v. Kentucky*, 476 U.S. 79 (1986); see also *J.E.B. v. Alabama ex rel. T.B.*, 511 U.S. 127, 129 (1994) (extending *Batson*’s ban on race-based juror exclusion to gender-based peremptory challenges); *Georgia v. McCollum*, 505 U.S. 42, 59 (1992) (extending *Batson* to criminal defendants); *Edmonson v. Leesville Concrete Co.*, 500 U.S. 614, 616 (1991) (extending *Batson* to private litigants in civil litigation).

60. See *J.E.B.*, 511 U.S. at 156 (Rehnquist, C.J., dissenting).

impartiality.”⁶¹ This understanding of bias sweeps more broadly than the immoderation or prejudice that the term usually conveys.⁶² On this account, bias encompasses, beyond just radical intolerance, “any outside influence” on a juror’s thinking about the case, where “outside” mental influences comprise those that cannot be traced directly to the evidence and “argument in open court.”⁶³

This overarching understanding of bias as any outside influence resembles in its expansiveness the influential account of bias set forth by psychologists Daniel Kahneman and Amos Tversky. Kahneman and Tversky defined bias in terms of any “non-relevant factor” that people use to perceive stimuli, store perceptions, and process memories.⁶⁴ They showed how this bias distorts decisionmaking in “systematic and predictable” ways.⁶⁵ Their “dual process theory” of cognition distinguishes the *automatic* kind of thinking that we engage in when we put one foot in front of the other from the *deliberative* kind when we make a choice about what to eat.⁶⁶

Dual process theory supplies a corresponding account of mental bias that distinguishes the automatic kind of non-relevant factors—that affect our decisions when we think too little—from the deliberative kind—when we think too much.⁶⁷ We usually think of racial bias, for example, as the deliberative kind held by the “juror who believes that blacks are violence prone or morally inferior.”⁶⁸ But no less can “subconscious” fears induce jurors “to credit or discredit white witnesses as opposed to black witnesses,”⁶⁹ some Supreme Court justices have recognized, or even serve to “determin[e] the verdict of guilt or innocence.”⁷⁰

It makes no difference for purposes of jury impartiality whether bias is the automatic or deliberative kind. Impartiality doctrine cares only about “[t]he point at which” a bias is no longer “too weak to warp the

61. *Hopt v. Utah*, 120 U.S. 430, 432 (1887).

62. *See, e.g., Liteky v. United States*, 510 U.S. 540, 550–52 (1994).

63. *Patterson v. Colorado*, 205 U.S. 454, 462 (1907).

64. *See generally* DANIEL KAHNEMAN, THINKING, FAST AND SLOW 8, 103, 139–40 (2011).

65. *See, e.g.,* Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124, 1131 (1974) (discussing common errors in probabilistic reasoning based on such unreliable evidence as what appears typical (representativeness), what come easily to mind (availability), and what we learn of first (anchoring)). *But see generally* GERD GIGERENZER ET AL., SIMPLE HEURISTICS THAT MAKE US SMART (1999) (arguing that “fast and frugal” mental shortcuts obstruct sound reasoning less often than they enable people to adapt in rational ways to their environment).

66. *See generally* Tversky & Kahneman, *supra* note 65; *see also* Keith E. Stanovich & Richard F. West, *Individual Differences in Reasoning: Implications for the Rationality Debate?*, 23 BEHAV. & BRAIN SCI. 645 (2000) (explaining variations in human reasoning).

67. *See* Tanja Rapus Benton et al., *Eyewitness Memory Is Still Not Common Sense: Comparing Jurors, Judges and Law Enforcement to Eyewitness Experts*, 20 APPLIED COGNITIVE PSYCHOL. 115, 119–20 (2006).

68. *Turner v. Murray*, 476 U.S. 28, 35 (1986).

69. *Id.* at 42 (Brennan, J., concurring in part and dissenting in part).

70. *Georgia v. McCollum*, 505 U.S. 42, 68 (1992) (O’Connor, J., dissenting).

judgment” but “too strong to suppress.”⁷¹ The distinction between automatic and deliberative biases still serves the epistemic function that it is often more difficult to detect automatic biases of which people are unaware. That people are aware of their deliberative biases, however, makes it possible to hide or misrepresent them, whether to avoid revealing unpopular views, to appear evenhanded in a moral culture that prizes objectivity, or to provide an answer that they think will meet with the judge’s approval.⁷²

A “growing body of social science” suggests that simply asking jurors whether they can be impartial is not likely to reveal with any reliability the presence or strength of many of the outside influences that they would in fact bring to bear on the questions at trial.⁷³ For example, social cognition research suggests that over eighty percent of American whites and Asians demonstrate at least unconscious bias in favor of whites compared to blacks.⁷⁴ Additionally, mock juror studies reveal that this anti-black bias routinely influences verdicts and sentencing in cases in which a juror’s race differs from the defendant’s.⁷⁵

The limited diagnosticity of self-reported bias casts serious doubt on the Supreme Court’s enduring confidence in its power as “the only sure

71. *Briley v. Commonwealth*, 279 S.E.2d 151, 154 (Va. 1981).

72. *See Commonwealth v. Laguer*, 571 N.E.2d 371, 377 (Mass. 1991) (noting that jurors “may be unaware” that they harbor some bias or “may have an interest in concealing” it); *see also* Richard Seltzer et al., *Juror Honesty During the Voir Dire*, 19 J. CRIM. JUST., 451, 453–58 (1991) (discussing bias gleaned from post-trial interviews with 190 jurors finding disparities between bias reported during pretrial voir dire).

73. *See Chin v. Runnels*, 343 F. Supp. 2d 891, 906 (N.D. Cal. 2004); *see, e.g.*, Regina A. Schuller et al., *The Impact of Prejudice Screening Procedures on Racial Bias in the Courtroom*, 33 L. & HUM. BEHAV. 320, 321 (2009) (demonstrating pervasive unawareness of one’s biases related to race and arguing that “even if people are able to identify the possibility that they may be biased, . . . they may not fully understand how and to what extent biases can affect their decisions”).

74. *See, e.g.*, Carol Izumi, *Implicit Bias and the Illusion of Mediator Neutrality*, 34 WASH. U. J.L. & POL’Y 71, 93 (2010); Shankar Vedantam, *See No Bias*, WASH. POST. MAG., Jan. 23, 2005, at 12, 15; PROJECT IMPLICIT, <https://implicit.harvard.edu/implicit> (last visited Apr. 24, 2014). Some scholars believe that much racial bias tends to resist detection because so many biases operate subconsciously. *See, e.g.*, Jerry Kang et al., *Implicit Bias in the Courtroom*, 59 UCLA L. REV. 1124, 1128–32 (2012). Others think it more plausible that people tend to be aware of their bias but are simply unwilling to admit how much influence it will have over the decisions they make. *See* Ralph Richard Banks & Richard Thompson Ford, *(How) Does Unconscious Bias Matter?: Law, Politics, and Racial Inequality*, 58 EMORY L.J. 1053, 1106–08 (2009); Amy L. Wax, *The Discriminating Mind: Define It, Prove It*, 40 CONN. L. REV. 979, 1021–22 (2008). Whether unwitting or disguised, bias frequently eludes not just self-reports and “evaluations of demeanor evidence.” *Rosales-Lopez v. United States*, 451 U.S. 182, 188 (1981). It also evades subliminal evaluative measures such as the Implicit Association Test, which behavioral psychologists agree cannot diagnose bias reliably enough to distinguish its presence and force with any precision among individuals. *See, e.g.*, Jerry Kang & Kristin Lane, *Seeing Through Colorblindness: Implicit Bias and the Law*, 58 UCLA L. REV. 465, 477–80 (2010).

75. *See* Tara L. Mitchell et al., *Racial Bias in Mock Juror Decision-Making: A Meta-Analytic Review of Defendant Treatment*, 29 L. & HUM. BEHAV. 621, 625, 627–28 (2005) (analyzing thirty-four juror verdict studies and sixteen juror sentencing studies that employed the experimental manipulation of a defendant’s race).

method of fathoming”⁷⁶ whether a prospective juror “has an unbiased mind.”⁷⁷ Yet much in the law still treats jurors who can “reach a verdict as free from bias as possible” as the goal toward which jury trials should aspire, at least in theory.⁷⁸

The problem with this aspiration is not just that a truly unbiased juror, like Hare’s hyper-rational archangel or *Star Trek*’s humanoid Spock, exists only in analytic philosophy or science fiction.⁷⁹ The decision maker who “strips himself of all predilections[] becomes a passionless thinking machine,” as Judge Jerome Frank once wrote about judges, and thereby “ceases to be human.”⁸⁰ Courts have indeed recognized that it would be “unrealistic” to expect courts to empanel a jury composed of individuals who are tantamount to a tabula rasa, and accordingly “free from all” outside sources of mental influence.⁸¹

The problem is also that bias is “such an elusive condition of the mind,” as the Supreme Court has lamented, that “it is most difficult, if not impossible, to always recognize its existence.”⁸² That prospective jurors cannot be trusted to disclose or perhaps even know their own biases leaves trial judges and lawyers in the precarious position of trying to read their minds in an effort to ascertain outside influences that might affect the jurors’ decisionmaking about the case.

C. THE EMERGING NEUROSCIENCE OF BIAS

These attempts at mind reading that take place during voir dire are not new or strange. Although we cannot see what another person is thinking, we frequently attribute mental states like fear, anxiety, joy, and boredom to others by drawing inferences from what we perceive from one’s tone of voice, facial expression, or body language. Behavioral observation can be an unreliable gauge of mental states, however, because of its vulnerability to deceit and basic reliance on unsubstantiated hunches and folk psychology.⁸³ Even the most reliable available psychological

76. *Aldridge v. United States*, 283 U.S. 308, 313–14 n.3 (1931) (“[T]o ask a person whether he is [biased] . . . is, probably, the only sure method of fathoming his thoughts and feelings.” (quoting *People v. Reyes*, 5 Cal. 347, 349 (1855))).

77. *Smith v. Phillips*, 455 U.S. 209, 217 n.7 (1982) (“[S]urely [a juror] who is trying . . . to live up to the sanctity of his oath is well qualified to say whether he has an unbiased mind.”) (quoting *Dennis v. United States*, 339 U.S. 162, 171 (1950)).

78. *In re Adams*, 421 F. Supp. 1027, 1030 (D.C. Mich. 1976).

79. See James J. Gobert, *In Search of the Impartial Jury*, 79 J. CRIM. L. & CRIMINOLOGY 269, 324 (1988) (arguing that the illusion of jurors who are impartial in the sense that they are without bias “may be worth preserving” to sustain “[p]ublic confidence in the legal system”).

80. *In re J.P. Linahan, Inc.*, 138 F.2d 650, 652–53 (2d Cir. 1943).

81. *Commonwealth v. Johnson*, 305 A.2d 5, 8 (Pa. 1973).

82. *Smith*, 455 U.S. at 231 (Marshall, J., dissenting) (quoting *Crawford v. United States*, 212 U.S. 183, 196 (1909)).

83. See Morris B. Hoffman, *Peremptory Challenges Should Be Abolished: A Trial Judge’s Perspective*, 64 U. CHI. L. REV. 809, 840, 863 (1997).

measures like the Implicit Association Test (“IAT”) cannot detect bias with any precision at the individual level.⁸⁴

Because such tools cannot discern “the precise psychological processes through which the influence of” factors deemed irrelevant to a decisionmaking context “occur[] in the legal context,” these tools have been unable to answer a number of fundamental questions about the control and manifestation of bias.⁸⁵ To wit: To what extent, and under which conditions, can people control biases? Why do so many people fail to control the very biases that they claim to reject on reflection? Why can some people control those biases better than others?⁸⁶ These are among the kinds of questions about bias that neuroscience has begun to answer.⁸⁷

I must begin by underscoring how preliminary this research is, especially in view of the complexity of the mental processes at issue. Many of these studies suppose a misrepresentative one-to-one correlation between neural activity in a particular area of the brain and a mental state that the activity is said to represent. But the neural activity responsible for most mental states is in fact distributed across several different areas of the brain.⁸⁸

In the case of automatic biases, researchers have identified as crucial the amygdala, which comprises a pair of small, almond-sized brain areas normally associated with subconscious processing like fear conditioning, memory retrieval, and emotional learning.⁸⁹ But singling out automatic bias is not as simple as identifying whether a person’s amygdala lights up when she is shown relevant stimuli. This is in part because other parts of the brain are also involved in the operation of the same processes, including the anterior cingulate cortex, medial temporal lobe, and fusiform face area.⁹⁰

84. See Kang et al., *supra* note 74, at 1129–33; see also Justin D. Levinson & Danielle Young, *Different Shades of Bias: Skin Tone, Implicit Racial Bias, and Judgments of Ambiguous Evidence*, 112 W. VA. L. REV. 307, 336–39 (2010) (arguing that implicit racial bias explains the statistically significant difference that the subtle manipulation of skin color made in mock juror perceptions of defendant guilt, even when subjects could not recall the defendant’s race); Jeffrey J. Rachlinski et al., *Does Unconscious Racial Bias Affect Trial Judges?*, 84 NOTRE DAME L. REV. 1195, 1226–31 (2009) (canvassing studies that use the Implicit Association Test (“IAT”) and similar psychological measures to argue that certain people are sometimes able to control the kind of automatic bias that operates unconsciously).

85. Samuel R. Sommers, *Race and the Decision Making of Juries*, 12 LEGAL & CRIMINOLOGICAL PSYCHOL. 171, 172 (2007).

86. See generally, Emily Pronin, *Perception and Misperception of Bias in Human Judgment*, 11 TRENDS COGNITIVE SCI. 37 (2007) (explaining why people often fail to report their own bias).

87. See generally David M. Amodio & Kyle G. Ratner, *The Neuroscience of Social Cognition*, in THE OXFORD HANDBOOK OF SOCIAL COGNITION 702 (Donald E. Carlston ed., 2013).

88. See, e.g., *id.* at 703–04.

89. See, e.g., Elizabeth A. Phelps et al., *Performance on Indirect Measures of Race Evaluation Predicts Amygdala Activation*, 12 J. COGNITIVE NEUROSCIENCE 729, 729–30 (2000).

90. See Austen Krill & Steven M. Platek, *In-Group and Out-Group Membership Mediates Anterior Cingulate Activation to Social Exclusion*, 1 FRONTIERS EVOLUTIONARY NEUROSCIENCE 1, 6 (2009).

Functional brain imaging over time (as opposed to static structural imaging) measures certain changes in the brain—like blood flows or electrical waves—while a subject is engaged in a particular cognitive or motor activity or experiences a particular emotional or mental state.⁹¹ Social neuroscientists Elizabeth Phelps and Alan Hart were the first to use functional magnetic resonance imaging (“fMRI”) to observe the increased levels of blood oxygen that flow to brain regions associated with certain attitudes or stereotypes while subjects were subliminally presented with the faces of people from races other than their own.⁹²

An fMRI registers brain activity indirectly by observing increases in blood flow to deliver needed oxygen to active neurons.⁹³ More precisely, the influx of oxygenated blood is thought to point to parts of the brain that require the recovery of lost oxygen due to performance of neural activity immediately prior, as indicated by those higher oxygen levels.⁹⁴ The blood flow that fMRI measures is a delayed proxy for certain kinds of neural activity, and even then at poor spatial resolution.⁹⁵

Whatever window fMRI provides into mental states accordingly comes “through a scanner darkly.”⁹⁶ The workings of the human mind are so complex that there might never be a brain imaging technology capable of predicting with reliability or confidence the effect of particular outside mental influences on a person’s decisionmaking about the legal issues at trial.⁹⁷ Some neuroscientists nevertheless believe that brain imaging might be able to improve our ability to uncover outside sources of mental influence because neural scans might be able to uncover—better than behavioral observation or reaction-time tests could—whether jurors are lying, even to themselves, about the influences that affect the way they think and the decisions they make.⁹⁸

Current neuroscience research into bias chiefly concerns attitudes and stereotypes about race. These studies suggest that the extent to which a person who holds an unwanted racial bias can control it has to do with her

91. See John C. Gore, *Principles and Practice of Functional MRI of the Human Brain*, 112 J. CLINICAL INVESTIGATION 4, 4 (2003).

92. See Phelps et al., *supra* note 89, at 730; Allen J. Hart et al., *Differential Response in the Human Amygdala to Racial Outgroup vs Ingroup Face Stimuli*, 11 NEUROREPORT 2351, 2351–52 (2000).

93. Elizabeth M.C. Hillman, *Coupling Mechanism and Significance of the BOLD Signal: A Status Report*, 37 ANN. REV. NEUROSCIENCE (forthcoming 2014).

94. *Id.*

95. See, e.g., David M. Amodio et al., *Neural Signals for the Detection of Unintentional Race Bias*, 15 PSYCHOL. SCI. 88, 92–93 (2004) (discussing the anterior cingulate and prefrontal cortex regions of the brain in association with the conflict detection and regulatory systems).

96. Teneille Brown & Emily Murphy, *Through a Scanner Darkly: Functional Neuroimaging as Evidence of a Criminal Defendant’s Past Mental States*, 62 STAN. L. REV. 1119, 1119 (2010).

97. See Emily R. Murphy & Henry T. Greely, *What Will Be the Limits of Neuroscience-Based Mindreading in the Law?*, in OXFORD HANDBOOK OF NEUROETHICS 635, 642 (Judy Illes & Barbara J. Sahakian eds., 2011).

98. See ROBERT J. STERNBERG, COGNITIVE PSYCHOLOGY 41–42, 47–48 (5th ed. 2009).

reasons for wanting to control that bias once it becomes apparent.⁹⁹ What matters is whether her desire to control it owes more to external reasons for avoiding disapproval than it does to internal reasons stemming from personal values.¹⁰⁰ Experiments with fMRI reveal differences in a person's brain activity when her effort to control bias is more externally motivated, as when she knows that she is being watched within a racially salient decisionmaking context, than when her effort is more internally motivated, as when race is less salient and she believes that no one else is looking.¹⁰¹ Neuroscientists have found that the frontal brain regions that govern cognitive inhibition and executive function processes exert demonstrably less activity when primarily internally motivated subjects, who are far more successful at controlling bias than their externally motivated counterparts, engage in control strategies such as reappraisal and detachment.¹⁰²

Building on this research, one striking recent study used fMRI analysis to predict the impact of racial bias on jury verdicts "more effectively" than behavioral or psychological measures.¹⁰³ Brain imaging enabled researchers to predict with greater accuracy than the IAT how much money nineteen subjects (all of them white) would award victims of different races in an otherwise identical employment discrimination case.¹⁰⁴ The mock jurors read short vignettes about an employment discrimination case and reported the amount of money they would award the victims.¹⁰⁵ The subjects thereafter took the IAT and their brains were scanned with the fMRI while they looked at black and white faces paired with positive and negative adjectives.¹⁰⁶

The researchers who designed that study looked at neural activity in regions of the brain associated with the automatic kind of racial bias.¹⁰⁷ Having identified a strong correlation between award size and neural activity, but no such correlation between verdict size and IAT scores,

99. See Sarah Banks et al., *Amygdala-frontal Connectivity During Emotion Regulation*, 2 Soc. COGNITIVE & AFFECTIVE NEUROSCIENCE 303, 303 (2007) (discussing involvement of frontal cortical regions in modulating amygdala reactivity and mediating emotion regulation).

100. See Patricia G. Devine & Lindsay B. Sharp, *Automaticity and Control in Stereotyping and Prejudice*, in HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION 61, 77–80 (Todd D. Nelson ed., 2009).

101. See, e.g., Sam J. Gilbert et al., *Evaluative vs. Trait Representation in Intergroup Social Judgments: Distinct Roles of Anterior Temporal Lobe and Prefrontal Cortex*, 50 NEUROPSYCHOLOGIA 3600, 3609 (2012).

102. See, e.g., Kevin N. Ochsner & James J. Gross, *Cognitive Emotion Regulation: Insights from Social Cognitive and Affective Neuroscience*, 17 CURRENT DIRECTIONS PSYCHOL. SCI. 153, 154–57 (2008).

103. Harrison A. Korn et al., *Neurolaw: Differential Brain Activity for Black and White Faces Predicts Damage Awards in Hypothetical Employment Discrimination Cases*, 7 Soc. NEUROSCIENCE 398, 398–99, 407 (2012).

104. See *id.* at 400, 404.

105. See *id.* at 400–01.

106. See *id.* at 400–02.

107. *Id.* at 404 (assessing the right inferior frontal gyrus and superior/middle parietal lobule).

they contended “that neuroimaging data can measure a racial bias . . . reflected in juror decisions more effectively than . . . the IAT.”¹⁰⁸ The researchers expressly rejected the suggestion “that potential jurors be put in an magnetic resonance imaging (“MRI”) machine during jury selection for cases where race is salient.”¹⁰⁹ But why not embrace neuro-voir dire if it were suitably reliable and feasible to implement?¹¹⁰

II. BRAIN IMAGING AND JUROR BIAS

The early state of this bias research warrants the “neuromodesty” that Stephen Morse cautions in drawing legal conclusions.¹¹¹ But we should not fail to draw lessons from brain imaging studies to the extent that they supply well-supported theories or push us to think in new ways about the law.

The case in which the Supreme Court extended the impartiality mandate from criminal to civil trials involved an equal protection challenge to the use of peremptory strikes against potential jurors based on race.¹¹² Litigant participation in the selection of jurors promotes the perception of legitimacy, but trading on “race stereotypes” exacts too high a price, Justice Kennedy held for the Court, “for acceptance of a jury panel as fair.”¹¹³ Justice Kennedy explained that “if a litigant believes that [a] prospective juror harbors” any outside influence that renders him biased, “the issue can be explored in a rational way.”¹¹⁴

This Part imagines a neuroscientifically rational way to detect and eliminate such outside influences during jury selection. It argues that adoption of this neuro-voir dire is worth resisting because it carries to full expression the bankrupt concept of monolithic bias that much of our jury doctrine and theory presupposes.

A. NEURO-VOIR DIRE

The emerging neuroscience discussed in Part I invites a thought experiment to evaluate the monolithic conception of bias that is included in any outside source of juror influence. Imagine if brain imaging were developed to the point at which it could reliably identify prospective

108. *Id.* at 407. Beyond the usual methodological problems with applying the results of mock jury studies to real-world trial settings, the study’s use of a small and homogenous sample cautions against making too much of its findings. *See id.*

109. *Id.*

110. Apart from fMRI’s insufficiently proven reliability to detect bias, the authors give as reasons just that “[t]he cost of doing so would be prohibitive, many people might feel it is overly invasive, and . . . courts have been hesitant to allow neuroimaging data to be used in trials.” *Id.*

111. *See generally* Stephen J. Morse, *Avoiding Irrational NeuroLaw Exuberance: A Plea for Neuromodesty*, 62 *MERCER L. REV.* 837 (2011) (addressing claims about criminal responsibility).

112. *Edmonson v. Leesville Concrete Co.*, 500 U.S. 614, 628–29 (1991).

113. *Id.* at 630.

114. *Id.* at 631.

jurors who arrive at trial affected by any extra-trial influence that appears relevant to the case. Courts could then use this perfect technology of bias detection, referred to as neuro-voir dire, to weed out individuals who harbor any outside influence with enough strength as it relates to a particular trial.

This analytic invention is designed, like Plato's cave, Descartes's evil demon, and Hobbes' state of nature, to provoke a new way to think about an old problem.¹¹⁵ Neuro-voir dire occasions us in a fresh and powerful way to ask whether the juror who lacks "any prepossessions whatever" would be so "extremely desirable," as Chief Justice Marshall put it in *Burr*, that such a juror, however fictional, stands as the model toward which jury selection and trial procedures should aspire.¹¹⁶ Would the adoption of brain imaging techniques that could detect jury bias hold the appeal that much of the impartiality jurisprudence assumes?¹¹⁷

Whatever hesitation we would have about neuro-voir dire cannot lie just in the fact that brain imaging is, for now, too expensive or cumbersome to administer. It is true that the \$500 or so that it costs to perform a brain image today makes it impossible to scan every person called for jury service.¹¹⁸ The price may, however, come down over time. Logistics pose another challenge. The fMRI machine, for example, requires subjects to lie still inside a large magnet.¹¹⁹ Yet scientists are developing wireless neuroimaging that does not require such restriction of movement.¹²⁰

Prospective jurors might still of course balk at the prospect of brain imaging at the courthouse. But foot dragging alone would hardly be sufficient reason to abandon measures that vindicate the constitutional guarantee of jury impartiality. If we suppose that neuroimaging could detect bias reliably, affordably, and conveniently, what explains the lingering unease that its adoption would inspire? The most obvious objection is that brain scanning jurors might infringe upon their cognitive privacy. The next Subpart examines that plausible but unsatisfying privacy-based objection to neuro-voir dire.

115. See DENNETT, *supra* note 29, at 6.

116. *United States v. Burr*, 25 F. Cas. 49, 50–51 (C.C.D. Va. 1807) (No. 14,692g).

117. See *supra* notes 17–20, 40–43 and accompanying text.

118. See *Cost & Billing*, UNIV. MICH. FMRI LAB., <http://fmri.research.umich.edu/users/billing.php> (last visited Apr. 24, 2014).

119. See generally Douglas C. Noll, *A Primer on MRI and Functional MRI* (Dep't of Biomed. Eng'g & Radiology, Univ. Mich., No. 2.1, 2001), available at <http://web.eecs.umich.edu/~dnoll/primer2.pdf>.

120. See, e.g., Yoko Hoshi et al., *Movable Cognitive Studies with a Portable, Telemetric Near-Infrared Spectroscopy System*, 13 NEUROIMAGE S18, S18 (2001) (noting that it is unclear whether such wireless imaging will enable measures of brain activity that are as precise as fMRI).

B. JUROR PRIVACY INTERESTS

Citizens who are called for jury service enjoy a qualified privacy right against being forced to disclose certain personal information, even if only to the inquiring trial lawyer or judge.¹²¹ Juror privacy interests vary as a function of, first, the sensitivity of the information that is being solicited and, second, its materiality to concerns about bias on the jury.¹²² Only if material information cannot be obtained less intrusively have juror privacy interests been held to yield to a defendant's right to an impartial jury.¹²³ Consider, for example, that federal law bars a juror's "exclusion from service" on the basis of religion.¹²⁴ But questions that go to her faith or affiliation are permitted if a religious figure or institution is a party, witness, or victim, or where the juror's religion appears likely to figure prominently at trial, as in prosecutions for polygamy or abortion, for example.¹²⁵

On this account, neuro-voir dire appears to pose a serious threat to juror privacy. Brain scanning could reveal sensitive personal information, after all, that a person would not wish to share or may not even yet know to be true. This privacy concern about forced brain imaging for bias goes beyond discovering information that traditional juror questioning and observation cannot. I have argued in the self-incrimination context that the content of private information matters less than control over "the use and disclosure of [one's] thoughts."¹²⁶

This concept of *mental control* is the best way to think about cognitive privacy interests in the context of jury selection. Even if the court does not disclose whatever information that brain imaging gleans, neuro-voir dire risks unwanted access to representations of the subjective beliefs that "anchor each of us as an individual person with an uninterrupted autobiographical narrative."¹²⁷ Our individual identities quite plausibly comprise little more than the memories and experiences that make up the patchwork of our potentially scannable thoughts—what most of us "think of as most important about who we are."¹²⁸

But the stakes differ between criminal suspects and potential jurors. In the Fifth Amendment context, the point of brain imaging would be to

121. *United States v. Workman*, 454 F.2d 1124, 1128–29 (9th Cir. 1971), *reh'g denied*, 409 U.S. 857 (1972).

122. A distinct dimension of juror privacy, less relevant to my inquiry, concerns how widely that information is disclosed. *E.g.*, *United States v. Barnes*, 604 F.2d 121, 140–41 (2d Cir. 1979).

123. *See, e.g.*, Paula L. Hannaford, *Safeguarding Juror Privacy: A New Framework for Court Policies and Procedures*, 85 JUDICATURE 18, 23 (2001).

124. 28 U.S.C. § 1862 (2003).

125. *See State v. Barnett*, 445 P.2d 124, 125 (Ore. 1968).

126. Fox, *supra* note 26, at 796.

127. *Id.*

128. *Id.* at 796–97. For a critique of my position, see Kiel Brennan-Marquez, *A Modest Defense of Mind Reading*, 15 YALE J.L. & TECH. 214, 257–58, 262–64 (2013).

supply evidence about whether a person committed a crime. For the Sixth Amendment, by contrast, it is to determine whether a person's state of mind qualifies her to serve at trial. With the right to silence at stake, the chief state interest is solving crime; with impartiality, it is securing a fair trial.¹²⁹ So for self-incrimination, conviction and punishment loom over brain scanning. In the case of bias, the threatened consequence is being dismissed from the jury.¹³⁰

No less in jury selection than criminal interrogations, however, does compelled brain imaging imperil the individual's mental control. Ordinary voir dire leaves a person free to refuse to disclose intimate details; she need simply not answer the questions.¹³¹ Neuro-voir dire deprives her of that choice, by contrast, because it extracts visual pictures meant to represent her "inner sanctum of individual feeling and thought," as the Supreme Court has put it in the self-incrimination context.¹³²

Yet a juror's privacy interests in her "mental control" fails to capture, at least fully or convincingly, the unwillingness that many share to accept brain imaging for all juror bias, even if it is safe, noninvasive, and reliable. In the context of jury selection, privacy interests are declined the constitutional status of the impartiality right that voir dire seeks to vindicate.

It is true that juror privacy interests weigh more heavily in civil cases than criminal cases. The loss of liberty that criminal prosecution threatens to a defendant makes her impartiality right more critical in that context. But even in civil trials, the Supreme Court has declined constitutional status to the juror privacy interest in ways that cannot override the decidedly constitutional right to an impartial jury.¹³³

That cognitive privacy does not provide a dispositive reason to resist neuro-voir dire for all outside influences suggests that this high-tech practice resembles the low-tech methods of bias detection that we accept. Whether interrogation of potential jurors takes the form of oral interviews, computer questionnaires, IATs, or brain imaging, it aims all the same to "eliminat[e] [the] extremes of partiality on both sides."¹³⁴

C. RETHINKING THE ANALOGY

If not privacy-based concerns about mental control, what is the relevant moral or legal difference between crude and sophisticated

129. See Ronald J. Allen, *Theorizing Self-Incrimination*, 30 *CARDOZO L. REV.* 729, 732, 736–37 (2008) (arguing that privacy interests permit compelled disclosures from criminal suspects).

130. The brain-scanned juror may also risk revealing sensitive proclivities or prejudices.

131. *Brandborg v. Lucas*, 891 F. Supp. 352, 360 (E.D. Tex. 1995).

132. *United States v. Nobles*, 422 U.S. 225, 233 (1975) (quoting *Couch v. United States*, 409 U.S. 85, 90–91 (1974)).

133. See *Press-Enter. Co. v. Superior Court*, 464 U.S. 501, 511 (1984).

134. *Holland v. Illinois*, 493 U.S. 474, 484 (1990) (quoting *Swain v. Alabama*, 380 U.S. 202, 219 (1965)).

measures of getting at juror biases?¹³⁵ To put the question another way: assuming there is nothing wrong with asking potential jurors, whether in words or writing, about their personal habits or convictions, why should we worry about like-minded attempts that enlist novel brain-based means?¹³⁶

Neuro-voir dire does not in fact represent any radical departure from existing jury selection practices. This resemblance does not, however, justify a futuristic method by appeal to the familiar. Instead, it gives reason to reevaluate the monolithic conception of juror bias that animates both. Neuro-voir dire is troubling because it draws out the full implications of treating all outside sources of juror influence the same.

We have not until now been forced to confront those implications because when it comes to juror bias, “it is most difficult, if not impossible, to always recognize its existence.”¹³⁷ We have seen how jurors can be as oblivious to the automatic bias they harbor as they are good at hiding deliberative bias.¹³⁸ Even voir dire’s defenders concede that its reliance on the assessment of jurors’ voluntary responses and demeanor leaves judges and lawyers bound to miss many of the “biases and opinions that will inevitably influence their decisions and perceptions.”¹³⁹

But neuro-voir dire suffers from no such epistemic shortcomings. This neurotechnological means of identifying jury bias wholesale would make only “more opaque and obscure” the complexity of those outside influences that its adoption seeks to uproot.¹⁴⁰ “When a machine runs efficiently,” after all, “one need focus only on its inputs and outputs and not on its internal complexity.”¹⁴¹

The term bias sweeps so broadly in the doctrine and literature that no uniform approach that conceives of every such “extrajudicial source”¹⁴² of “outside influence”¹⁴³ the same way could preserve the appropriate balance between the objective and subjective ideals of the jury. The preoccupations and parochialisms through which jurors’ minds filter the testimony at trial vary not just in terms of whether those biases operate consciously or resist control, but in terms of their moral valence and reflection of social mores. Bigotry should not be treated like

135. Cf. *United States v. Jones*, 132 S. Ct. 945, 963–64 (2012) (comparing suspect privacy interests at stake in police tracking through routine tailing via car versus space-based satellite navigation).

136. See *supra* text accompanying notes 119–120.

137. *Smith v. Phillips*, 455 U.S. 209, 231 (1982) (Marshall, J., dissenting) (quoting *Crawford v. United States*, 212 U.S. 183, 196 (1909)).

138. See, e.g., Mary R. Rose & Shari Seidman Diamond, *Judging Bias: Juror Confidence and Judicial Rulings on Challenges for Cause*, 42 *LAW & SOC’Y REV.* 513, 516–17 (2008).

139. Barbara Allen Babcock, *Voir Dire: Preserving “Its Wonderful Power”*, 27 *STAN. L. REV.* 545, 551 (1975).

140. BRUNO LATOUR, *PANDORA’S HOPE: ESSAYS ON THE REALITY OF SCIENCE STUDIES* 304 (1999).

141. *Id.*

142. Vermeule, *supra* note 40, at 403 (internal quotation marks omitted).

143. *Patterson v. Colorado*, 205 U.S. 454, 462 (1907).

empathy, nor personal vendettas like regional values. That we would reject neuro-voir dire presses us to see that the impartiality mandate requires more than the absence of whatever bias is taken to mean.

Neuro-voir dire, no less than ordinary voir dire, is misguided for the reason and to the extent that it treats every outside source of juror influence the same way and thus fails to appreciate important moral differences among them. What we need is a more precise way to think and talk about the multiplicity of the outside mental influences on potential jurors that go by the name of bias.

III. THE COGNITIVE BIAS SPECTRUM

This Part develops a novel conceptual framework with which to evaluate those biases that find the most prominent expression in jury law and theory. This Article distinguishes four categories of outside influence. What I call *personal interests* comprise the self-regarding kinds of influence that arise when the outcome in a case has implications for the welfare of a juror's family or fortune. *Community interests* consist of local area norms that a juror identifies with, or expectations in the region affected by the dispute with which he feels pressure to conform. *Case-specific beliefs* spring from juror exposure to out-of-court facts or rumors about the particular people or events at trial. *Case-general beliefs* are attitudes about social groups or ideologies that bear relevance to the trial more broadly.

Unraveling the monolith of bias along this spectrum of cognitive biases helps to reconcile the objective and subjective ideals of the jury. I argue that trial courts can vindicate the objective ideal of the jury by expanding the grounds for exclusion for cause to cover two categories of juror bias: personal interests in the case, whether social or financial, and case-specific beliefs arising from pretrial facts or rumors about the parties or events. The subjective ideal of the jury in turn calls for greater solicitude with respect to community interests and case-general beliefs about broadly relevant social groups or causes. Rather than questioning jurors regarding these categories of bias, I would implement several bias-tempering mechanisms to mitigate the accompanying risk that juries would refuse to follow the law, be unable to agree on a verdict, or permit unjust considerations to influence their decisionmaking.

A. VINDICATING THE OBJECTIVE IDEAL

The objective ideal of the jury is of recent vintage. Until the eighteenth century, trials were decided by jurors already familiar with the dispute being litigated.¹⁴⁴ Jurors were chosen precisely because of

¹⁴⁴ See e.g., John Marshall Mitnick, *From Neighbor-Witness to Judge of Proofs: The Transformation of the English Civil Juror*, 32 AM. J. LEGAL HIST. 201, 206–29 (1988).

their prior knowledge of the events or about the people at issue.¹⁴⁵ That prerevolutionary vision of jurors prized their acquaintance with the parties and their conflict.¹⁴⁶ The institution that we know as the jury was forged in opposition to the model of jurors as witness-neighbors.¹⁴⁷ The American tradition seeks jurors who are unfamiliar with the people or events at trial.¹⁴⁸

Information about the case that is not admitted into evidence, whether acquired through social media or word of mouth, uniformly erodes the requisite balance of objectivity on the jury. Exposure to such fact or rumor that so closely resembles the evidence presented at trial does not simply cloud or confound jurors' consideration of that evidence but risks supplanting it altogether and thus depriving the parties of the opportunity for cross-examination, which courts have long regarded as the "greatest legal engine ever invented for the discovery of truth."¹⁴⁹ Mistrust of exposure to out-of-court rumor and publicity is in this sense similar to the epistemic and unfairness rationales for excluding evidence such as hearsay and perhaps prior misconduct.¹⁵⁰ The constitutional bedrock that jurors come to a trial relatively unaware of the facts explains why the jury doctrine rightly resists, wholesale, this category of biases that I refer to as *case-specific beliefs*.

There is a second category of outside influence whose presence should, without exception, disqualify a juror when it appears with sufficient force. The impartiality mandate requires not just ignorance of facts beyond the testimony. It also insists that jurors stand at a certain distance from the people and matters involved. Even the "self-informing" jury excluded prospective jurors who were related to the parties or had property riding on the outcome.¹⁵¹ Social affections or stock holdings breed the self-serving conflicts of interest that explain why bribes and threats so corrupt jury decisionmaking.

A juror who herself is a party to a case is paradigmatic of what I call *personal interests*. It is a "mainstay of our system of government," the Supreme Court asserts, that "[n]o man is allowed to be a judge in his own

145. See, e.g., Steven A. Engel, *The Public's Vicinage Right: A Constitutional Argument*, 75 N.Y.U. L. REV. 1658, 1674 (2000) (arguing that citizens who possessed personal knowledge of the events that gave rise to the legal dispute, and consequently were thought to be best positioned to adjudicate it).

146. See, e.g., *S. Union Co. v. United States*, 132 S. Ct. 2344, 2353 (2012).

147. See, e.g., Michael C. Dorf, *Spandrel or Frankenstein's Monster? The Vices and Virtues of Retrofitting in American Law*, 54 WM. & MARY L. REV. 339, 341 (2012).

148. See Engel, *supra* note 145, at 1693 (noting that "modern courts disfavor jurors with specific knowledge of the parties or the crime").

149. *United States v. Evans*, 216 F.3d 80, 85 (D.C. Cir. 2000) (quoting *California v. Green*, 399 U.S. 149, 158 (1970)).

150. Cf. Richard D. Friedman, *Minimizing the Jury Over-Valuation Concern*, 2003 MICH. ST. L. REV. 967, 967-68 (arguing that the dominant reason that evidence law excludes hearsay, character, and prior misconduct evidence is a fear that juries will value it too highly).

151. See Daniel Klerman, *Was the Jury Ever Self-Informing?*, 77 S. CAL. L. REV. 123, 133-34 (2003).

cause, because his interest would certainly bias his judgment.”¹⁵² Even a scholar like Adrian Vermeule, who has argued that institutional designers often do well to depart from the axiom against deciding one’s own case, champions “rules for selecting petit juries [that] exclude jurors” with any such personal interests.¹⁵³

I. *Personal Interests*

First consider the personal interests that pull at jurors’ heart and purse strings. Personal interests relate to a potential juror’s social or economic ties to a party or other prominent participant in the trial. There is a core of this self-regard within concentric circles that extends outward, from standing in judgment of one’s family or friends, to deciding cases that implicate gradually attenuated professional or pecuniary stakes.¹⁵⁴ These conflicts of interest subvert the measure of objectivity required for a juror’s even-handed application of the facts to the law.¹⁵⁵

If the juror believes that the outcome in a case could impact her intimates or bank account, the impulse is to decide it in a way that helps her friend, hurts her enemy, preserves her wealth, grinds an axe, or indulges a grudge. Because “every man is presumed to do all things in order to his own benefit,” Thomas Hobbes wrote, “no man is a fit arbitrator in his own cause.”¹⁵⁶ The reason to weed out from the jury those personal interests located near the center is not just that they tend to be so persuasive, but also that they run roughshod over the objective ideal of the jury.

a. *Social*

Most of us enjoy relationships with family and friends whose well-being matters to us. The presence or relevance of people like these within the context of trial predictably encourages jurors to displace the consideration of truth and justice with regard for self or loved ones.¹⁵⁷ A juror’s relationship with a party, lawyer, victim, or witness naturally affects her thinking about that person’s arguments, testimony, or outcomes.¹⁵⁸

Relatives and companions will of course tend to have a stronger pull than neighbors or colleagues. Brain imaging studies indeed confirm that

152. *Gutierrez de Martinez v. Lamagno*, 515 U.S. 417, 428 (1995) (citations omitted) (internal quotations marks omitted).

153. Vermeule, *supra* note 40, at 402.

154. *Id.* at 390–91.

155. *See id.* at 400 (discussing tradeoffs of efficiency, expertise, and independence).

156. THOMAS HOBBS, *LEVIATHAN* 102 (Michael Oakeshott ed., Macmillan 1947) (1651).

157. *See, e.g.*, John A. Bargh & Erin L. Williams, *The Automaticity of Social Life*, 15 *CURRENT DIRECTIONS PSYCHOL. SCI.* 1, 4 (2006).

158. *See, e.g.*, *Estrada v. Scribner*, 512 F.3d 1227, 1241 (9th Cir. 2008).

people who have greater individual meaning are “more likely to [elicit] selective excitatory responses” than strangers or celebrities with whom we have only generalized familiarity.¹⁵⁹

The point is not, however, that more wide-ranging or intense memories or involvement with another person will make it more likely that his prominent place at trial will “influence the information recalled” or the way that jurors perceive or process information.¹⁶⁰ It is that the influence of such personal interests characteristically disfigures the conditions required for objective decisionmaking.

b. Financial

A second kind of personal interest arises under circumstances in which a potential juror or her close relation has a nontrivial monetary stake in how the case is resolved. A juror who holds stock in a corporation that is a named party, for example, would thereby have financial interests in the case that a juror who uses that corporation’s products would not.¹⁶¹ Similar financial interests arise for an employee or clerk, landlord or tenant, principal or agent, debtor or creditor, business partner or surety on any bond to either party. As the prospect of fiscal reward increases—due to the larger or more direct pecuniary incentives at stake—the release of dopamine to the reward system of the brain also increases in a way that is similar to that of people who are addicted to a controlled drug respond to its use.¹⁶²

The Supreme Court, “while recognizing that persons of the ‘highest honor and greatest self-sacrifice’ would not be influenced by fear of financial losses, has said that . . . ‘[such] temptation to the average man as a judge . . . denies the [accused] due process of law.’”¹⁶³ What makes such interests corrosive of the kinds of jurors we want is not that they tend to exert such great psychological influence, but that the self-regarding logic they promote collides with the provision of other-regarding justice. Some jurors may be less personally interested, however, by contrast to the rule

159. Indre V. Viskontas et al., *Human Medial Temporal Lobe Neurons Respond Preferentially to Personally Relevant Images*, 106 *PROC. NAT’L ACAD. SCI.* 21329, 21331 (2009).

160. Alisha C. Holland & Elizabeth A. Kensinger, *Review: Emotion and Autobiographical Memory*, 7 *PHYSICS LIFE REV.* 88, 88 (2010).

161. *See, e.g.*, *Chestnut v. Ford Motor Co.*, 445 F.2d 967, 971 (4th Cir. 1971) (“That a stockholder in a company which is a party to a lawsuit is incompetent to sit as juror is so well settled as to be black letter law.”).

162. Hans C. Breiter et al., *Functional Imaging of Neural Responses to Expectancy and Experience of Monetary Gains and Losses*, 30 *NEURON* 619, 634 (2001).

163. *Dennis v. United States*, 339 U.S. 162, 176 (1950) (Black, J., dissenting) (quoting *Tumey v. Ohio*, 273 U.S. 510, 532 (1927)).

of necessity that authorizes judges to determine the constitutionality of changes to their salaries.¹⁶⁴

2. *Case-Specific Beliefs*

A distinct source of outside influence arises under conditions in which a potential juror has (or believes she has) knowledge of or familiarity with information related to the case that was not admitted at trial. Such information might be acquired either through direct experience with the events or people at trial or through social rumor, media reports, or exposure to earlier proceedings in the case or another between the same parties.¹⁶⁵ This is the kind of bias that defense attorney Don West alluded to when in his opening statement he began: “Knock-knock. Who’s there? George Zimmerman. George Zimmerman, who? Alright good. You’re on the jury.”¹⁶⁶

What makes case-specific beliefs such as antecedent knowledge about the defendant so disquieting is not just that their resemblance to the evidence at trial makes jurors especially susceptible to influence. Experimental studies have demonstrated the frequently significant influence that inadmissible information about a party or events has on juror thinking.¹⁶⁷ Beyond the distinctive power to persuade, however, case-specific beliefs are predictably one-sided and undermine the objective ideal by depriving the side that they skew against of the opportunity to contest their truth in the court of law.¹⁶⁸

Justice Kennedy has usefully divided the relevant precedents regarding what I call case-specific beliefs into two categories. First are cases involving the narrow propagation of those beliefs; second are those involving the pervasive kind of exposure that creates an “atmosphere so corruptive of the trial process that . . . a fair trial could not be held [there], nor an impartial jury assembled.”¹⁶⁹

164. See, e.g., *United States v. Will*, 449 U.S. 200, 215 (1980). For further discussion, see Vermeule, *supra* note 40, at 408–09.

165. See *Leonard v. United States*, 378 U.S. 544, 544 (1964) (per curiam) (reversing conviction because a juror had heard announcement of defendant’s guilty verdict on similar charges in an earlier trial).

166. Adam Goldberg, *George Zimmerman’s Lawyer Tells ‘Knock-Knock’ Joke at Trial*, HUFFINGTON POST (June 24, 2013, 1:45 PM), http://www.huffingtonpost.com/2013/06/24/george-zimmerman-knock-knock_n_3491367.html; see Mike Schneider, *George Zimmerman Trial: Social Media Infiltrates Trial*, HUFFINGTON POST (July 7, 2013, 10:27 PM), http://www.huffingtonpost.com/2013/07/07/george-zimmerman-trial-social-media-infiltrates-trial_n_3557734.html.

167. See, e.g., Christina A. Studebaker & Steven D. Penrod, *Pretrial Publicity: The Media, the Law, and Common Sense*, 3 PSYCHOL. PUB. POL’Y & L. 428, 436–37 (1997).

168. See *supra* note 150 and accompanying text.

169. *Mu’Min v. Virginia*, 500 U.S. 415, 448 (1991) (Kennedy, J., dissenting).

a. Narrow

Courts determine the suitability of narrow case-specific beliefs on a juror-by-juror basis by reference to the content and acquisition of information about the people or events at trial.¹⁷⁰ Content-based inquiry goes to how directly that information relates to the case and whether it communicates opinion rather than fact.¹⁷¹ As to its acquisition, courts ask how recently the exposure took place and how reliable its source is perceived to be.¹⁷²

Even “brief exposure” to case-specific information can entrench beliefs about guilt by generating an enduring lens through which jurors filter the evidence at trial.¹⁷³ It is more than “the difficulty of effacing prejudicial publicity from the minds of the jurors,” however, that explains why “trial courts must take strong measures to ensure that the balance is never weighed against the accused.”¹⁷⁴ Case-specific beliefs should disqualify jurors not because they persuade but because they distort consideration of admissible evidence by masquerading as the kind of information about the facts and events that is subject to cross-examination.

b. Pervasive

Sometimes media reports or social conversation about a case permeates the affected geographic region across the board. A party may in such cases ask the court to move the area from which potential jurors are drawn or delay the trial to let memories of that exposure fade and attending passions subside.¹⁷⁵ In high-profile cases that generate pretrial publicity—what Justice Kennedy called “atmospheric”—the Supreme Court has focused on these same two elements of case-specific beliefs.¹⁷⁶ First is its content. The Court has emphasized the reliable appearance and inflammatory nature of a defendant’s televised murder confession, for example, as a reason to reverse his conviction when his request for a change in venue was denied.¹⁷⁷

What sets pervasive, case-specific beliefs apart from narrow beliefs is the breadth of exposure to those beliefs within a particular geographic area. With respect to this second dimension of pretrial publicity, courts

170. See *Skilling v. United States*, 130 S. Ct. 2896, 2915–17 (2010).

171. See *United States v. Church*, 217 F. Supp. 2d 696, 698 (W.D. Va. 2002).

172. See, e.g., *United States v. Bakker*, 925 F.2d 728, 732–33 (4th Cir. 1991).

173. See DAN SIMON, *IN DOUBT: THE PSYCHOLOGY OF THE CRIMINAL JUSTICE PROCESS* 186 (2012) (explaining the “lingering impact” of discredited pretrial information on jurors’ beliefs about the case in terms of so-called hindsight bias, belief preservation, and coherence effects).

174. *Sheppard v. Maxwell*, 384 U.S. 333, 362 (1966).

175. See *Irvin v. Dowd*, 366 U.S. 717, 725 (1961).

176. *Mu’Min v. Virginia*, 500 U.S. 415, 448 (1991) (Kennedy, J., dissenting).

177. See *Rideau v. Louisiana*, 373 U.S. 723, 726–27 (1963).

highlight its saturation, frequency, and availability.¹⁷⁸ Sporadic media exposure across a sprawling community is less problematic, on this account, than intensive exposure of case-specific facts “delivered regularly to approximately 95% of the dwellings” near which the litigated events took place, while “radio and TV stations . . . likewise blanketed” that same concentrated region from which the jury pool was selected.¹⁷⁹ The presence of these kinds of outside influences threatens an indispensable balance of objectivity among jurors.

Personal interests and case-specific beliefs so impair the objective ideal of the jury that deference to trial courts is misplaced in determinations about whether potential jurors affected by these sources of outside influence can serve impartially.¹⁸⁰ That the impartiality inquiry is “not easily subject to appellate review” cannot reduce to empty rhetoric or rudderless confusion the constitutional imperative to curb the distorted impact of personal interests or case-specific beliefs on jury decisionmaking.¹⁸¹

There are two measures that trial courts should take to efface from the jury sufficiently strong personal interests and case-specific beliefs. First, courts could lower the standard for presuming a disqualifying bias, subject to rebuttal that a juror is impartial.¹⁸² Second, courts could require individualized questionnaires designed specifically to ascertain these pernicious sources of outside influence.

Exclusion should be more readily assumed for jurors who hold strong personal interests or case-specific beliefs. Individuals with strong connections or exposure to inadmissible information should be presumptively disqualified.¹⁸³ The Supreme Court should use common law or a revision of the federal rules of procedure to lower the threshold for presumptive disqualification for personal interests and case-specific beliefs to the less demanding reasonable-likelihood-of-unfairness standard that it adopted only briefly in *Sheppard v. Maxwell*.¹⁸⁴

178. See *Irvin*, 366 U.S. at 725–27.

179. *Id.* at 725.

180. See, e.g., *Skilling v. United States*, 130 S. Ct. 2896, 2923 (2010) (explaining that “the deference due to district courts is at its pinnacle” in determinations about jury impartiality).

181. *Rosales-Lopez v. United States*, 451 U.S. 182, 188 (1981).

182. See *United States v. Torres*, 128 F.3d 38, 43–47 (2d Cir. 1997) (distinguishing bias that is admitted from that which is presumed from statutory criteria and bias that is inferred “when a juror discloses a fact that bespeaks a risk of partiality sufficiently significant to warrant granting the trial judge discretion to excuse the juror for cause, but not so great as to make mandatory a presumption of bias”); see also *United States v. Thomas*, 627 F.3d 146, 161 (5th Cir. 2010) (similar).

183. See *Coughlin v. Tailhook Ass’n*, 112 F.3d 1052, 1062 (9th Cir. 1997).

184. 384 U.S. 333, 363 (1966); 28 U.S.C. § 2072 (2014) (establishing a congressional approval requirement).

That this disqualification is presumptive and not absolute provides the opportunity for clarifying questioning in borderline cases in which personal interests or case-specific beliefs are arguably remote or attenuated under the particular circumstances. Follow-up voir dire in such limited cases should be individualized, sequestered, and open-ended if it is to realize its promise as an “effective method of rooting out” these objectionable categories of bias.¹⁸⁵

Mandatory questionnaires should ask prospective jurors to disclose any pretrial acquaintance with the facts and any social or economic connections to the case. Such questionnaires would be time- and cost-effective, easy to administer, and “superior to voir dire in obtaining [true and complete] answers to questions.”¹⁸⁶ Live questioning that takes place in full view of judges, lawyers, and other prospective jurors might make people reticent to reveal personal interests or case-specific beliefs in a way that insulated surveys would not.

These sources of mental influence are less susceptible to the vagaries of self-reported bias that plague voir dire more broadly. That is because people are usually aware of whether they have heard about events in the case, have a financial holding in its outcome, or a social relationship to the people involved. Nor are these the sensitive kinds of outside influence about social groups or ideologies that more often give jurors reason to conceal their views. Disclosure about which news sources a prospective juror uses or how she invests her money does not tend to be personal or embarrassing in the way that attitudes about race or politics might.

As the Court insists, a potential juror’s cursory affirmation that she is impartial should not suffice to establish her qualification to serve.¹⁸⁷ It is a mistake to decline to find reversible error when a trial judge declines, for example, to excuse from jury service a patient of the doctor who is sued for medical malpractice,¹⁸⁸ an agent of a firm that insures personal injury defendants,¹⁸⁹ a member of the same church as the mother of the decedent in a murder trial,¹⁹⁰ or the employee of one local oil company in an action against its competitor.¹⁹¹

The judge’s appraisal in these cases of a “prospective juror’s inflection, sincerity, demeanor, candor, body language, and apprehension of duty” is little solace.¹⁹² Courts cannot trust a juror’s claim to

185. *Patton v. Yount*, 467 U.S. 1025, 1038 n.13 (1984) (citation omitted).

186. Joseph A. Colquitt, *Using Jury Questionnaires; (Ab)using Jurors*, 40 CONN. L. REV. 1, 15–16 (2007).

187. *Mu’Min v. Virginia*, 500 U.S. 415, 439–41 (1991) (Marshall, J., dissenting).

188. *Poynter v. Ratcliff*, 874 F.2d 219, 221–22 (4th Cir. 1989).

189. *Lusich v. Bloomfield S.S. Co.*, 355 F.2d 770, 775 (5th Cir. 1966).

190. *Porter v. Illinois*, 479 U.S. 898, 899 (1986) (Marshall, J., dissenting).

191. *Marks v. Shell Oil Co.*, 895 F.2d 1128, 1130–31 (6th Cir. 1990).

192. *Skilling v. United States*, 130 S. Ct. 2896, 2918 (2010).

impartiality if she “admits exposure to pretrial publicity” or connection to a party without at least asking “*what* he has read or heard about the case” or how close that connection is in order to determine “what corresponding impressions he has formed.”¹⁹³ The presence of personal interests or case-specific beliefs make it “likely that at least some of the seated jurors, despite stating that they could be fair, harbor[] similar biases that a more probing inquiry would likely have exposed.”¹⁹⁴

B. VINDICATING THE SUBJECTIVE IDEAL

Potential jurors are moved by more than protecting their families and wallets, and they harbor opinions about more than the events and people at trial. What I call *community interests* comprise the social goods and ills that a juror attributes to the broader community. Jurors can identify with the community or feel pressure to conform to its norms in ways that favor a particular side. These stakes may be clear to residents of that community, whether or not news media or social rumor convey case-specific information about the people and events. That such interests span a community’s “yearning to see justice done” and its “urge for retribution” after a conspicuous crime or scandal makes clear that it is as important to preserve some of these on the jury as it is to efface others.¹⁹⁵

The moral complexity of such solidarities among jurors is also reflected in *case-general beliefs* about ideologies or affiliations. Ideological kinds of case-general beliefs range from mercy for a defendant subject to prosecutorial misconduct to spite for the one whose minor offense would qualify as the third strike under a recidivist statute. Neither ideological nor affiliative case-general beliefs are good or bad across the board, and are categorically worth preserving or uprooting. Compare racial stereotyping with understanding based on shared experiences. Bigotry infects the jury no less than empathy informs it.¹⁹⁶ These are two categories of bias whose careful accommodation among jurors serves to vindicate the subjective ideal of the jury.

These categories of bias are importantly distinct from those analyzed in the previous Subpart. Every personal interest or case-specific belief, at least when it is strong enough, corrodes the measure of objectivity that we demand from jurors, without loss to the kind of subjectivity that we at the same time expect. By contrast, community interests and case-general beliefs admit of certain influences that preserve the subjective element that jurors should bring to trial. That is, some community interests and case-general beliefs make up the sort of

193. *Mu’Min v. Virginia*, 500 U.S. 415, 441–43 (1991) (Marshall, J., dissenting).

194. *Skilling*, 130 S. Ct. at 2962 (Sotomayor, J., concurring in part and dissenting in part).

195. *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, 571 (1980).

196. *See supra* notes 136–141 and accompanying text.

common sense and life experience that our juries should not eschew, but prize. These classes of bias call for a more sophisticated approach—beyond detecting and striking jurors who harbor them—that channels biases in constructive ways.

I. *Community Interests*

Community interests are like personal interests but instead of capturing the narrow regard for one's self, family, and friends, they reflect a broader concern for one's locality. Just as in a case that presents social or financial stakes, a person is likely to decide it in a way that serves those interests, so too may a case that holds implications for his community lead him to an outcome that serves its security, economy, or customs.¹⁹⁷ But we do not condemn every such community interest as we do all personal interests among jurors.

Some “community concern[s]”¹⁹⁸ that vary across regions reflect the law's resolve to provide a “jury . . . of the peers” from among “neighbors, fellows, [and] associates.”¹⁹⁹ Those local values that reflect base retribution or bare parochialism erode the jury's requisite objectivity. But we tolerate or even prize others, not just to “[g]uard against the corrupt or overzealous prosecutor[,]” but also to vindicate a community's shared (and unobjectionable) beliefs about race, faith, family, or justice that find expression in a certain time and place.²⁰⁰

Consider the community interest of Paul Butler's proposal that juries enforce drug laws only very weakly, if at all, as a reaction to the mass incarceration of young black men within a particular area.²⁰¹ Or consider a community interest to harshly punish pornography based on regional norms of sexual morality.²⁰² The subjective ideal suggests that these community interests deserve to be heard by a jury of peers. The text of the Sixth Amendment reflects this incorporation of community interests in jury decisionmaking when it follows the impartiality clause with the requirement that prospective jurors be selected from “the State and district wherein the crime shall have been committed.”²⁰³

197. See Keise Izuma et al., *Processing of the Incentive for Social Approval in the Ventral Striatum During Charitable Donation*, 22 J. COGNITIVE NEUROSCI. 621, 628–29 (2010).

198. *Richmond Newspapers*, 448 U.S. at 570–71.

199. *Strauder v. West Virginia*, 100 U.S. 303, 308 (1880); see OLDHAM, *supra* note 58, at 176 (contrasting peer with expert juries that include citizens with special knowledge or qualifications).

200. *Duncan v. Louisiana*, 391 U.S. 145, 156 (1968).

201. See Paul Butler, *Racially Based Jury Nullification: Black Power in the Criminal Justice System*, 105 YALE L.J. 677, 679 (1995). I propose measures to reduce the incidence of and pressures associated with jury nullification. See *infra* notes 247–248 and accompanying text.

202. See Robert F. Nagel, *Unfocused Governmental Interests*, 55 ALB. L. REV. 573, 576–77 (1992) (discussing Justice Brennan's dissent in *Paris Adult Theatre v. Slaton*, 413 U.S. 49 (1973)).

203. U.S. CONST. amend. VI.

a. *Identifying*

Community interests arise when jurors identify with that community or feel pressure to conform to its perceived norms or welfare. The extent to which such identifying interests tend to influence a prospective juror depends on the strength of her group identification and relevance of that community interest to the issues presented at trial.²⁰⁴ These interests can arise independent of any case-specific exposure because a juror may identify with the community even if the “facts of the case were ‘neither heinous nor sensational’” and “media coverage ‘ha[d] . . . been objective and unemotional.’”²⁰⁵

Consider the community interest at stake in a criminal trial in Miami that had provoked pretrial race riots.²⁰⁶ The case involved a Hispanic officer who was tried for the deaths of two African-American motorcyclists.²⁰⁷ An appeals court overturned the jury’s manslaughter conviction on the ground that the trial judge should have granted a change of venue to seek jurors who were not influenced by extra-evidentiary considerations.²⁰⁸ Miami jurors were inclined to convict, the court explained, for fear that acquittal would have reignited violence in the city with which they identified.²⁰⁹

Consider also the identifying kind of community interests that plausibly affected the jurors who convicted the former CEO of Enron, the Houston-based energy and commodities corporation, for federal fraud and insider trading related to the company’s financial downfall. That Houston residents so strongly identified with Enron helps to explain why “animosity toward Jeffrey Skilling ran deep,” as Justice Sotomayor wrote in dissent, “and the desire for conviction was widely shared.”²¹⁰

[M]ost Houstonians identified Enron with their city—the place of its founding and headquarters. Enron provided a source of pride for Houstonians, as well as a stimulus to the local economy. When the company descended into bankruptcy, thousands lost their jobs and savings, and local businesses and communities lost important monetary contributions.²¹¹

204. See Roland Bénabou & Jean Tirole, *Incentives and Prosocial Behavior*, 96 AM. ECON. REV. 1652, 1653 (2006).

205. *Skilling v. United States*, 130 S. Ct. 2896, 2901, 2908 (2010) (citations omitted).

206. See Tony Pugh, *A Taut Tallahassee Waits as Lozano Trial Approaches*, MIAMI HERALD, Mar. 1, 1993, at 1A.

207. See *id.*; see also *Lozano v. State*, 584 So. 2d 19, 21 (Fla. Dist. Ct. App. 1991).

208. See *Lozano*, 584 So. 2d at 22 n.5. The officer was acquitted on remand in Orlando. See Larry Rohters, *Tension Surrenders to Relief as Miami Reacts to Verdict*, N.Y. TIMES, May 30, 1993, at A18.

209. See *Lozano*, 584 So. 2d at 22–23.

210. See *Skilling*, 130 S. Ct. at 2954 (Sotomayor, J., concurring in part and dissenting in part).

211. Christina Collins, Note, *Stuck in the 1960s: Supreme Court Misses an Opportunity in Skilling v. United States to Bring Venue Jurisprudence into the Twenty-First Century*, 44 TEX. TECH L. REV. 391, 415 (2012) (footnotes omitted).

It is not just that “four [of the jurors who decided the case] knew former Enron employees who lost [their] savings.”²¹² It is that those individuals who identify with Houston and the corporation once at the heart of it might quite reasonably seek to vindicate their disrupted sense of city “pride” in a manner that inclines them to return a verdict “against those who oversaw Enron’s collapse.”²¹³ That community interest should be tolerated as a relevant subjective perspective, so long as it does not ride roughshod over the competing ideal of jury objectivity.

b. Conforming

A prospective juror need not himself identify with a broader group for its values or goals to exert “outside influence” over his thinking about a case. A related interest arises when a juror who does not herself identify with the community nevertheless feels pressure to conform her decisionmaking in a way that would serve that community’s perceived interests. The Enron case is again instructive. Justice Sotomayor described such conforming interests in her dissent: “Juror 75, for instance, told the court, ‘I think a lot of people feel that they’re guilty. And maybe they’re expecting something to come out of this trial.’ It would be ‘tough,’ she recognized ‘to vote not guilty and go back into the community.’”²¹⁴ The trial court in *Skilling* acknowledged this need to withstand community pressure upon return when it announced to potential jurors during voir dire that “it would take courage” for them to acquit.²¹⁵

Another example comes from the trial of Timothy McVeigh for the Oklahoma City bombing that affected thousands of victims’ family and friends across the state.²¹⁶ The judge in the case was right to have ordered a change of venue, explaining that “[t]he effects of the explosion on that community are so profound and pervasive” that jurors who come from the community, whether or not they themselves shared the city’s values, could be expected to feel “a sense of obligation to reach a result which will find general acceptance in the relevant audience.”²¹⁷ These interests cave to, rather than identify with, concern for the welfare of one’s community.²¹⁸

212. Brief for Petitioner at 13, *Skilling v. United States*, 130 S. Ct. 2896 (2010) (No. 08-1394), 2009 WL 4818500, at *19.

213. *United States v. Skilling*, 554 F.3d 529, 561 (5th Cir. 2009), *aff’d in part*, 130 S. Ct. 2896 (2010).

214. *Skilling*, 130 S. Ct. at 2957 (Sotomayor, J., concurring in part and dissenting in part) (citations omitted).

215. Brief for Petitioner, *supra* note 212, at 9.

216. *United States v. McVeigh*, 918 F. Supp. 1467 (W.D. Okla. 1996).

217. *Id.* at 1470, 1473.

218. For more on brain correlates of conformity, see Vasily Klucharev et al., *Downregulation of the Posterior Medial Frontal Cortex Prevents Social Conformity*, 31 J. NEUROSCI. 11, 934 (2011).

2. *Case-General Beliefs*

A second category of outside influences is, like community interests, a mixed bag, ranging from worthy perspectives to hateful intolerance. This last class of extra-trial factors that get lumped under the term bias comprises attitudes about the broader kinds of social groups or social ideologies relevant to the litigation but independent of the specific people or events at trial.²¹⁹

These case-general beliefs concern views about a social group to which a party or witness belongs, and ideological views about the crime, defense, or punishment. Cases before the Supreme Court have considered jurors' beliefs about whether the act that a defendant is said to have committed should be criminalized,²²⁰ about whether a punishment such as the death penalty should (ever) be imposed,²²¹ and about a defendant's race, especially if the victim belongs to a different race.²²²

These case-general beliefs often relate to a case-salient cause or group with which a juror identifies, apart from her community writ large. Dan Kahan and his colleagues have demonstrated that people "tend selectively to credit empirical information in patterns congenial to their cultural values" under conditions like those at trial in which people must make sense of uncertain or ambiguous facts among competing claims about how they matter.²²³

a. *Affiliative*

The first kind of case-general beliefs concerns the social groups to which jurors belong or that the trial is perceived to implicate. Jurors bring to the court a range of life experiences and attitudes that relate to their being young or old, religious or atheist, "a man or woman, a black person or a white person, a low-wage laborer as distinct from a well-paid

219. See Note, *Community Hostility and the Right to an Impartial Jury*, 60 COLUM. L. REV. 349, 350 (1960) (distinguishing "general knowledge and predisposition" from extraevidentiary beliefs that "operate solely in a particular case or with respect to a particular defendant").

220. See *Reynolds v. United States*, 98 U.S. 145, 157 (1878) (holding that potential jurors living in polygamy were not impartial to serve in the trial of a defendant accused of bigamy).

221. See *Wainwright v. Witt*, 469 U.S. 412, 423 (1985) (spelling out conditions under which states may exclude prospective jurors in capital cases for their opposition to the death penalty).

222. See *Turner v. Murray*, 476 U.S. 28, 33 (1986) (reversing death sentence of black defendant convicted of murdering white man because trial judge failed to ask about possible racial bias).

223. Dan M. Kahan et al., "They Saw a Protest": *Cognitive Illiberalism and the Speech-Conduct Distinction*, 64 STAN. L. REV. 851, 859 (2012); see Dan M. Kahan, *Foreword: Neutral Principles, Motivated Cognition, and Some Problems for Constitutional Law*, 125 HARV. L. REV. 1, 24 (2011) (citations omitted) ("[M]ock jury studies have linked identity-protective cognition . . . to conflicting perceptions of the risk posed by a motorist fleeing the police in a high-speed chase; of the consent of a date rape victim who said 'no' but did not physically resist her assailant; of the volition of battered women who kill in self-defense; and of the use of intimidation by political protestors.").

desk worker.”²²⁴ Jurors might share such affiliations with parties, victims, attorneys, or witnesses in the case. These affiliations can in turn trigger assumptions that people from certain groups are more or less credible or dangerous, worthy of pity, or likely to reoffend.

The normative valence of these affiliative case-general beliefs range from the laudable to the repugnant.²²⁵ Juror attitudes that stigmatize or degrade other groups, for example, are worth avoiding more than statistical stereotypes or cultural norms. Differently situated people often perceive the same event in a very different light, depending on how they view social disadvantage or how they identify with the life experiences of others.²²⁶

The fact that a young black defendant from a poor neighborhood fled from the police, for instance, might be construed by a juror who grew up under similar conditions as evidence that the defendant feared mistreatment by police, but regarded by a juror from an affluent social background as evidence of the defendant’s guilt. Neither perspective should be excluded from deliberations simply because it reflects an outside source of juror influence. But certainly racial bigotry should.

Affiliative beliefs are about more than race. They might also concern gender, national origin, and sexual orientation, or any number of socially salient occupations or roles—such as spouses, mechanics, and social activists—as well as traits and behaviors—such as old, loyal, and violent. Justice O’Connor has written, for example, that “the battered wife [] on trial for wounding her abusive husband” might reasonably seek “to ensure that the jury of her peers contains as many women members as possible.”²²⁷

Consider also affiliative beliefs that relate to a juror’s felony conviction:

[A] person who has suffered the most severe form of condemnation that can be inflicted by the state . . . might . . . harbor a continuing resentment against ‘the system’ that punished him and [a uniquely

224. *Taylor v. Sisto*, 606 F.3d 622, 627–28 (9th Cir. 2010), *superseded by* 449 F. App’x 665 (9th Cir. 2011) (linking “[t]he requirement of representativeness . . . to the varied and unique experiences that Americans of different backgrounds bring into the jury box”).

225. *See supra* notes 66–70 and accompanying text.

226. *See, e.g.*, Dov Fox, *Silver Spoons and Golden Genes: Genetic Engineering and the Egalitarian Ethos*, 33 AM. J.L. & MED. 567, 592, 592 n.154 (2007); *see id.* at 593 n.159 (explaining why, for example, “white males [might] struggle empathizing with the obstacles that females and minorities face in a social system characterized by patriarchy and racial prejudice”).

227. *See J.E.B. v. Alabama ex rel. T.B.*, 511 U.S. 127, 149, 151 (1994) (O’Connor, J., concurring) (explaining that “one need not be a sexist to share the intuition that in certain cases a person’s gender and resulting life experience will be relevant to his or her view of the case”); *see also* *Abbott Labs. Supplemental Brief Regarding United States v. Windsor*, *Smithkline Beecham Corp. v. Abbott Labs.*, 740 F.3d 471 (9th Cir. 2014) (Nos. 11-17357, 11-17373), 2014 WL 211807 (concerning whether prospective jurors can be excluded from service on the basis of their sexual orientation).

informed perspective, even if typically in] favor of the defendant on trial, who is seen as a fellow underdog caught in its toils.²²⁸

The same twin charge of hostility or empathy might be levied against a juror who himself or whose loved one has fallen victim to a tort or crime that resembles the events or crimes at issue in the trial.²²⁹

The powerful influence of these affiliations coheres with the “story model” of jurors who reconstruct legal facts as a narrative whose themes depend on the understandings that they draw from their own lives.²³⁰ This mixed bag of affiliative case-general beliefs demands a more tailored response than uprooting such bias across the board. I will explain this approach after clarifying ideological case-general beliefs below.

b. Ideological

Among the ideological kind of case-general beliefs are moral, political, or religious commitments that relate to those presented at trial. Consider jurors who hold strong opinions about, for instance, obscenity in a child pornography case, tort reform in a class action suit, or environmentalism in a pollution case. Commentators in the George Zimmerman trial have similarly seen the case as a referendum for issues ranging from self-defense and gun ownership to racial profiling and civil rights.²³¹ The juror who feels passionately about a particular cause in a case that she perceives as implicating it may find it difficult to be dispassionate about the outcome in the way that the objective ideal of the jury requires. Scientists have shown that abstract belief systems correspond to psychological differences explained in part by the human needs for security and solidarity.²³²

Not all ideological case-general beliefs are objectionable. They “serve[] causes both good and ill,” the Ninth Circuit recognized in a different context.²³³ We applaud the case-general beliefs that jurors held against “the morally-obnoxious fugitive slave laws,” for example, as we do those jurors who refused to indict “John Peter Zenger, a newspaper publisher charged with libel after criticizing the Governor of New

228. Rubio v. Superior Court, 593 P.2d 595, 600 (Cal. 1979).

229. See Brian C. Kalt, *The Exclusion of Felons from Jury Service*, 53 AM. U. L. REV. 65, 127 (2003).

230. See, e.g., Nancy Pennington & Reid Hastie, *A Cognitive Theory of Juror Decision Making: The Story Model*, 13 CARDOZO L. REV. 519, 519–20 (1991).

231. See, e.g., Adam Weinstein, *The Trayvon Martin Killing, Explained*, MOTHER JONES (Mar. 18, 2012, 9:42 AM), <http://www.motherjones.com/politics/2012/03/what-happened-trayvon-martin-explained>.

232. See, e.g., DREW WESTEN, THE POLITICAL BRAIN: THE ROLE OF EMOTION IN DECIDING THE FATE OF THE NATION (2007); John T. Jost et al., *Political Ideology: Its Structure, Functions, and Elective Affinities*, 60 ANN. REV. PSYCHOL. 307, 337 (2009).

233. United States v. Navarro-Vargas, 408 F.3d 1184, 1199 (9th Cir. 2005) (en banc) (holding that grand jury independence has historically served causes both good and ill).

York . . . because the jurors were politically opposed to the prosecutions.”²³⁴

A more contentious case concerns juror views about the death penalty. Some jurors have conscientious scruples against capital punishment broadly or believe that defendants from disadvantaged groups in particular deserve mercy because the criminal justice system tends to treat them worse.²³⁵ Other jurors strongly favor the death penalty as a symbol of opposition to social deviance or commitment to individual responsibility.²³⁶ The Supreme Court has held that “those who firmly believe that the death penalty is unjust may nevertheless serve as jurors in capital cases so long as they . . . are willing to temporarily set aside their own beliefs in deference to” the state’s interest in carrying out its capital punishment laws.²³⁷

This standard permits a trial judge to excuse for cause the potential juror who would not, during the sentencing phase, be able to impose a sentence of death, however heinous and unmitigated the crime.²³⁸ But the Supreme Court erred in authorizing the dismissal of a juror for her widely held scruples—because she would reserve the punishment of execution for very grave cases—where she nonetheless affirmed her ability and willingness to consider mitigating and aggravating factors as required under the state laws.²³⁹

That only a subset of case-general beliefs and community interests warrant exclusion from the jury makes these across-the-board categories, as with personal interests and case-specific beliefs, an unfitting basis for presumptive, indiscriminate disqualification. For personal interests and

234. *Id.* at 1192, 1199; see VIDMAR & HANS, *supra* note 47, at 225 (“If Northern juries of the 1850s acquitted the courageous people who harbored slaves in defiance of the Fugitive Slave Act, Southern juries a hundred years later acquitted people who had beaten and killed the descendants of those slaves as they attempted to assert their legal rights.”).

235. See *Uttecht v. Brown*, 551 U.S. 1, 35 (2007) (Stevens, J., dissenting) (“A cross section of virtually every community in the country includes citizens who firmly believe the death penalty is unjust but who nevertheless are qualified to serve as jurors in capital cases.”).

236. Dan M. Kahan and colleagues contrast anti-death penalty “egalitarian/solidarists” with pro-death penalty “hierarchical/individualists.” Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 HARV. L. REV. 413, 439–42 (1999); John Gastil et al., The ‘Wildavsky Heuristic’: The Cultural Orientation of Mass Political Opinion 19–21 (Oct. 15, 2005) (unpublished article), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=834264.

237. *Lockhart v. McCree*, 476 U.S. 162, 176 (1986).

238. See generally *Wainwright v. Witt*, 469 U.S. 412 (1985) (expounding on the proper standard for determining when prospective jurors may be excluded based on capital punishment views).

239. *Uttecht*, 551 U.S. at 44 (Stevens, J., dissenting). The juror gave as an example of the kind of case in which he might vote for death one in which the defendant would reoffend if released from prison. When the attorneys clarified that under the state death penalty statute, the jury could sentence a capital defendant only to death or life without parole—thus preventing any chance of the defendant’s release—the juror confirmed that he would consider and impose the death penalty in the appropriate circumstance. *Id.* at 36–37 (Stevens, J., dissenting).

case-specific beliefs, courts need only assess their presence and magnitude. I propose questionnaires that ask potential jurors about their knowledge of the people and events at trial and their social or financial stakes in the case. The uniform threat that these sources of influence pose to jury impartiality warrants a low threshold for presumptive exclusion.²⁴⁰ I would indeed limit voir dire to those instances in which it is useful to clarify ambiguous written responses about personal interests or case-specific beliefs.

For community interests and case-general beliefs, by contrast, some subvert the tension between an objective and subjective ideal of the jury, while others enrich that balance. I propose accommodating their influence by forgoing voir dire and declining to question prospective jurors about community interests and case-general beliefs. This will permit valued outside influences among these to assume their rightful place on the jury, yet will also let in those among them that are pernicious. I am not sanguine about the pervasive evil of biases like racial bigotry. To rein these darker manifestations of community interests and case-general beliefs, trial courts should supplement their broad acceptance with deeper jury pool diversity before voir dire and pretrial judicial instructions that encourage perspective sharing.²⁴¹

Community interests and case-general beliefs on the jury are managed better on the other side of the Atlantic. In England, potential jurors are not dismissed for these or other unspecified reasons, as the practice of peremptory challenges permits in the United States.²⁴² Limiting juror exclusions to personal interests and case-specific beliefs is the first step in achieving balance between subjective and objective elements of the impartial jury.

Declining to ask potential jurors about community interests and case-general beliefs is not a panacea. But it is better than our heavy reliance on peremptories. Eligible jurors who are “selected at random,” and thereby received “as they come,” Lord Denning explained over thirty years ago, tend to “represent the views of the common man” and “the people as a whole” better than jurors who survive objection by the parties after being “cross-examine[d]” for “their views on this matter or that which may arise in the course of the hearing—so as to see if they are prejudiced in any way.”²⁴³

240. See *supra* notes 193–185 and accompanying text.

241. That my proposed means of empanelling juries are quicker and cheaper than voir dire may, as a welcome byproduct, make it more likely that disputes will be resolved through trial rather than either plea bargaining in the criminal context, coercive as it tends to be, or civil settlements based on deficient discovery. See John H. Langbein, *The Disappearance of Civil Trial in the United States*, 122 *YALE L.J.* 522, 561–64 (2012) (discussing the costs and benefits of civil and criminal trials).

242. See, e.g., *Pullar v. H.M. Advocate*, (1993) J.C. 126, 134–35 (Scot.).

243. *Regina v. Sheffield Crown Ct, ex parte Brownlow*, [1980] Q.B. 530 (C.A.) 541–42.

A more inclusionary approach to community interests and case-general beliefs that prevents either side from seeking to bend the composition of the jury in its favor would allay suspicions that prospective jurors are removed for reasons that are capricious, speculative, cynical, or sinister.²⁴⁴ The abolition of peremptories would also save time, judicial resources, and privacy risks, while reducing the reliance on jury consultants—a low-tech neuro-voir dire available only to the affluent—that exacerbates inequalities between the parties.²⁴⁵

Allowing anyone who harbors such biases to serve, however, poses a real danger that more juries will hang, reach unjust verdicts, or refuse to follow the law. That is because ignorance about jurors' community interests and case-general beliefs, without more, jeopardizes the jury's essential objective dimension by making it more likely that people with harmful such biases are allowed to sit. It will not do to abide by Lord Denning's assurance that "the chances are 1,000 to one against any juror [who emerges randomly] being found unsuitable."²⁴⁶ There is a real threat that drawing community interests and case-general beliefs into the jury room could unwittingly slant the attitudes with which jurors arrive to trial, frustrate their openness to persuasion in the course of deliberations, or subvert the prospect of agreement upon a verdict.²⁴⁷

To mitigate these risks, I propose supplementing narrow bias-specific questionnaires with two reforms designed to discipline overpowering and otherwise objectionable case-general beliefs and community interests within the dynamics of group decisionmaking. The first—deepening diversification of the jury pool—would take place before jurors are selected; the second—identity-affirming instructions—would take place after.²⁴⁸

First, I would diversify jury pool by adding to the source list those who pay income tax, who receive public assistance, or who have recently moved or become citizens. The Supreme Court has squarely rejected the view that "a constitutionally impartial *jury* can be constructed . . . by 'balancing' the various predispositions of the individual *jurors*."²⁴⁹ Yet the taming of good and bad biases may require less.

Take affiliative case-general biases about race in the Zimmerman trial, in which a jury with no black members determined that the shooting

244. See *supra* note 83 and accompanying text.

245. See Hoffman, *supra* note 83, at 29.

246. Regina v. Sheffield Crown Ct, *ex parte* Brownlow, [1980] Q.B. 530 (C.A.) 542.

247. Dov Fox, *Retracing Liberalism and Remaking Nature: Designer Children, Research Embryos, and Featherless Chickens*, 24 *BIOETHICS* 170, 173 (2010).

248. The implementation of any such debiasing mechanisms should of course be sensitive to the risks of under- or over-correction. See Timothy D. Wilson et al., *Mental Contamination and the Debiasing Problem*, in *HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT* 185, 191 (Thomas Gilovich et al. eds., 2002).

249. See *Lockhart v. McCree*, 476 U.S. 162, 177–78 (1986); see also *supra* notes 57–61.

death of a young black man in Florida did not constitute a crime. A month after Martin was killed, economists published a study of conviction rates in 700 Florida felony trials from 2000 to 2010 based on the composition of potential jurors called to the courthouse, controlling for racial composition of jurors ultimately selected to serve.²⁵⁰ Their findings are shocking.

When the pool of eligible jurors drawn from a community included no black members, black defendants were convicted at a rate almost twenty percent higher than white defendants.²⁵¹ But when there was even a single black person in the jury pool, the conviction rate was *lower* for black defendants than for whites.²⁵² So conviction rates for blacks and whites nearly flipped based on whether just one black person was randomly assigned to the jury pool.²⁵³ This stunning finding controlled for a wide range of variables including the race, gender, and age of seated jurors and the offense class and history of the defendant.²⁵⁴

Why might racial diversity in the pool from which jurors are chosen be thought to influence jury verdicts or even curb prejudice or promote empathy? Two kinds of explanations emerge from the neuroscience of bias control, each corresponding to the internal as opposed to external reasons to control bias.²⁵⁵ The first explanation is that jurors' engagement alongside people of different races as they wait in the courthouse before trial might enlarge perspectives and shape perceptions in constructive ways, even if the jury itself is not diverse.²⁵⁶ By confronting eventual jurors with the live possibility of serving with people from other races, this background condition of pretrial diversity has the power to activate internal commitments to cross-racial understanding or attenuate the expression of pejorative stereotypes during trial.²⁵⁷

The second reason is that jury pool diversity promises to subdue the risks of admitting certain biases concerns "external" juror motivation to avoid disapproval.²⁵⁸ Jurors' awareness that they might need to reach a shared verdict with those who are different, other studies suggest, leads

250. See Shamena Anwar et al., *The Impact of Jury Race in Criminal Trials*, 127 Q. J. Eco. 1017, 1017–19 (2012).

251. *Id.* at 1034–35.

252. *Id.* at 1035.

253. *Id.*

254. *Id.* at 1032–34.

255. See *supra* notes 95–102 and accompanying text.

256. See Samuel R. Sommers, *On Racial Diversity and Group Decision Making: Identifying Multiple Effects of Racial Composition on Jury Deliberations*, 90 J. PERSON. & SOC. PSYCHOL. 597, 607–08 (2006).

257. See *id.* at 602. Cf. Kang et al., *supra* note 74, at 1172 (arguing that "reminding [jurors] of countertypical associations . . . might momentarily activate different mental patterns while in the courthouse and reduce the impact of implicit biases on their decisionmaking").

258. Studies show that white jurors who serve on racially mixed juries—as opposed to all-white ones—are less likely, by a considerable measure, to think that a black defendant is guilty, not just after they deliberate, but even before trial. See Sommers, *supra* note 256, at 604–05.

them to lay greater emphasis on actual and missing evidence in deliberations, permit fewer inaccurate statements to go uncorrected, and undertake richer dialogue on sensitive matters, without greater risk of hung or nullifying juries.²⁵⁹ Researchers explain that diversity in the jury pool prompts jurors, for fear of being perceived as prejudiced, to engage more carefully with the evidence and more openly with ideals and backgrounds other than their own.²⁶⁰

The inclusion of other case-general beliefs and community interests in the jury pool might in a similar way help to encourage perspective sharing and critical appraisal of unreflective sources of outside influence. The procedures that trial courts use to create jury pools today often exclude, without meaning to, a disproportionate number of minorities and others who tend to appear less on lists of voters or licensed drivers, who do not remain at one address for long enough to receive a jury summons, or cannot obtain transportation to the courthouse or time off from work.²⁶¹

But jurisdictions need not oversample from minority or otherwise targeted neighborhoods to achieve the desired diversity in jury pool.²⁶² They could also expand the source list properties to include more minorities and others who appear less frequently on lists of voters and licensed drivers.²⁶³ Diversifying the jury pool using such non-salient measures would enhance balanced deliberations without risking trading on false or demeaning assumptions about jurors in the way that cross-section jurisprudence forbids.²⁶⁴

My second proposal advocates adoption of the judicial instructions that judges and scholars have long derided but that debiasing research has more recently commended as a promising way to enrich discourse

259. See *id.* at 609–10. Social psychologists have found that this prejudice-mitigating effect is even stronger within decisionmaking contexts for which race is *less* salient, as when the victim and defendant belong to different races, but race is not made a prominent issue at trial. See Samuel R. Sommers, *Race and the Decision Making of Juries*, 12 LEGAL & CRIMINOLOGICAL PSYCHOL. 171, 174 (2007); see also Cynthia Lee, *Making Race Salient: Trayvon Martin and Implicit Bias in a Not Yet Post-Racial Society*, 91 N.C. L. REV. 1555, 1589–90 (2013) (“The research on race salience suggests that it is important to highlight the relevance of race and make jurors aware of the possibility of racial bias if one is concerned that implicit racial bias might result in unfair treatment of either a Black defendant or a Black victim.”).

260. See, e.g., Nilanjana Dasgupta & Luis M. Rivera, *When Social Context Matters: The Influence of Long-Term Contact and Short-Term Exposure to Admired Outgroup Members on Implicit Attitudes and Behavioral Intentions*, 26 SOC. COGNITION 112, 115–16 (2008). See generally Tor D. Wager et al., *Prefrontal-Subcortical Pathways Mediating Successful Emotion Regulation*, 59 NEURON 1037 (2008) (identifying prefrontal pathways that regulate emotion and using them to predict a reduction in emotion).

261. See, e.g., *In re Jury Plan of E. Dist. of N.Y.*, 61 F.3d 119, 121–22 (2d Cir. 1995).

262. See generally *United States v. Ovalle*, 136 F.3d 1092 (6th Cir. 1998) (holding unconstitutional racially salient efforts to achieve demographic balance within the jury pool).

263. See Nancy J. King, *Racial Jurymantering: Cancer or Cure? A Contemporary Review of Affirmative Action in Jury Selection*, 68 N.Y.U. L. REV. 707, 712–14 (1993).

264. See, e.g., *Duren v. Missouri*, 439 U.S. 357, 369 (1979).

and reduce polarization.²⁶⁵ David Sklansky and others have suggested that “the growing body of research on debiasing gives reason to think” that such curative instructions “make it less likely that jurors will over-rely on” or “react emotionally to” some factor whose undesirability a judge clearly explains.²⁶⁶

Consider case-general racial bigotry, whether it is deliberative or automatic. Federal District Court Judge Mark Bennett, for example, instructs jurors to avoid such biases that we all share in a non-accusatory way that seeks to avoid putting jurors on the defensive or provoking their resistance.²⁶⁷ The existing psychology research does not yet convince me that judicial admonitions that jurors be aware of their own decisionmaking processes or set aside certain sources of influence will be effective.²⁶⁸

More encouraging is the prospect of using judicial instruction to affirm a prospective juror’s sense of self-worth in ways that “suppl[y] a buffer against the psychic cost associated with giving open-minded evaluation to threatening information.”²⁶⁹ The expression of “moderation or equivocation within groups” and of “openness or ambivalence by those in the opposing group,” Dan M. Kahan and his colleagues suggest, can relieve the dangers of community interests and case-general beliefs by creating conditions under which jurors are more willing to entertain diverging attitudes and “display cooperative open-mindedness.”²⁷⁰

Kahan and colleagues derive from the psychological literature a mechanism by which to stimulate such identity-affirmation on the jury. Judges should instruct jurors, they propose, “to speak in turn and to identify not only his or her own position but also the strongest counterargument to it” to disrupt exaggerated assumptions of division and afford jurors cover to reveal their ambivalence.²⁷¹ Instructing jurors before they are seated to deliberate in this give-and-take way will make jurors less likely to act on the automatic biases that they do not on reflection endorse but nonetheless hold. And it may even better the chances that over the course of trial, they will “have given sympathetic attention to evidence contrary to their cultural predispositions.”²⁷²

265. See *Krulewitch v. United States*, 336 U.S. 440, 453 (1949) (Jackson, J., concurring) (“The naïve assumption that prejudicial effects can be overcome by instructions to the jury is one that all practicing lawyers know to be unmitigated fiction.”); Peter J. Smith, *New Legal Fictions*, 95 GEO. L.J. 1435, 1451–52 (2007) (referring to the “presumption that jurors can understand and follow limiting instructions” as a “legal fiction”).

266. Sklansky, *supra* note 9, at 416.

267. Mark W. Bennett, *Unraveling the Gordian Knot of Implicit Bias in Jury Selection: The Problems of Judge-Dominated Voir Dire, the Failed Promise of Batson, and Proposed Solutions*, 4 HARV. L. & POL’Y REV. 149, 169 (2010).

268. See Sklansky, *supra* note 9, at 439.

269. Kahan et al., *supra* note 223, at 896.

270. *Id.* at 896–97 (emphasis omitted).

271. *Id.* at 897.

272. *Id.*

CONCLUSION

Many critics of the Zimmerman verdict expressed their frustration in terms of jury bias.²⁷³ This Article argues that this charge of bias is, articulated at that level of abstraction, never enough to challenge a juror or verdict.

The conception of jury bias that much of impartiality doctrine takes for granted sweeps every source of outside influence under that vague concept. No such monolithic conception of bias can meaningfully distinguish those outside sources of juror influence that inform a fair trial from those that infect it. There is instead, I have argued, a spectrum of cognitive biases—personal interests, community interests, case-specific beliefs, and case-general beliefs—whose constitutional statuses and normative valences vary considerably.

I have recommended that courts vindicate the objective ideal of the jury by purging only personal interests and case-specific beliefs and that they vindicate the subjective ideal by adopting a more inclusive approach with respect to community interests and case-general beliefs. The practical effect of adopting these recommendations is to expand recusal for cause, abolish peremptory challenges, and implement low-cost debiasing measures that are informed by the most reliable available evidence from social psychology and neuroscience.

273. See, e.g., Richard Gabriel, *Race, Bias and the Zimmerman Jury*, CNN OPINION (July 16, 2013, 4:14 PM), <http://www.cnn.com/2013/07/16/opinion/gabriel-bias-zimmerman>; Joe Patrice, *The Rise and Fall of Juror B37 and How Verdicts Are Made*, ABOVE THE LAW (July 16, 2013, 12:34 PM), <http://abovethelaw.com/2013/07/the-rise-and-fall-of-juror-b37-and-how-verdicts-are-made>; Rhonda Waller, *Juror Bias and the Trayvon Martin Case*, APPLIED SOC. PSYCHOL. (July 31, 2013, 3:48 PM), <http://www.personal.psu.edu/bfr3/blogs/asp/2013/07/juror-bias-and-the-trayvon-martin-case.html>.