

## The Other View of *The Cathedral*

Yotam Kaplan

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## THE OTHER VIEW OF *THE CATHEDRAL*

YOTAM KAPLAN\*

*In their celebrated article, now simply known as The Cathedral, Guido Calabresi and Douglas Melamed laid out the choice between property rules and liability rules. The rich and sophisticated literature that followed added multiple new ways to view this basic choice and highlighted the advantages of liability rules. The current Article adds a new element to the classic comparison between liability and property rules by introducing the elements of racial inequality and racial bias into the analysis. This move immediately proves fruitful, upending the familiar picture of The Cathedral and showcasing the disadvantage of liability rules.*

*This Article shows that since liability rules entail an additional layer of open-ended judicial discretion, their application is more susceptible to judicial bias and is more likely to generate discriminatory outcomes. When employing a liability rule, the legal system allows a person's right to be removed by another, for compensation objectively determined by the judge or jury. This formulation of liability rules should immediately strike us as suspicious: Judges and jurors are never "objective." The Article shows that implicit biases cause judges and jurors to undervalue the rights of members of racial minorities, thus offering them insufficient legal protection under liability rules. Conversely, property rules do not suffer the same disadvantage, since under property rules right holders are granted authority to evaluate their own rights or hold onto them if they are undervalued by others. The Article discusses the implications of this analysis to the classic debate regarding property and liability rules and studies relevant policy implications.*

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## INTRODUCTION

The past year marked the semi-centennial of the publication of *The Cathedral*, Guido Calabresi and Douglas Melamed's monumental article.<sup>1</sup> As suggested by its title, *The Cathedral*<sup>2</sup> offers an analysis of the grand structure of the legal system.<sup>3</sup> The article provides a unified theory of tort law and property law,<sup>4</sup> and suggests a broader framework for the analysis of legal entitlements in all legal fields.<sup>5</sup> Very few articles can compete with the fame and prominence of *The Cathedral* as a modern-age classic of legal scholarship. *The Cathedral* is one of the most cited law review articles of all time,<sup>6</sup> has changed the landscape of legal theory,<sup>7</sup> germinated a multitude of scholarly responses,<sup>8</sup> and established an entirely new, rich, and sophisticated branch of legal scholarship.<sup>9</sup>

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1. Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).

2. Scholars regularly refer to Calabresi & Melamed's work simply as "*The Cathedral*." See, e.g., Carol M. Rose, *The Shadow of The Cathedral*, 106 YALE L.J. 2175 (1997) (Calabresi and Melamed's article is referenced in the title).

3. Calabresi & Melamed, *supra* note 1, at 1089; see also Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1, 2–3 (2002).

4. Calabresi & Melamed, *supra* note 1, at 1089 ("Only rarely are Property and Torts approached from a unified perspective. Recent writings by lawyers concerned with economics and by economists concerned with law suggest, however, that an attempt at integrating the various legal relationships treated by these subjects would be useful both for the beginning student and the sophisticated scholar. By articulating a concept of 'entitlements' which are protected by property, liability, or inalienability rules, we present one framework for such an approach." (footnote omitted)).

5. Bell & Parchomovsky, *supra* note 3, at 2–3 (describing the broad application of the framework offered in *The Cathedral*, stating that "in 1972, Guido Calabresi and Douglas Melamed resolved to craft a comprehensive, yet elegant, model for organizing the universe of legal entitlements" (footnote omitted)); Saul Levmore, *Unifying Remedies: Property Rules, Liability Rules, and Startling Rules*, 106 YALE L.J. 2149, 2151 (1997) (explaining that "the value of the Calabresi-Melamed framework lies in its ability to illuminate fields outside of traditional property and tort law").

6. Fred R. Shapiro & Michelle Pearse, *The Most-Cited Law Review Articles of All Time*, 110 MICH. L. REV. 1483, 1489 (2012) (listing *The Cathedral* among the top ten most-cited law review articles of all time); James E. Krier & Stewart J. Schwab, *The Cathedral at Twenty-Five: Citations and Impressions*, 106 YALE L.J. 2121, 2122 (1997) (showcasing the influence of *The Cathedral* using citation analysis).

7. Rose, *supra* note 2, at 2175–76.

8. *Id.*

9. See, e.g., *id.*; Bell & Parchomovsky, *supra* note 3; Robert C. Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls*, 40 U. CHI. L. REV. 681, 683 (1973) (employing the categories offered by Calabresi and Melamed in the context of land use disputes); A. Mitchell Polinsky, *Controlling Externalities and Protecting Entitlements: Property Right, Liability Rule, and Tax-Subsidy Approaches*, 8 J. LEGAL STUD. 1 (1979); Madeline Morris, *The Structure of Entitlements*, 78 CORNELL L. REV. 822 (1993); Richard Craswell, *Property Rules and Liability Rules in Unconscionability and Related Doctrines*, 60 U. CHI. L. REV. 1 (1993); Ward Farnsworth, *Do Parties to Nuisance Cases Bargain After Judgment? A Glimpse Inside the Cathedral*, 66 U. CHI. L. REV. 373 (1999); Zohar Goshen, *Controlling Strategic Voting: Property*

*The Cathedral* introduced a revolutionary reconceptualization of legal rights and legal duties, departing from then long-accepted jurisprudential categories.<sup>10</sup> Calabresi and Melamed open their analysis by explaining the two-layered structure of legal rights: A full delineation of a legal right includes, first, its assignment with a right holder,<sup>11</sup> and, second, the determination of a modality of protection.<sup>12</sup> Calabresi and Melamed describe two basic modalities of protection: property rule protection and liability rule protection,<sup>13</sup> and establish them as fundamental categories in the structure of the legal system.<sup>14</sup> They explain the two protection modalities as follows. When an entitlement is protected under a property rule, the entitlement cannot be removed without the holder's consent;<sup>15</sup> any attempt to remove the entitlement without the holder's consent can be prevented through injunctive relief or an equivalent legal response.<sup>16</sup> Thus, under property rule protection, the entitlement holder is granted exclusive power to set the price that any non-holder would be required to pay if they wished to use the protected right.<sup>17</sup> Conversely, when an entitlement is protected under a liability rule, the entitlement can be removed without the holder's consent, for a price to

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*Rule or Liability Rule?*, 70 S. CAL. L. REV. 741 (1997); Daphna Lewinsohn-Zamir, *The Choice Between Property Rules and Liability Rules Revisited: Critical Observations from Behavioral Studies*, 80 TEX. L. REV. 219 (2001); Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293 (1996); Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357 (2001); Dale A. Nance, *Guidance Rules and Enforcement Rules: A Better View of the Cathedral*, 83 VA. L. REV. 837 (1997); Symposium, *Property Rules, Liability Rules, and Inalienability: A Twenty-Five Year Retrospective*, 106 YALE L.J. 2081 (1997); Saul Levmore, *Love It or Leave It: Property Rules, Liability Rules, and Exclusivity of Remedies in Partnership and Marriage*, 58 L. & CONTEMP. PROBS. 221 (1995). Of course, this list is far from comprehensive: Additional responses to *The Cathedral* are discussed throughout this Article.

10. Bell & Parchomovsky, *supra* note 3, at 11 ("Calabresi and Melamed . . . developed a new conceptualization of the law."); Rose, *supra* note 2, at 2176 ("Despite the becoming modesty of their title ('one view'), Calabresi and Melamed put forth a synoptic view of common law entitlements arguably not seen since Wesley Newcomb Hohfeld's turn-of-the-century general categorization of legal rights."). Rose refers to Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16 (1913).

11. Calabresi & Melamed, *supra* note 1, at 1090, 1093.

12. *Id.* at 1090–91, 1105.

13. *Id.* at 1105. *The Cathedral* also offers a third type of legal protection rule, protection provided through inalienability rules. *Id.* at 1111–15. Inalienability protection is granted when an entitlement cannot be removed or sold, even with the consent of the holder. Margaret Jane Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849, 1850 (1987); Susan Rose-Ackerman, *Inalienability and the Theory of Property Rights*, 85 COLUM. L. REV. 931, 932 (1985). In this Article, I focus on property rules and liability rules, as much of the literature has done. A critical race theory analysis of inalienability rules is thereby left for future research opportunities.

14. Calabresi & Melamed, *supra* note 1, at 1092, 1105–06.

15. *Id.*

16. *Id.*

17. *Id.* at 1092, 1105.

be determined by an objective governmental organ, typically a court.<sup>18</sup> Thus, under liability rule protection, non-holders are allowed to take the entitlement without the holder's consent, for payment equal to the objective value of the removed right, typically in the form of the payment of damages.<sup>19</sup>

Calabresi and Melamed further highlighted a key advantage of liability rules.<sup>20</sup> By allowing rights to be removed for a fair price, liability rules facilitate a *dynamic* system of entitlements.<sup>21</sup> In such a system, holders are fully protected, and will always enjoy the full value of their rights;<sup>22</sup> at the same time, holders cannot abuse their rights, and non-holders have the option to obtain any rights they need by suffering to pay the full value of the right they removed or violated,<sup>23</sup> as objectively determined by the state.<sup>24</sup>

As Calabresi and Melamed explain, they only offer “*One View*” of the Cathedral; multiple other scholars then followed up with their own perspectives, providing additional views and angles on the basic property-liability rule dichotomy.<sup>25</sup> The advantage of liability rules is a reoccurring theme in the rich and vast literature that followed *The Cathedral*,<sup>26</sup> with scholars emphasizing the attractiveness of liability rules in circumventing rent-seeking behaviors and holdout problems.<sup>27</sup>

Against this backdrop, this Article sets out to offer a new and crucially missing view of *The Cathedral*, by focusing on the issue of racial inequality. Viewed from this new direction, the familiar picture of *The Cathedral* is immediately upended, and troubling features of liability rules become apparent. Under a property rule, a right holder is allowed to determine the

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18. *Id.* at 1092, 1106–10.

19. *Id.*

20. *Id.* at 1106.

21. *Id.*

22. *Id.*

23. *Id.* at 1106–07.

24. *Id.* at 1092.

25. See, e.g., Rose, *supra* note 2; Bell & Parchomovsky, *supra* note 3; Ellickson, *supra* note 9; Levmore, *supra* note 5; James E. Krier & Stewart J. Schwab, Essay, *Property Rules and Liability Rules: The Cathedral in Another Light*, 70 N.Y.U. L. REV. 440 (1995); Ian Ayres & J.M. Balkin, Essay, *Legal Entitlements as Auctions: Property Rules, Liability Rules, and Beyond*, 106 YALE L.J. 703 (1996); Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 HARV. L. REV. 713 (1996).

26. Kaplow & Shavell, *supra* note 25, at 717–18; Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027, 1032 (1995); Jeffrey J. Rachlinski & Forest Jourden, *Remedies and the Psychology of Ownership*, 51 VAND. L. REV. 1541, 1575 (1998) (“The papers by Calabresi and Melamed, Ayres and Talley, and Kaplow and Shavell all favored liability rules because of their ability to facilitate trade.”).

27. Henry E. Smith, *Property and Property Rules*, 79 N.Y.U. L. REV. 1719, 1721 (2004) (“[O]ver the years most commentators theorizing about entitlement protection have come to conclude that liability rules are generally preferable to property rules in achieving an efficient allocation of resources. Property rules find relatively few defenders . . .” (footnote omitted)).

value of their entitlement;<sup>28</sup> under a liability rule, the power to determine the value of the entitlement is taken from the right holder and given to an objective state organ.<sup>29</sup> Once we recognize that state organs are not objective, but racially biased,<sup>30</sup> it is clear that the move from a property rule to a liability rule is not a neutral one. When right holders are members of a racial minority, the move from a property rule to a liability rule amounts to the appropriation of the holder's ability to determine the value of their right,<sup>31</sup> and the assignment of this authority to a biased state organ, who is likely to undervalue the right. This argument undermines the assumption that liability rules assure full and equal protection of rights, thereby refuting the supposed equivalation of liability and property rules.

To glean a quick insight into the argument in this Article, consider the polluting factory hypothetical, a mainstay of Calabresi and Melamed's framework.<sup>32</sup> In particular, assume that pollution from the factory causes harm to nearby residents, and that those residents are members of a racial minority group. First, if granted property rule protection, the residents will be entitled to an injunction. Armed with this mode of legal protection, the residents will only allow the factory to operate if it can pay them a sum of money, sufficient in their eyes, to compensate them for the value of their lost rights. Conversely, under a liability rule, the factory will be allowed to operate, as long as it pays the residents the objective value of their lost rights as determined by the court. When the residents are members of a racial minority, implicit racial judicial bias will systematically lead to undervaluation of the residents' rights under a liability rule. Judges and jurors tend to undervalue lost wages,<sup>33</sup> house values,<sup>34</sup> and even the pain and suffering<sup>35</sup> of members of racial minorities. This means that the move from property rule protection to liability rule protection changes not only the modality of legal protection, but also the actual value of the right for holders who are members of a racial minority.

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28. Calabresi & Melamed, *supra* note 1, at 1092, 1105.

29. *Id.* at 1092, 1106.

30. Charles Lawrence III, *Unconscious Racism Revisited: Reflections on the Impact and Origins of "The Id, the Ego, and Equal Protection"*, 40 CONN. L. REV. 931, 936 (2008); Jonathan Cardi, Valerie P. Hans & Gregory Parks, *Do Black Injuries Matter?: Implicit Bias and Jury Decision Making in Tort Cases*, 93 S. CAL. L. REV. 507, 509 (2020); Jerry Kang et al., *Implicit Bias in the Courtroom*, 59 UCLA L. REV. 1124, 1132 (2012).

31. In this sense, this Article joins some earlier critiques of the idea of liability rule protection. Jules L. Coleman & Jody Kraus, *Rethinking the Theory of Legal Rights*, 95 YALE L.J. 1335, 1339 (1986) (criticizing the concept of liability rules as contradictory to the classic notions of right as a domain of freedom, autonomy, and agency).

32. Calabresi & Melamed, *supra* note 1, at 1115–16; Rose, *supra* note 2, at 2175–76.

33. See *infra* Section II.B.4.

34. See *infra* Section II.B.1.

35. See *infra* Section II.B.3.

Extrapolating from the example of the polluting factory, this Article provides evidence for the discriminatory application of liability rules more broadly, in all areas of law, and demonstrates the comparative advantage of property rule protection. Thus, under property rules, right holders are given the power to determine the value of their own rights; if others give a low valuation, right holders can simply choose to hold on to their entitlements and refuse to sell them. Under liability rules, right holders are deprived of this power; non-holders can decide to remove entitlements without the holders' consent, for a price determined by a state organ. When right holders are members of a racial minority, and such determinations by state organs are racially biased, liability rules fail to adequately protect rights.

By introducing this argument, this Article makes three novel contributions. The first contribution is conceptual, reframing the classic debate regarding liability and property rules by viewing it from a new direction.<sup>36</sup> This reconceptualization sheds new light on the familiar picture of *The Cathedral*, allowing new insights and a fresh perspective. The second contribution is analytical. This Article shows that once the comparison between property rules and liability rules accounts for the possibility of racial inequality, it becomes clear that liability rules are systematically biased.<sup>37</sup> This Article offers ample support for this analytical claim.<sup>38</sup> The third contribution is normative, as this Article highlights a disadvantage of liability rules and offers that property rules should be preferred whenever possible.<sup>39</sup> This argument pushes back against recent trends in legal scholarship that have come to favor liability rules over property rules on grounds of efficiency.<sup>40</sup> The choice between liability rules and property rules is a fundamental question of legal design, relevant to all areas of law, and regularly revisited by scholars. This Article offers a novel contribution to this core normative debate. This contribution is especially timely, as it helps connect *The Cathedral* with the insights of critical race theory, a scholarly perspective now drawing public and media attention more than ever before.<sup>41</sup>

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36. See *infra* Section II.A.2.

37. See *infra* Section III.A.

38. See *infra* Section II.B.

39. See *infra* Section III.B.

40. See *infra* Section I.B.2.

41. See, e.g., Marisa Iati, *What is Critical Race Theory, and Why Do Republicans Want to Ban It in Schools?*, WASH. POST (May 29, 2021, 8:00 AM), <https://www.washingtonpost.com/education/2021/05/29/critical-race-theory-bans-schools/>; Charles M. Blow, Opinion, *Demonizing Critical Race Theory*, N.Y. TIMES (June 13, 2021), <https://www.nytimes.com/2021/06/13/opinion/critical-race-theory.html>; Michelle Goldberg, Opinion, *The Maddening Critical Race Theory Debate*, N.Y. TIMES (June 28, 2021), <https://www.nytimes.com/2021/06/28/opinion/critical-race-theory.html>; Kmele Foster et al., Opinion, *We Disagree on a Lot of Things. Except the Danger of Anti-Critical-Race-Theory Laws*, N.Y. TIMES (July 5, 2021), <https://www.nytimes.com/2021/07/05/opinion/we-disagree-on-a-lot-of->



This Article proceeds as follows. Part I describes Calabresi and Melamed's classical *Cathedral* article<sup>42</sup> and reviews the key moves in the literature building on this seminal work.<sup>43</sup> This Part explains the choice between property rules and liability rules,<sup>44</sup> and highlights recent scholarly trends favoring the latter.<sup>45</sup> Part II then moves on to offer a novel view on the choice between property rules and liability rules, focusing on racial inequality.<sup>46</sup> This Part is the analytical core of the paper and highlights a previously unappreciated disadvantage of liability rules.<sup>47</sup> Part III builds on the analysis in Part II to offer normative implications.<sup>48</sup> This Part develops the key normative argument of the Article, that property rules should be preferred over liability rules whenever possible.<sup>49</sup> A short conclusion follows.

### I. *THE CATHEDRAL*

This Part reviews Calabresi and Melamed's seminal article, as well as some key developments in the vast literature that followed *The Cathedral*.

#### A. *Calabresi & Melamed: One View*

In their famed *Cathedral* article, Calabresi and Melamed describe a two-tier structure of the legal system.<sup>50</sup> At the first stage, the legal system assigns

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things-except-the-danger-of-anti-critical-race-theory-laws.html; Spencer Bokart-Lindell, Opinion, *Why Is the Country Panicking About Critical Race Theory?*, N.Y. TIMES (July 13, 2021), <https://www.nytimes.com/2021/07/13/opinion/critical-race-theory.html>; Jelani Cobb, *The Man Behind Critical Race Theory*, NEW YORKER (Sept. 13, 2021), <https://www.newyorker.com/magazine/2021/09/20/the-man-behind-critical-race-theory>; Jeremy Engle, *Lesson of the Day: 'Critical Race Theory: A Brief History'*, N.Y. TIMES (Sept. 20, 2021), <https://www.nytimes.com/2021/09/20/learning/lesson-of-the-day-critical-race-theory.html>; Claire Suddath, *How Critical Race Theory Became a Political Target*, BLOOMBERG (Nov. 30, 2021, 1:35 PM), <https://www.bloomberg.com/news/articles/2021-10-02/how-critical-race-theory-became-a-political-target-quicktake>; Jacey Fortin, *Critical Race Theory: A Brief History*, N.Y. TIMES (Nov. 8, 2021), <https://www.nytimes.com/article/what-is-critical-race-theory.html>; Jennifer Schuessler, *Bans on Critical Race Theory Threaten Free Speech, Advocacy Group Says*, N.Y. TIMES (Nov. 9, 2021), <https://www.nytimes.com/2021/11/08/arts/critical-race-theory-bans.html>; John McWhorter, *If It's Not Critical Race Theory, It's Critical Race Theory-lite*, N.Y. TIMES (Nov. 9, 2021), <https://www.nytimes.com/2021/11/09/opinion/critical-race-theory.html>; Jay Caspian Kang, Opinion, *Can We Talk About Critical Race Theory?*, N.Y. TIMES (Nov. 11, 2021), <https://www.nytimes.com/2021/11/11/opinion/critical-race-theory.html>.

42. See *infra* Sections I.A.1–4.

43. See *infra* Section I.B.1.

44. See *infra* Section I.A.5.

45. See *infra* Section I.B.2.

46. See *infra* Section II.A.1.

47. See *infra* Section II.A.2.

48. See *infra* Section III.A.

49. See *infra* Section III.B.

50. Calabresi & Melamed, *supra* note 1, at 1090.

entitlements to right holders;<sup>51</sup> at the second stage, the legal system must determine the modality under which each entitlement is protected.<sup>52</sup>

### 1. Assigning Entitlements

Calabresi and Melamed open their analysis of legal rights and legal duties by describing what they term the stage of “entitlement,” in which the legal system must decide what person or group of people is entitled to a specific asset or activity.<sup>53</sup> This is a necessary step in any legal system; if the law does not assign rights, society will revert back to a state of “might makes right,” and assets will simply go to those who can forcefully take them.<sup>54</sup>

Rights assigned at this stage can take many forms: the right to hold and use a tract of land, the right to enter it, the right to exclude others from entering it, the right to know certain information, the right to keep information private, and so on. Throughout the analysis, I will focus on a polluting factory example in the style of *Boomer v. Atlantic Cement Co.*,<sup>55</sup> the same example animating the discussion in the original *Cathedral* article<sup>56</sup> as well as much of the subsequent literature.<sup>57</sup> In this example, in adjudicating a dispute between the factory and its neighbors, the court must set the parties’ entitlements: Either the factory has a right to operate and pollute, or its neighbors have a right to enjoy peace, quiet, and clean air. Those are conflicting entitlements and cannot coexist in their complete forms: The legal system can either decide that the factory is entitled to operate, or not, and symmetrically, that the neighbors are entitled to clean air, or not.<sup>58</sup>

### 2. Property Rule Protection

After entitlements are assigned, the legal system must choose the modality of protection for each entitlement.<sup>59</sup> Calabresi and Melamed identify three such modalities, describing a different mechanism for removing the underlying entitlement. The first modality of protection

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51. *Id.*

52. *Id.* at 1090–91.

53. *Id.* at 1090, 1093–1115.

54. *Id.* at 1090.

55. 257 N.E.2d 870 (N.Y. 1970).

56. Calabresi & Melamed, *supra* note 1, at 1106, 1116.

57. Rose, *supra* note 2, at 2175–76 (“In several of these scholarly ventures, beginning with *The Cathedral* itself, a particular explanatory example looms in the foreground: It is an instance of environmental pollution, grounded on a classic nuisance case, *Boomer v. Atlantic Cement Co.*, in which a cement factory polluted the air so as to damage a number of nearby residential properties.” (footnote omitted)).

58. Calabresi & Melamed, *supra* note 1, at 1105.

59. *Id.*

identified by Calabresi and Melamed is a property rule.<sup>60</sup> An entitlement is protected with a property rule if it cannot be removed without the consent of the right holder.<sup>61</sup> Under property rule protection, whoever wishes to remove the entitlement must buy it from the holder, and pay whatever value the holder sees fit to demand.<sup>62</sup> In the polluting factory example, the neighbors' entitlement can be protected under a property rule.<sup>63</sup> If the right is assigned to the neighbors and is protected through a property rule, this would mean that the neighbors have a right to clean air and that the factory does not have the power to unilaterally remove this entitlement.<sup>64</sup> If the factory wishes to produce and pollute, it must secure the neighbors' consent to do so, usually by making a payment that the neighbors will estimate to be sufficiently high to make it worthwhile for them to suffer the harm from the factory.<sup>65</sup> Symmetrically, property rule protection can also be used if the legal system decides that the factory, rather than its neighbors, is the right holder.<sup>66</sup> Thus, if the factory's right to produce (and pollute) is protected through a property rule, the neighbors can only remove it if they manage to buy the factory's consent.<sup>67</sup>

### 3. *Liability Rule Protection*

The second modality of protection identified by Calabresi and Melamed is a liability rule.<sup>68</sup> Under liability rule protection, the entitlement can be removed for the payment of its fair value, as objectively determined by the legal system.<sup>69</sup> Thus, if the neighbors have a right to clean air, protected by a liability rule, the factory can choose to produce and pollute, as long as it pays the neighbors for the objective value of their lost rights, through compensation as determined by the court.<sup>70</sup> Note that in this case the neighbors still hold the entitlement to clean air, in the sense that they deserve legal protection when this right is violated, and are guaranteed the enjoyment of the value this right represents. Yet the factory can decide to remove this entitlement by compensating the neighbors for its fair market price.

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60. *Id.* at 1092.

61. *Id.* at 1105.

62. *Id.*

63. *Id.* at 1118 (describing the "entitlement to be free from pollution protected by a property rule").

64. *Id.*

65. *Id.*

66. *Id.* (describing the "entitlement to pollute protected by a property rule").

67. *Id.*

68. *Id.* at 1092, 1105–06.

69. *Id.* at 1106.

70. *Id.* at 1119–20.

Symmetrically, the factory can also be protected under a liability rule.<sup>71</sup> In such a case, the factory would have the right to produce and pollute, but the neighbors will be able to remove this entitlement by paying its objective value as determined by the court.<sup>72</sup>

#### 4. *Inalienability*

Finally, the third modality of protection identified by Calabresi and Melamed is an inalienability rule.<sup>73</sup> Under an inalienability rule, once the entitlement is granted, it cannot be removed, even with the consent of both parties.<sup>74</sup> Thus, if the residents have the right to clean air and are protected under an inalienability rule, then they are not allowed to grant the factory permission to pollute.<sup>75</sup> Symmetrically, if the factory is protected under an inalienability rule, then the factory is entitled to produce and pollute, and cannot forgo this right in exchange for some payment from the neighbors.<sup>76</sup> Inalienability rules have become a central topic of discussion elsewhere,<sup>77</sup> yet the main strand of literature that followed *The Cathedral* focused on the choice between property rules and liability rules.<sup>78</sup> This is also the focus of the current inquiry.

#### 5. *Choosing Between Modalities of Protection*

After introducing the different modalities for protecting entitlements, Calabresi and Melamed discuss the choice between the two key modalities of protection: property rules and liability rules.<sup>79</sup> *Boomer v. Atlantic Cement Co.* nicely illustrates this choice. All judges in *Boomer* agreed that noise, vibrations, smoke, and dirt from the factory constituted nuisance, thereby placing the entitlement with the factory's neighbors.<sup>80</sup> Yet the judges disagreed regarding the modality of protection.<sup>81</sup> The majority awarded damages only, thus supporting a liability rule protection, while the dissent

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71. *Id.* at 1116.

72. *Id.* at 1092.

73. *Id.* at 1092–93, 1111–15.

74. *Id.* at 1092.

75. *Id.* at 1111.

76. *Id.*

77. See, e.g., Radin, *supra* note 13, at 1849 (studying the justifications of inalienability rules in relation to notions of commodification in the context of prostitution, baby-selling, and surrogate motherhood); Rose-Ackerman, *supra* note 13, at 932–33 (offering and analyzing a typology of inalienability rules).

78. Rose-Ackerman, *supra* note 13, at 931 (discussing the relative neglect of inalienability rules in the literature that followed *The Cathedral*).

79. Calabresi & Melamed, *supra* note 1, at 1106.

80. *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870, 871 (N.Y. 1970).

81. *Id.* at 875 (Jasen, J., dissenting).

argued for an injunction, offering a property rule approach. With *Boomer* as a starting point, *The Cathedral* captures the universal legal dilemmas of harmful activities, conflicting uses,<sup>82</sup> and the creation of negative externalities.<sup>83</sup> In this, *The Cathedral* offers a simple and elegant model, describing universal legal issues.<sup>84</sup> Extrapolating on the stylized examples of the polluting factory, *The Cathedral* invites readers to explore the choice between property rules and liability rules more generally.

Calabresi and Melamed argued that the choice between liability rules and property rules depends on the existence or absence of transaction costs.<sup>85</sup> Thus, property rules are preferable when transaction costs are low,<sup>86</sup> and liability rules are preferable when transaction costs are high.<sup>87</sup>

Property rules allow an entitlement to be removed only through a voluntary exchange, in which the right holder agrees to sell their entitlement to someone else.<sup>88</sup> Calabresi and Melamed therefore deduce that property rules offer a useful mode of protection primarily when transaction costs are low,<sup>89</sup> as, under such conditions, voluntary transfers are possible.<sup>90</sup> Calabresi and Melamed explain that transaction costs are low when there are few parties to the dispute and when those parties are easily identifiable.<sup>91</sup> When transaction costs are low, the parties can easily transfer rights between themselves, and arrive at the most efficient allocation.<sup>92</sup> Thus, non-holders can buy rights they require, and if the legal system assigns rights inefficiently, the parties can correct the error and achieve efficient outcomes through bargaining and private ordering.<sup>93</sup>

To illustrate, assume that the polluting factory is indeed a nuisance for nearby residents, but that it also generates great benefits for consumers and employees, making it socially desirable to allow the factory to continue its

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82. Lucian Arye Bebchuk, *Property Rights and Liability Rules: The Ex Ante View of the Cathedral*, 100 MICH. L. REV. 601, 606 (2001).

83. *Id.* at 603.

84. Bell & Parchomovsky, *supra* note 3, at 2–3 (comparing *The Cathedral* to the elegance of Nicolas Copernicus' heliocentric model of the solar system).

85. Calabresi & Melamed, *supra* note 1, at 1106.

86. *Id.* at 1107.

87. *Id.*

88. *Id.* at 1105.

89. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 15 (1960) (famously using the concept of “transaction costs” to refer to the costs involved in forming a bargain between parties).

90. *Id.* at 1106–07, 1125–27.

91. *Id.* at 1125–27.

92. *Id.* This notion builds on the idea of the Coase Theorem and the world of zero transaction costs. See Coase, *supra* note 89, at 10 (describing the possibility of costless transaction); Robert C. Ellickson, *The Case for Coase and Against “Coaseanism”*, 99 YALE L.J. 611, 612 (1989) (offering important clarifications regarding the assumption of zero transaction costs).

93. Bell & Parchomovsky, *supra* note 3, at 14.

operation. If transaction costs are low, and a voluntary transfer of rights between the parties is possible, Calabresi and Melamed argue that property rule protection to the neighbors seems appropriate.<sup>94</sup> Thus, the court will issue an injunction against the factory, and the factory will not be allowed to operate without first securing the neighbors' consent. If transaction costs are low (with all possible hindrances to voluntary transfer included in this notion), and the value of production in the factory is great, the factory will buy the residents' consent to operate, and an overall desirable outcome will be achieved. If production in the factory is not sufficiently profitable, the injunction will simply remain in effect, and a desirable outcome again obtains.

This form of analysis also explains, according to Calabresi and Melamed, the reason for the existence of liability rules.<sup>95</sup> In some situations, a voluntary bargain between the parties will be impossible, unlikely, or extremely costly to administer.<sup>96</sup> In such situations, when transaction costs are high, liability rules might offer attractive solutions, mimicking the outcomes of voluntary exchange.<sup>97</sup> Calabresi and Melamed explain that transaction costs can be high when the dispute involves a large number of parties, and when parties are difficult to identify and contact in advance.<sup>98</sup> In such situations, it might be impossible for the parties to agree on a bargain between them, and holdout problems will hinder voluntary exchange.<sup>99</sup> Thus, a liability rule might be necessary to assure the entitlement indeed ends up with whoever values it most.<sup>100</sup>

To illustrate, assume again that the factory causes a nuisance to nearby residents and that the overall value of production in the factory is high; but this time assume also that transaction costs are high and that a bargain between the residents and the factory is impossible or prohibitively costly. This can be the case, for instance, because the number of residents is simply too great, and it is costly to administer such a multiparty bargain. Alternatively, any attempt to bargain may encounter holdout behaviors,<sup>101</sup>

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94. Calabresi & Melamed, *supra* note 1, at 1125–27.

95. *Id.* at 1106.

96. *Id.* at 1106–07.

97. *Id.*

98. *Id.* at 1127.

99. *Id.* at 1107.

100. *Id.*

101. *Id.*

rent-seeking,<sup>102</sup> and free-riding.<sup>103</sup> Under such assumptions, property rule protection is likely to be problematic. Thus, if the neighbors' right is protected under a property rule, the factory is enjoined from operating, and the great benefits it can generate are lost to society. Since a bargain is costly or impossible, the factory is unable to buy the residents' consent for its operation. The fact that transaction costs are high can mean, for instance, that some residents are trying to extort more than their fair share, and demand the factory pay unreasonable shares of its profit, far beyond the harm actually caused to them, in order to give their consent. Such extortion is possible under a property rule since the factory is trapped by the residents' legal power and cannot operate without their consent. Under such conditions, Calabresi and Melamed explain that moving away from property rule protection might be advisable, and liability rules can provide effective remedies.<sup>104</sup> Thus, under a liability rule, the court will simply allow the factory to operate for fair compensation to the residents, thereby circumventing any holdout problem or rent-seeking conduct. Under a liability rule, the neighbors still hold the entitlement to peace, quiet, and clean air, but this entitlement can be removed through a forced sale, with a price determined by the court or another state organ. Under a liability rule, the factory will produce, pollute, and pay the neighbors for the disturbance it is causing. As long as compensation is correctly determined, a liability rule will assure a desirable result: The factory will produce and pollute only if its profits from doing so outweigh the harm caused to the neighbors, for which the factory will have to pay if it chooses to continue its activity.

*B. Subsequent Scholarship: More Views*

Calabresi and Melamed's seminal *Cathedral* article was the starting point for a rich and sophisticated literature, studying the choice between the different modalities of protection offered in the original paper.<sup>105</sup> As

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102. The term "rent-seeking" refers to efforts to secure gains at the expense of others, without creating any new value. Robert D. Tollison, *Rent Seeking*, in THE ENCYCLOPEDIA OF PUBLIC CHOICE 495, 495 (Charles K. Rowley & Friedrich Schneider eds., 2004). The literature on rent seeking tends to focus on individuals' attempts to manipulate or capture regulatory mechanisms and use them to obtain a competitive advantage in a market environment. See generally GORDON TULLOCK, THE ECONOMICS OF SPECIAL PRIVILEGE AND RENT SEEKING (1989); Roger D. Congleton, *Evaluating Rent-Seeking Losses: Do the Welfare Gains of Lobbyists Count?*, 56 PUB. CHOICE 181 (1988); Barry J. Nalebuff & Joseph E. Stiglitz, *Prizes and Incentives: Towards a General Theory of Compensation and Competition*, 14 BELL J. ECON. 21 (1983); Stergios Skaperdas, *Restraining the Genuine Homo Economicus: Why the Economy Cannot be Divorced from its Governance*, 15 ECON. & POL. 135 (2003).

103. Calabresi & Melamed, *supra* note 1, at 1095 n.13 (discussing the problem of "freeloaders").

104. *Id.* at 1107.

105. See, e.g., Ayres & Balkin, *supra* note 25; Ian Ayres & Paul M. Goldbart, *Optimal Delegation and Decoupling in the Design of Liability Rules*, 100 MICH. L. REV. 1 (2001); Ayres &

demonstrated below, this literature developed an argument for the general superiority of liability rules over property rules.<sup>106</sup>

### *1. Additional Rules*

Following *The Cathedral*, some papers offered additional rules, developing the original modalities of protection offered by Calabresi and Melamed. This literature demonstrates a fascination with liability rules. Thus, Avi Bell and Gideon Parchomovsky study *Pliability* rules,<sup>107</sup> emphasizing ways by which property rules can turn into liability rules when the advantages of liability rules are required.<sup>108</sup>

Bell and Parchomovsky explain that such transition from property rule protection to liability rule protection is both desirable and common.<sup>109</sup> For instance, in Calabresi and Melamed's classic factory example, Bell and Parchomovsky argue that the neighbors are initially protected by a property rule,<sup>110</sup> but that this protection is replaced with a liability rule if it is shown that the benefits generated by the factory are especially great.<sup>111</sup> Similarly, Bell and Parchomovsky explain that property rules can turn into liability rules based on the identity of the parties to the dispute.<sup>112</sup> In such cases, an entitlement can be protected by a property rule against the general population of non-holders, but with a liability rule against a specified set of privileged takers, who are allowed to take the entitlement for payment of damages.<sup>113</sup> For instance, owners of riparian water rights are generally protected under property rules against interference from the general public or from other riparian owners;<sup>114</sup> yet, when the source of interference is in the use of water by a mill, the property rule protecting the riparian owner turns into a liability rule.<sup>115</sup> Bell and Parchomovsky similarly explain the legal protection of share ownership.<sup>116</sup> Thus, minority shareholders usually enjoy property rule

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Talley, *supra* note 26; Ellickson, *supra* note 9; Kaplow & Shavell, *supra* note 25; Krier & Schwab, *supra* note 25; Polinsky, *supra* note 9; A. Mitchell Polinsky, *Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damage Remedies*, 32 STAN. L. REV. 1075 (1980); A. Mitchell Polinsky, *On the Choice Between Property Rules and Liability Rules*, 18 ECON. INQUIRY 233 (1980).

106. See, e.g., Kaplow & Shavell, *supra* note 25; Smith, *supra* note 27, at 1721; Rachlinski & Jourden, *supra* note 26, at 1575; Ayres & Talley, *supra* note 26.

107. Bell & Parchomovsky, *supra* note 3, at 7, 26.

108. *Id.* at 5.

109. *Id.* at 6–7.

110. *Id.* at 38.

111. *Id.*

112. *Id.* at 52.

113. *Id.*

114. *Id.*

115. *Id.*

116. *Id.* at 6.



protection over their shares.<sup>117</sup> Yet, in the case of a merger or a freeze-out takeover, minority shareholders can be forced to surrender their shares in exchange for fair compensation; they can accept the price offered to them by the acquirer,<sup>118</sup> or they can exercise their right for appraisal by the court.<sup>119</sup> Either way, the minority is forced to part with their shares,<sup>120</sup> meaning that their initial property rule protection was replaced with a liability rule. Bell and Parchomovsky argue for multiple advantages of liability rules,<sup>121</sup> highlighting their flexibility.<sup>122</sup>

Scholars' fascination with liability rules is also apparent in the literature studying liability rules as equivalent to options.<sup>123</sup> In studying the difference between property rules and liability rules, Calabresi and Melamed highlighted the difference in the identity of the party given the authority to evaluate the right: the right holder under a property rule, and the state under a liability rule.<sup>124</sup> Scholars viewing liability rules as options later emphasized an additional element: the identity of the party allowed to trigger forced exchange.<sup>125</sup> Thus, under a property rule, no party is allowed to trigger forced exchange unilaterally, and under a liability rule this power is given to the non-holder.<sup>126</sup> To complete the picture, scholars discuss the possibility of a new type of liability rule, under which the *holder* will be allowed to demand forced exchange, with the price determined by a state organ.<sup>127</sup> Building on the work of Madeline Morris,<sup>128</sup> and James Krier and Stewart Schwab,<sup>129</sup> Saul Levmore refers to such new liability rules as "startling rules," an additional element<sup>130</sup> missing from the original framework offered by Calabresi and

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117. *Id.* at 32.

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.* at 66.

122. *Id.* at 67.

123. IAN AYRES, *OPTIONAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS* 1, 5 (2005) (discussing options structures in property remedies); Morris, *supra* note 9; Krier & Schwab, *supra* note 25; Ayres & Talley, *supra* note 26; Ayres & Balkin, *supra* note 25; Levmore, *supra* note 5, at 2160–61; Ian Ayres, Monsanto Lecture, *Protecting Property with Puts*, 32 VAL. U. L. REV. 793, 795 (1998) [hereinafter Ayres, *Protecting Property with Puts*]; Richard A. Epstein, Commentary, *Protecting Property Rights with Legal Remedies: A Common Sense Reply to Professor Ayres*, 32 VAL. U. L. REV. 833 (1998); Ronen Avraham, *Modular Liability Rules*, 24 INT'L REV. L. & ECON. 269, 272 (2004).

124. Calabresi & Melamed, *supra* note 1, at 1106, 1092.

125. Levmore, *supra* note 5, at 2163–65; Ayres & Goldbart, *supra* note 105, at 9; Avraham, *supra* note 123, at 272.

126. Levmore, *supra* note 5, at 2163–65.

127. *Id.* at 2160.

128. Morris, *supra* note 9, at 854–56.

129. Krier & Schwab, *supra* note 25, at 471.

130. Levmore, *supra* note 5, at 2150, 2160–65.

Melamed.<sup>131</sup> Ian Ayres and Paul Goldbart explain these rules as “put option” liability rules.<sup>132</sup>

Ayres illustrates the operation of these new rules with the example of the polluting factory.<sup>133</sup> Thus, under a traditional liability rule protecting the residents’ entitlement, the factory can pollute and pay damages, thereby forcing a sale on the residents.<sup>134</sup> This is in fact a call option for the non-holder, as the factory can force a sale of the residents’ right. Symmetrically, Ayres suggested that the residents can be protected under a “put option” liability rule.<sup>135</sup> Under such a rule, the residents hold the entitlement, and can force its sale to the factory: They can choose to force the factory to operate, pollute, and pay damages.<sup>136</sup> The same forms of protection are available also for the factory’s entitlement. Under a traditional liability rule protecting the factory’s entitlement, the factory is entitled to operate and the residents have a call option, as they can stop the factory from operating if they are willing to pay damages.<sup>137</sup> Under a put option liability rule protecting the factory, the factory is allowed to produce, but can force a sale of this right: It can decide to stop producing, and have the residents compensate it.<sup>138</sup> The measure of the remedy will equal the harm the residents would have suffered had the factory continued production, as objectively determined by the court.<sup>139</sup> The literature on liability rules as options further develops these tools into increasingly more complicated and sophisticated forms of liability rules, pointing out their advantages.<sup>140</sup>

## 2. *Choosing Between the Modalities of Protection*

The literature that followed *The Cathedral* not only added new forms of liability rules, but has also expanded on the considerations for choosing between liability rules and property rules as first described by Calabresi and Melamed. For instance, Lucian Bebchuk studied the choice between property rules and liability rules in terms of their effect on the parties’ ex ante incentives and on the levels of investment designed to increase the value of their right.<sup>141</sup> Daphna Lewinsohn-Zamir studied the choice between the two modalities of protection from the perspective of behavioral economics,

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131. *Id.* at 2150–52.

132. Ayres & Goldbart, *supra* note 105, at 5–6.

133. Ayres, *Protecting Property with Puts*, *supra* note 123, at 797–98.

134. Calabresi & Melamed, *supra* note 1, at 1106.

135. Ayres, *Protecting Property with Puts*, *supra* note 123, at 797–98.

136. *Id.*

137. Calabresi & Melamed, *supra* note 1, at 1106.

138. Levmore, *supra* note 5, at 2160.

139. *Id.* at 2160 n.37.

140. *See, e.g.*, Avraham, *supra* note 123.

141. Bebchuk, *supra* note 82, at 606.

considering the relevance of actual bargaining behaviors for the choice between property rules and liability rules.<sup>142</sup>

Much of the literature that followed Calabresi and Melamed emphasized the advantages of liability rules, and their superiority over property rules.<sup>143</sup> Recall that, according to Calabresi and Melamed, property rules are preferable when transaction costs are low,<sup>144</sup> and liability rules are preferable when transaction costs are high.<sup>145</sup> Later scholarship offered an argument for the general superiority of liability rules, claiming that property rules in fact offer little advantage.<sup>146</sup>

To explain this argument, consider first the case of high transaction costs. When transaction costs are high, Calabresi and Melamed themselves admit that property rules will lead to inefficiencies, as they can result in undesirable allocation of resources, holdout problems, and rent-seeking behaviors.<sup>147</sup> For instance, in the factory example, if the entitlement is given to the neighbors and protected by a property rule, and if transaction costs are high, the neighbors cannot sell the right to the factory. In such a case, the beneficial activity of the factory will be prohibited, and much social value will be lost. A liability rule is therefore preferable under such conditions, allowing a forced taking of the neighbors' entitlement.

Supposedly, according to Calabresi and Melamed, property rules should apply when transaction costs are low.<sup>148</sup> Yet, Louis Kaplow and Steven Shavell argue that there is no advantage for property rules over liability rules under such conditions.<sup>149</sup> In fact, when transaction costs are low, a desirable outcome will obtain, regardless of the legal rule.<sup>150</sup> Thus, if transaction costs are low, the parties can negotiate and reach a beneficial bargain also under a liability rule, and property rule protection offers no real advantage.<sup>151</sup> In fact, Ian Ayres and Eric Talley show that that negotiation and bargaining can be

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142. Lewinsohn-Zamir, *supra* note 9, at 221.

143. Kaplow & Shavell, *supra* note 25, at 717; Ayres & Talley, *supra* note 26; Rachlinski & Jourden, *supra* note 26, at 1575 ("The papers by Calabresi and Melamed, Ayres and Talley, and Kaplow and Shavell all favored liability rules because of their ability to facilitate trade."); Smith, *supra* note 27, at 1721 ("[O]ver the years most commentators theorizing about entitlement protection have come to conclude that liability rules are generally preferable to property rules in achieving an efficient allocation of resources. Property rules find relatively few defenders . . ." (footnote omitted)).

144. See *supra* Section I.A.5; Calabresi & Melamed, *supra* note 1, at 1107.

145. See *supra* Section I.A.5; Calabresi & Melamed, *supra* note 1, at 1107.

146. Kaplow & Shavell, *supra* note 25, at 717.

147. Calabresi & Melamed, *supra* note 1, at 1107.

148. *Id.*

149. Kaplow & Shavell, *supra* note 25, at 717.

150. Coase, *supra* note 92, at 10.

151. Kaplow & Shavell, *supra* note 25, at 717.

more likely under liability rules, as compared with property rules.<sup>152</sup> Ayres and Talley argue that liability rules facilitate trade by inducing parties to reveal information regarding their preferences and the subjective value of their rights. Similarly, Kaplow and Shavell argue that liability rules will outperform property rules even in cases where courts will find it difficult to accurately assess the value of rights. In another argument in favor of liability rules, Jeffrey Rachlinski and Forest Jourden argue that these rules are superior in combating endowment effects.<sup>153</sup> Thus, owners find it difficult to let go of their entitlement, which hinders trade and a transfer of assets to those who can benefit most from them.<sup>154</sup> Liability rules, by allowing forced sales, mitigate those problems.<sup>155</sup>

Combined, these arguments translate into a forceful attack against property rule protection, and in favor of liability rules. Thus, when transaction costs are high, liability rules are preferable, and when transaction costs are low, there seems to be no clear advantage to either of the two types. This means that, generally, liability rules are superior to property rules. This is especially true since in reality it is often difficult to know if transaction costs are high or low. When this is the case, liability rules are generally preferable.

This supposed superiority of liability rules is a reoccurring feature of the law and economics literature, connecting liability rules with the concept of efficient violations of rights.<sup>156</sup> The general argument is that liability rules are efficient, as they allow rights to be efficiently transferred from holders to non-holders. Whenever a right is of relatively low value for its holder, and of relatively high value for a non-holder, the non-holder can simply take it. The non-holder will only do so if they value the right more than the current holder does, as the non-holder needs to fully compensate the holder for taking the right. For instance, in contract law, expectation damages, a form of liability rule, are considered superior to specific performance, a property rule.<sup>157</sup> Expectation damages are considered superior since they allow a party to breach their contract, taking the other party's contractual right, and pay

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152. Ayres & Talley, *supra* note 26, at 1053.

153. Rachlinski & Jourden, *supra* note 26, at 1575.

154. *Id.*

155. *Id.*

156. See generally Ayres & Talley, *supra* note 26; Kaplow & Shavell, *supra* note 25; Hans-Bernd Schäfer & Ram Singh, *Takings of Land by Self-Interested Governments: Economic Analysis of Eminent Domain*, 61 J.L. & ECON. 427 (2018); Abraham Bell, *Private Takings*, 76 U. CHI. L. REV. 517 (2009).

157. Daniel Markovits & Alan Schwartz, *The Myth of Efficient Breach: New Defenses of the Expectation Interest*, 97 VA. L. REV. 1939, 1940 (2011); Steven Shavell, *Damage Measures for Breach of Contract*, 11 BELL J. ECON. 466 (1980).

expectation damages.<sup>158</sup> The breaching party will only choose to breach if doing so is more profitable for them than it is harmful for the other party.<sup>159</sup> Supposedly, if breach is a more profitable option, expectation damages assure this option is realized;<sup>160</sup> conversely, under specific performance, such preferable alternatives to performance can be missed due to holdout.<sup>161</sup> Thus, the arguments regarding the superiority of liability rules come in multiple manifestations, in all areas of law.

## II. THE OTHER VIEW OF *THE CATHEDRAL*

Existing scholarship offers strong arguments for the general superiority of liability rules over property rules.<sup>162</sup> This Part offers to upend this familiar picture, by connecting *The Cathedral* to the literature on racial inequality and racial bias. This helps to highlight a general and crucial disadvantage of liability rules, as their application is more susceptible to judicial bias and is more likely to generate discriminatory outcomes. Section II.A outlines the general argument. This Section opens by introducing the concepts of systematic discrimination and the core insights of critical race theory scholarship.<sup>163</sup> This Section then moves on to connect these insights with *The Cathedral*, and with the comparison between property rules and liability rules.<sup>164</sup> Section II.B illustrates the general argument given in Section II.A, in a variety of specific legal contexts.

### A. A New Theory of Right Evaluation

#### 1. Critical Race Perspective

Critical race theory brings together several core ideas.<sup>165</sup> It shows that racism, racial bias, and discrimination are endemic and systematic<sup>166</sup>:

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158. Robert L. Birmingham, *Breach of Contract, Damage Measures, and Economic Efficiency*, 24 RUTGERS L. REV. 273, 274 (1970) (arguing in favor of “efficient breach” of contract); Markovits & Schwartz, *supra* note 157.

159. Markovits & Schwartz, *supra* note 157, at 2006 (“[P]romisees, we argue, prefer contracts that confer on the promisor discretion either to satisfy the contract’s action terms—to supply the specified goods or services—or to pay the gain that performance of those terms would have yielded.”).

160. *Id.*

161. *Id.*

162. *See supra* Section I.B.2.

163. *See infra* Section II.A.1.

164. *See infra* Section II.A.2–3.

165. Athena D. Mutua, *The Rise, Development and Future Directions of Critical Race Theory and Related Scholarship*, 84 DENV. L. REV. 329, 333–34 (2006) (describing the core tenets of critical race theory).

166. *See generally* KIMBERLÉ CRENSHAW, LUKE CHARLES HARRIS & GEORGE LIPSITZ, *THE RACE TRACK: UNDERSTANDING AND CHALLENGING STRUCTURAL RACISM* (2013) (studying and

Discrimination is not merely the product of explicit bias, but is also the outcome of institutional patterns,<sup>167</sup> social conditions,<sup>168</sup> political forces,<sup>169</sup> and implicit attitudes.<sup>170</sup> Institutional racism is “less overt, far more subtle,” and “originates in the operation of established and respected forces in the society, and thus receives far less public condemnation.”<sup>171</sup> Critical race theory shows that the law is part of the social structure and institutional design that produces discriminatory outcomes.<sup>172</sup> Thus, critical race theory rejects the notion of legal neutrality: Legal norms are never neutral, objective, or colorblind;<sup>173</sup> they always carry distributional implications, favoring some and disadvantaging others. Claims for legal neutrality ignore the reality of “the racial caste system constructed in part by law,”<sup>174</sup> and thus cement inequality for subordinated groups.<sup>175</sup> As legal norms are never neutral, they should be analyzed in terms of their effects on subordinated groups and racial minorities.<sup>176</sup> By examining legal norms from this perspective, critical race theory seeks to promote equality; recognizing the oppressive effects of the law is the first step towards improving it.<sup>177</sup> To achieve these goals, critical

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developing the concepts of institutional and systematic racism); Devon W. Carbado & Mitu Gulati, Book Review, *The Law and Economics of Critical Race Theory*, 112 YALE L.J. 1757, 1766–67 (2003); CROSSROADS, DIRECTIONS, AND A NEW CRITICAL RACE THEORY 1–6 (Francisco Valdes, Jerome McCristal Culp & Angela P. Harris eds., 2002).

167. STOKELY CARMICHAEL & CHARLES HAMILTON, *BLACK POWER: THE POLITICS OF LIBERATION IN AMERICA* 28 (1967).

168. Catherine A. Cottrell & Steven L. Neuberg, *Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach to “Prejudice”*, 88 J. PERSONALITY & SOC. PSYCH. 770, 770 (2005).

169. Charles Lawrence III, *Listening for Stories in All the Right Places: Narrative and Racial Formation Theory*, 46 L. & SOC’Y REV. 247, 248 (2012) (“Race is constructed for a political purpose.”).

170. Mutua, *supra* note 165, at 333; Lawrence, *supra* note 30; Charles R. Lawrence III, *Local Kine Implicit Bias: Unconscious Racism Revisited (Yet Again)*, 37 U. HAW. L. REV. 457 (2015).

171. CARMICHAEL & HAMILTON, *supra* note 167, at 4.

172. Mutua, *supra* note 165, at 334.

173. Kimberlé Williams Crenshaw, *Unmasking Colorblindness in the Law: Lessons from the Formation of Critical Race Theory*, in *SEEING RACE AGAIN: COUNTERING COLORBLINDNESS ACROSS THE DISCIPLINES* 41, 53 (Kimberlé Williams Crenshaw et al. eds., 2019) (highlighting the danger in claims of legal “objectivity”).

174. Mutua, *supra* note 165, at 334.

175. *Id.*; Crenshaw, *supra* note 173, at 53–54; Neil Gotanda, *A Critique of “Our Constitution Is Color-Blind”*, 44 STAN. L. REV. 1, 2 (1991) (arguing that claims of constitutional law being “color-blind” foster “white racial domination”).

176. Cynthia Grant Bowman, Dorothy Bowman & Leonard S. Rubinowitz, *Race and Gender in the Law Review*, 100 NW. U. L. REV. 27, 60–61 (2006).

177. Rebecca Tsosie, *Engaging the Spirit of Racial Healing Within Critical Race Theory: An Exercise in Transformative Thought*, 11 MICH. J. RACE & L. 21, 25 (2005).

race theory embraces story-telling as a key mechanism, aiming to give voice to the concerns of those who are usually ignored.<sup>178</sup>

Critical race theory was pioneered by Derrick Bell<sup>179</sup> and Richard Delgado<sup>180</sup> during the mid-1970s,<sup>181</sup> around the same time that Calabresi and Melamed wrote their *Cathedral* article. Bell and Delgado were soon joined by others, now considered founders of critical race theory, including

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178. See Mario L. Barnes, *Black Women's Stories and the Criminal Law: Restating the Power of Narrative*, 39 U.C. DAVIS L. REV. 941, 953–54 (2006) (explaining the role and importance of narrative in critical race theory scholarship); see also Pedro A. Malavet, *Literature and the Arts as Antisubordination Praxis: LatCrit Theory and Cultural Production: The Confessions of an Accidental Crit*, 33 U.C. DAVIS L. REV. 1293, 1301–02 (2000) (explaining the importance of the use of narrative to include minority viewpoints).

179. See, e.g., DERRICK A. BELL, JR., RACE, RACISM, AND AMERICAN LAW (Vicki Been et al., eds., 6th ed. 2008); Derrick A. Bell, Jr., *Serving Two Masters: Integration Ideals and Client Interests in School Desegregation Litigation*, 85 YALE L.J. 470 (1976) (discussing the legal aspects of school segregation); Derrick A. Bell, Jr., Comment, *Brown v. Board of Education and the Interest-Convergence Dilemma*, 93 HARV. L. REV. 518, 524 (1980) (explaining that the timing of the *Brown v. Board of Education (Brown I)*, 347 U.S. 483 (1954), decision was meant to bolster international support for the United States during the Cold War).

180. See, e.g., Richard Delgado, *The Imperial Scholar: Reflections on a Review of Civil Rights Literature*, 132 U. PA. L. REV. 561, 561–63 (1984) (showing the failure of mainstream civil right scholarship to engage with the works of Black, Hispanic, and Native American law professors); Richard Delgado, *Liberal McCarthyism and the Origins of Critical Race Theory*, 94 IOWA L. REV. 1505 (2009) (connecting the origins of critical race theory with attempts to silence radical leftist views in academia); Richard Delgado, *Critique of Liberalism*, in CRITICAL RACE THEORY: THE CUTTING EDGE 1 (Richard Delgado ed., 1995); RICHARD DELGADO & JEAN STEFANCIC, CRITICAL RACE THEORY: AN INTRODUCTION (Richard Delgado & Jean Stefancic eds., 2d ed. 2012).

181. See, e.g., Richard Delgado & Jean Stefancic, Essay, *Critical Race Theory: An Annotated Bibliography*, 79 VA. L. REV. 461, 461 (1993) (providing a comprehensive, yet not exhaustive, list of works).

Kimberlé Crenshaw,<sup>182</sup> Cheryl Harris,<sup>183</sup> Charles Lawrence,<sup>184</sup> Mari Matsuda,<sup>185</sup> and Patricia Williams.<sup>186</sup> The movement has since offered studies of all areas of law,<sup>187</sup> from civil rights,<sup>188</sup> constitutional law,<sup>189</sup> and property

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182. See, e.g., Kimberlé W. Crenshaw, *From Private Violence to Mass Incarceration: Thinking Intersectionally About Women, Race, and Social Control*, 59 UCLA L. REV. 1418 (2012) (studying the connections between mass incarceration, race, and gender); Kimberlé Williams Crenshaw, *Twenty Years of Critical Race Theory: Looking Back to Move Forward*, 43 CONN. L. REV. 1253 (2011) (revisiting the early history of critical race theory, in comparison to contemporary trends); Kimberlé Crenshaw, *Race, Gender, and Sexual Harassment*, 65 S. CAL. L. REV. 1467 (1992) (discussing the connections between race, gender, and sexual harassment); Kimberlé Crenshaw, *Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color*, 43 STAN. L. REV. 1241 (1991) (studying the connections between race, gender, and physical violence); Kimberlé Williams Crenshaw, *Race, Reform, and Retrenchment: Transformation and Legitimation in Antidiscrimination Law*, 101 HARV. L. REV. 1331, 1331 (1988) (arguing that antidiscrimination reform has succeeded in “eliminating the symbolic manifestations of racial oppression, but has allowed the perpetuation of material subordination of Blacks”).

183. See, e.g., Cheryl I. Harris, *Whiteness as Property*, 106 HARV. L. REV. 1707 (1993) (showcasing the centrality of race and racism to the structure of property law); Cheryl I. Harris, *Whitewashing Race: Scapegoating Culture*, 94 CALIF. L. REV. 907, 908 (2006) (reviewing MICHAEL K. BROWN ET AL., *WHITEWASHING RACE: THE MYTH OF A COLOR-BLIND SOCIETY* (2003)) (showing that the notion of colorblindness serves to cover deep discriminatory realities); Cheryl I. Harris, *Critical Race Studies: An Introduction*, 49 UCLA L. REV. 1215 (2002) (discussing the introduction of a critical race studies concentration at the UCLA School of Law); Cheryl I. Harris, *Equal Treatment and the Reproduction of Inequality*, 69 FORDHAM L. REV. 1753, 1757 (2001) (arguing that “equal treatment” is insufficient to generate equality).

184. See, e.g., Charles R. Lawrence III, *If He Hollers Let Him Go: Regulating Racist Speech on Campus*, 1990 DUKE L.J. 431 (criticizing the lax regulation of hate speech on university campuses during the late 1980s and early 1990s); Lawrence, *supra* note 170 (revisiting the idea of unconscious racial bias in light of new scientific evidence supporting the existence of such bias); Lawrence, *supra* note 30 (lamenting judicial refusal to acknowledge scientific evidence of implicit racial bias).

185. See, e.g., Mari J. Matsuda, Essay, *Are We Dead Yet? The Lies We Tell to Keep Moving Forward Without Feeling*, 40 CONN. L. REV. 1035 (2008) (describing the lingering effects of racism in the supposedly post-racial, colorblind society); Mari J. Matsuda, *Looking to the Bottom: Critical Legal Studies and Reparations*, 22 HARV. C.R.-C.L. L. REV. 323 (1987) (discussing the relationship between critical legal studies and critical race theory); CHARLES R. LAWRENCE III & MARI J. MATSUDA, *WE WON'T GO BACK: MAKING THE CASE FOR AFFIRMATIVE ACTION* (1997) (exploring the future of affirmative action).

186. See, e.g., PATRICIA J. WILLIAMS, *THE ALCHEMY OF RACE AND RIGHTS* (1991); PATRICIA J. WILLIAMS, *THE ROOSTER'S EGG* (1995); PATRICIA J. WILLIAMS, *SEEING A COLOR-BLIND FUTURE: THE PARADOX OF RACE* (The Noonday Press, 1st Am. ed. 1998); PATRICIA J. WILLIAMS, *OPEN HOUSE: OF FAMILY, FRIENDS, FOOD, PIANO LESSONS, AND THE SEARCH FOR A ROOM OF MY OWN* (1st ed. 2004); PATRICIA J. WILLIAMS, *GIVING A DAMN: RACE, ROMANCE AND GONE WITH THE WIND* (2021).

187. *Mutua*, *supra* note 165, at 354–56.

188. E.g., Eleanor Marie Brown, Note, *The Tower of Babel: Bridging the Divide Between Critical Race Theory and “Mainstream” Civil Rights Scholarship*, 105 YALE L.J. 513, 515–16 (1995).

189. E.g., Robert L. Hayman, Jr., *The Color of Tradition: Critical Race Theory and Postmodern Constitutional Traditionalism*, 30 HARV. C.R.-C.L. L. REV. 57, 58 (1995).



law,<sup>190</sup> to tax law,<sup>191</sup> business law,<sup>192</sup> and intellectual property law.<sup>193</sup> In comparison, the application of critical race theory to tort law and to the law of remedies, the subject of the current Article, has been scant.<sup>194</sup>

## 2. *Re-conceptualizing* The Cathedral

*The Cathedral* implicitly assumes a benevolent and objective judiciary. In particular, in defining the difference between property rules and liability rules, it is assumed that under property rule protection, right holders determine the value of their assets, while under liability rule protection, the value of rights is “objectively determined” by the state.<sup>195</sup> The teachings of critical race theory immediately call this objectivity into question,<sup>196</sup> warning against the masquerade of legal “neutrality” which serves to cover up systemic and institutional bias.<sup>197</sup>

Of course, some of the literature that followed *The Cathedral* had recognized the fact that the operation of liability rules might require more information,<sup>198</sup> or that it could be more prone to judicial error.<sup>199</sup> After all, liability rules require judges to determine the value of rights, a process in which they might err.<sup>200</sup> Yet this important insight is typically set aside.<sup>201</sup> Since scholars do not assume that such judicial error is systematic, it does not seem important. Presumably, on some occasions, judges will overestimate damages amounts, and in other cases they will underestimate them.<sup>202</sup> Overall, on average, the value of rights will be determined more-or-less

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190. See sources cited *supra* note 183.

191. E.g., Beverly I. Moran & William Whitford, *A Black Critique of the Internal Revenue Code*, 1996 WIS. L. REV. 751, 751–52; Dorothy A. Brown, *Race, Class, and Gender Essentialism in Tax Literature: The Joint Return*, 54 WASH. & LEE L. REV. 1469, 1489–90 (1997) (explaining the importance of examining tax law from a race as well as a gender perspective).

192. See Brown, *supra* note 191, at 1485 n.98.

193. E.g., K.J. Greene, *What the Treatment of African American Artists Can Teach About Copyright Law*, in [1 COPYRIGHT AND RELATED RIGHTS] INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE 385 (Peter K. Yu ed., 2007).

194. MARTHA CHAMALLAS & JENNIFER B. WRIGGINS, *THE MEASURE OF INJURY: RACE, GENDER, AND TORT LAW* 1 (2010); Cardi et al., *supra* note 30, at 509.

195. Calabresi & Melamed, *supra* note 1, at 1092.

196. See Kimberlé Williams Crenshaw, Essay, *Race Liberalism and the Deradicalization of Racial Reform*, 130 HARV. L. REV. 2298, 2298 (2017) (criticizing the “‘colorblind’ model of racial justice”). See generally Gotanda, *supra* note 175.

197. See Crenshaw, *supra* note 196, at 2298, 2300.

198. Smith, *supra* note 27, at 1753.

199. Bebchuk, *supra* note 82, at 661.

200. *Id.*

201. *Id.*

202. See Kaplow & Shavell, *supra* note 25, at 719.

correctly, and the possibility of judicial error is not considered a major problem.<sup>203</sup>

Things change when we move to consider the problem of systemic judicial bias, as opposed to judicial error.<sup>204</sup> Racial bias, as opposed to error, is likely to operate in one specific direction, and is therefore more likely to result in systemic distortion of justice. Once this perspective is considered, a glaring disadvantage of liability rules becomes apparent. Liability rules, as opposed to property rules, require judges to determine the value of rights. Multiple studies demonstrate the prevalence of judicial racial bias in such determinations, as judges tend to underestimate harms when victims belong to racial minority groups.<sup>205</sup>

*The Cathedral* equalizes liability rules with the objective evaluation of rights.<sup>206</sup> This is clearly false. Reflecting on the nature of liability rules from the perspective of critical race theory reveals that objective evaluation of rights is impossible. The application of liability rules is distorted by psychological, social, and cultural biases.<sup>207</sup> Liability rules, as compared to property rules, do not offer “objective” valuation of rights; rather, they shift the authority to evaluate rights from right holders to judges and regulators.

This power shift clearly results in discriminatory outcomes.<sup>208</sup> Judges typically belong to social and economic elites.<sup>209</sup> Therefore, when right holders also belong to the same elites, and a liability rule is applied, judges are in a good position to evaluate rights. They have a good understanding of the right and its meaning to the right holder and are likely to evaluate it fairly. Conversely, when right holders belong to racial minorities, and liability rules are applied, judges are not in a good position to evaluate rights. They have a partial and biased understanding of the value of the right to the right holders and are likely to undervalue it.

Viewed through this lens, the conceptual advantage of property rules becomes evident. Liability rules grant decision-making powers to judges and jurors, and assign them complex evaluation tasks, while property rules, by

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203. *See id.* at 719–20.

204. *See* sources cited *supra* notes 166, 170.

205. *See infra* Section II.B.

206. Calabresi & Melamed, *supra* note 1, at 1092.

207. For similar claims in the context of pain and suffering damages, see Maytal Gilboa, *The Color of Pain: Racial Bias in Pain and Suffering Damages*, 56 GA. L. REV. 651 (2022); Ronen Avraham, *Putting a Price on Pain-and-Suffering Damages: A Critique of the Current Approaches and a Preliminary Proposal for Change*, 100 NW. U. L. REV. 87, 91 (2006).

208. *See, e.g.*, Gilboa, *supra* note 207.

209. *See* Allison P. Harris & Maya Sen, *Bias and Judging*, 22 ANN. REV. POL. SCI. 241, 242 (2019) (explaining that “judicial decision making is highly variable—indeed, research shows that judges’ personal backgrounds, professional experiences, life experiences, and partisan and ideological loyalties might impact their decision making”).

comparison, leave decision-making powers with right holders and allow them to evaluate their own rights. Under this type of protection, right holders can always choose not to part with their rights if they value those rights at a higher level than others. This important option is unavailable under liability rules, which allow a non-holder to unilaterally decide to remove the right.

This mode of comparing property rules and liability rules is intimately connected to the notions of storytelling as highlighted in critical race theory scholarship.<sup>210</sup> The difference between liability rules and property rules is all about storytelling; it is about who gets to tell the story of the right through the process of its evaluation, who decides which rights have value, and how much that value will be. A court will highlight some types of value and ignore others. A property rule gives a right holder the agency to tell the story of their own right. Thus, under a property rule, the right holder can decide if they want to sell their right for a given price, or not. They make this decision based on their own evaluation, their own story of the value of their right for them. Judges are unlikely to understand those stories and appreciate the true value of the rights of members of racial minorities.

### 3. *Implicit & Explicit Bias*

The evaluation of rights under a liability rule can generate discriminatory outcomes even if judges and jurors do not admit they discriminate, and even if they truly believe they do not discriminate. People (judges and jurors included) do not typically see themselves as evil;<sup>211</sup> usually, people believe they are justified in their behaviors, decisions, and choices, and value their self-image as ethical individuals.<sup>212</sup> Therefore, people will not typically choose a course of action they identify as discriminatory; rather, they will discriminate as long as they can do so while still maintaining a moral self-image.<sup>213</sup> Research shows that this can be

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210. See Alex M. Johnson, Jr., *Defending the Use of Narrative and Giving Content to the Voice of Color: Rejecting the Imposition of Process Theory in Legal Scholarship*, 79 IOWA L. REV. 803, 830–51 (1994) (explaining the usefulness of narrative as a form of legal analysis); George A. Martinez, *Philosophical Considerations and the Use of Narrative in Law*, 30 RUTGERS L.J. 683, 683 (1999) (explaining the use of story-telling “as a way to introduce a perspective that is not represented in mainstream legal discourse”); Barnes, *supra* note 178, at 951 (highlighting the use of “personal stories as a method of challenging the harmful identity constructions contained within the formal legal narratives”); Richard Delgado, *Storytelling for Oppositionists and Others: A Plea for Narrative*, 87 MICH. L. REV. 2411 (1989); Daniel A. Farber & Suzanna Sherry, *Telling Stories Out of School: An Essay on Legal Narratives*, 45 STAN. L. REV. 807, 810 (1993).

211. Francesca Gino, *Understanding Ordinary Unethical Behavior: Why People Who Value Morality Act Immorally*, 3 CURRENT OP. IN BEHAV. SCIS. 107, 107 (2015).

212. Nina Mazar, On Amir & Dan Ariely, *The Dishonesty of Honest People: A Theory of Self-Concept Maintenance*, 45 J. MKTG. RSCH. 633, 633–34 (2008).

213. Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCH. BULL. 480, 480 (1990) (“There is considerable evidence that people are more likely to arrive at conclusions that they want

achieved through a series of cognitive biases that lead people to ignore or justify<sup>214</sup> their own discriminatory conduct.<sup>215</sup>

Thus, discriminatory right evaluation can come from two potential sources: explicit bias and implicit bias.<sup>216</sup> Explicit racial bias is the type of bias that people practice knowingly and sometimes openly embrace. Explicit bias undoubtedly exists and is undoubtedly the source of deep societal ills. Yet explicit bias is often not the main problem.<sup>217</sup> Thus, implicit racial biases are considered key for the understanding of contemporary socioeconomic gaps between racial groups.<sup>218</sup> Implicit bias refers to those stereotypical associations, assumptions, and prejudices that are too subtle for people to notice, even (and especially) when they themselves hold them.<sup>219</sup>

Implicit racial bias is prevalent,<sup>220</sup> and researchers suggest that implicit biases drive much of contemporary racial disparities.<sup>221</sup> Research shows that most people, including those who openly object to discriminatory norms and practices, nevertheless hold implicit biases that can lead them to make discriminatory decisions.<sup>222</sup> Unfortunately, implicit racial bias is common also in the judicial system,<sup>223</sup> and judges do not seem immune from its effects

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to arrive at, but their ability to do so is constrained by their ability to construct seemingly reasonable justifications for these conclusions.”).

214. Shaul Shalvi, Ori Eldar & Yoella Bereby-Meyer, *Honesty Requires Time (and Lack of Justifications)*, 23 PSYCH. SCI. 1264 (2012).

215. Albert Bandura, *Moral Disengagement in the Perpetration of Inhumanities*, 3 PERSONALITY & SOC. PSYCH. REV. 193, 204 (1999); Ann E. Tenbrunsel & David M. Messick, *Ethical Fading: The Role of Self-Deception in Unethical Behavior*, 17 SOC. JUST. RSCH. 223, 228 (2004).

216. Christine Jolls & Cass R. Sunstein, *The Law of Implicit Bias*, 94 CALIF. L. REV. 969, 969–70 (2006) (illustrating the concept of implicit bias).

217. See generally Charles R. Lawrence III, *The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism*, 39 STAN. L. REV. 317 (1987) (discussing unintentional discrimination and introducing the idea that anti-discrimination law should consider the problem of unconscious racial bias); Lawrence, *supra* note 170 (revisiting the idea of unconscious racial bias in light of new scientific evidence supporting the existence of such bias).

218. See Lawrence, *supra* note 217, at 322–26.

219. Anthony G. Greenwald & Linda Hamilton Krieger, *Implicit Bias: Scientific Foundations*, 94 CALIF. L. REV. 945, 951, 961 (2006) (“[E]vidence that implicit attitudes produce discriminatory behavior is already substantial and will continue to accumulate.” (footnote omitted)); Kristin A. Lane, Jerry Kang & Mahzarin R. Banaji, *Implicit Social Cognition and Law*, 3 ANN. REV. L. & SOC. SCI. 427, 433 (2007).

220. Anona Su, *A Proposal to Properly Address Implicit Bias in the Jury*, 31 HASTINGS WOMEN’S L.J. 79, 90 (2020); CHAMALLAS & WRIGGINS, *supra* note 194, at 8; Kang et al., *supra* note 30, at 1132.

221. Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1512 (2005).

222. See generally Jerry Kang & Mahzarin R. Banaji, *Fair Measures: A Behavioral Realist Revision of “Affirmative Action”*, 94 CALIF. L. REV. 1063 (2006).

223. Greenwald & Krieger, *supra* note 219, at 951, 961; Lane et al., *supra* note 219, at 433.

any more than lay people.<sup>224</sup> Using the widely accepted Implicit Association Test,<sup>225</sup> researchers have shown that most white Americans hold implicit biases toward Black Americans.<sup>226</sup> Research also shows that judges harbor similar levels of implicit biases as lay people,<sup>227</sup> and, more importantly, that these biases can influence judicial decision-making.<sup>228</sup> Research similarly offers evidence of racial bias in jury decisions.<sup>229</sup> Research shows that implicit bias can affect people's perception and distort the way they process information<sup>230</sup>: Bias causes people to emphasize some facts and ignore<sup>231</sup> or forget others.<sup>232</sup> In legal settings, it has been shown that such selective remembering is likely to operate to the disadvantage of members of racial minorities.<sup>233</sup> Thus, people remember some facts and forget others, but do not do so randomly; instead, they do so in a way that fits with racial

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224. Mikah K. Thompson, *Bias on Trial: Toward an Open Discussion of Racial Stereotypes in the Courtroom*, 2018 MICH. ST. L. REV. 1243, 1307.

225. PROJECT IMPLICIT, <https://www.projectimplicit.net/> (last visited Jan. 4, 2023) (select tab "TAKE A TEST").

226. Jeffrey J. Rachlinski et al., *Does Unconscious Racial Bias Affect Trial Judges?*, 84 NOTRE DAME L. REV. 1195, 1195 (2009) ("Researchers, using a well-known measure called the Implicit Association Test, have found that most white Americans harbor implicit bias toward black Americans.").

227. *Id.*

228. See David Arnold, Will Dobbie & Crystal S. Yang, *Racial Bias in Bail Decisions*, 133 Q.J. ECON. 1885 (2018); Ian Ayres & Joel Waldfogel, *A Market Test for Race Discrimination in Bail Setting*, 46 STAN. L. REV. 987, 992 (1994) (finding that judges set bail for Black defendants at thirty-five percent higher than for similarly situated white defendants); David B. Mustard, *Racial, Ethnic, and Gender Disparities in Sentencing: Evidence from the U.S. Federal Courts*, 44 J.L. & ECON. 285, 300 (2001) (finding a twelve percent gap between sentences imposed on Black defendants compared to similarly situated white defendants); see also R. Richard Banks, Jennifer L. Eberhardt & Lee Ross, *Discrimination and Implicit Bias in a Racially Unequal Society*, 94 CALIF. L. REV. 1169, 1175 (2006) (finding that "killers of [w]hite victims are more likely to be sentenced to death than are killers of Black victims" and that "Black defendants are more likely than [w]hite defendants" to receive the death penalty).

229. See e.g., Justin D. Levinson, *Forgotten Racial Equality: Implicit Bias, Decisionmaking, and Misremembering*, 57 DUKE L.J. 345, 345 (2007) ("[I]mplicit racial biases affect the way judges and jurors encode, store, and recall relevant case facts."); Cardi et al., *supra* note 30, at 550 (finding that Black plaintiffs were awarded lower damages compared to similarly situated white plaintiffs); Edward J. McCaffery, Daniel J. Kahneman & Matthew L. Spitzer, *Framing the Jury: Cognitive Perspectives on Pain and Suffering Awards*, 81 VA. L. REV. 1341, 1345–46 (1995) (studying the effects of implicit bias on jury decisions in the context of pain and suffering damages).

230. Kunda, *supra* note 213, at 480; Emily Balcetis & David Dunning, *See What You Want to See: Motivational Influences on Visual Perception*, 91 J. PERSONALITY & SOC. PSYCH. 612 (2006).

231. Balcetis & Dunning, *supra* note 230; Dolly Chugh, Max H. Bazerman & Mahzarin R. Banaji, *Bounded Ethicality as a Psychological Barrier to Recognizing Conflicts of Interest*, in CONFLICTS OF INTEREST: CHALLENGES AND SOLUTIONS IN BUSINESS, LAW, MEDICINE, AND PUBLIC POLICY 74 (Don A. Moore et al. eds., 2005).

232. Lisa L. Shu, Francesca Gino & Max H. Bazerman, *Dishonest Deed, Clear Conscience: When Cheating Leads to Moral Disengagement and Motivated Forgetting*, 37 PERSONALITY & SOC. PSYCH. BULL. 330 (2011); Levinson, *supra* note 229, at 398.

233. Levinson, *supra* note 229, at 398.

stereotypes.<sup>234</sup> Research similarly shows that the effects of implicit racial biases become especially pronounced when decision-makers are faced with complex dilemmas, where a single correct answer is not easily identifiable.<sup>235</sup> In such situations, ambiguity allows racial bias to “creep in,” bolstering its influence on decision outcomes.<sup>236</sup>

Judicial evaluation of rights, as required under liability rules, is a complex decision-making process, wrought with ambiguity. Thus, in evaluating rights, judges must consider future changes in market values, risks, opportunities, and subjective valuations by right holders. When making such complex decisions, research in behavioral psychology shows that decision-makers are particularly susceptible to biases.<sup>237</sup> Since the objectively correct value of a right is an elusive concept, it is very difficult, if not impossible, for judges to separate the relevant considerations for right evaluation from their biases.<sup>238</sup>

Thus, when assigning a particular value to a right, judges might not even realize they are assigning a low value. Since the accurate value of the right is ambiguous, it would be difficult for a judge to know when their discretion is affected by racial biases. Moreover, because judges prefer to think of themselves as virtuous people,<sup>239</sup> they will systematically prefer the conclusion that their reasoning is sound and just, rather than discriminatory.<sup>240</sup> These cognitive mechanisms would facilitate discriminatory outcomes.<sup>241</sup>

Alternatively, a judge might be aware they are assigning a relatively low value to a right, but they may fail to understand that by doing so they are discriminating against the right holder.<sup>242</sup> Thus, in assigning a low value to a right, a judge will prefer the conclusion that they are doing so based on relevant and legitimate considerations, and not based on their racially biased

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234. *Id.*

235. Erik Girvan & Heather J. Marek, *Psychological and Structural Bias in Civil Jury Awards*, 8 J. AGGRESSION, CONFLICT & PEACE RSCH. 247, 249 (2016) (noting the connection between ambiguity and implicit racial bias).

236. *Id.*; Constantine Boussalis, Yuval Feldman & Henry E. Smith, *Experimental Analysis of the Effect of Standards on Compliance and Performance*, 12 REGUL. & GOVERNANCE 277, 277–78 (2018) (providing empirical evidence for the effect of legal ambiguity on behavior).

237. Boussalis et al., *supra* note 236, at 277–78.

238. Mark Geistfeld, *Placing a Price on Pain and Suffering: A Method for Helping Juries Determine Tort Damages for Nonmonetary Injuries*, 83 CALIF. L. REV. 773, 785 (1995) (showing that implicit biases affect judgment more dominantly when legal standards are vague).

239. See Gino, *supra* note 211, at 107.

240. *Id.*

241. *Id.*

242. Yuval Feldman & Yotam Kaplan, *Behavioral Ethics as Compliance*, in THE CAMBRIDGE HANDBOOK OF COMPLIANCE 50, 52 (Benjamin Van Rooij & D. Daniel Sokol eds., 2021) (discussing “[s]elf-justified wrongdoing”).

perception. As multiple considerations typically feed into the process of right evaluation, a judge can always justify their decisions as based on some such relevant factor. Research shows that in such cases, when decisions are multifaceted, people are more prone to bias.<sup>243</sup> The reason for this is that people can attribute their decision to some relevant factor and avoid the conclusion that an illegitimate consideration led them to their decision. Research shows that people often fail to recognize such processes in themselves, as they systematically believe they are more objective than they actually are.<sup>244</sup> Thus, people do not think they are racially biased and tend to think their judgements are objective.<sup>245</sup> This makes implicit bias hard to detect and harder to eradicate as compared to explicit bias.<sup>246</sup>

### *B. The Practice of Right Evaluation*

This section, moving from theory to practice, provides concrete examples for how racial bias affects judicial decision-making in the evaluation of rights. Examples follow the same familiar stylized example of the polluting factory, and focus on real estate values, medical costs, pain and suffering, future earnings, and intellectual property rights. Together, these examples illustrate the judicial tendency to undervalue the rights of members of racial minorities, thereby showcasing the general disadvantage in the use of liability rules as opposed to property rules.

#### *1. Real Property & Community*

The application of liability rules often requires the evaluation of real property rights. To illustrate, assume that pollution and noise from the factory render a nearby house uninhabitable, potentially forcing the family residing there to relocate. Assume also that the value of production in the factory far outweighs the value of the house. Under a property rule, the residents will be entitled to an injunction, presumably meaning that the factory cannot continue production unless it buys the house from the residents at a price they believe reflects its value. Conversely, under a liability rule, the factory is allowed to continue operating and must compensate the residents for their harm, or, effectively, the loss of their home. Evidence suggests that in determining the value of the house, courts will be influenced by implicit racial bias, systematically causing them to give low right-evaluations for houses of members of racial minorities.<sup>247</sup>

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243. *Id.*

244. *Id.*

245. *Id.*; YUVAL FELDMAN, *THE LAW OF GOOD PEOPLE: CHALLENGING STATES' ABILITY TO REGULATE HUMAN BEHAVIOR* 1–2, 16, 48–49 (2018).

246. Levinson, *supra* note 229, at 406.

247. See Greenwald & Krieger, *supra* note 219, at 951, 961; Lane et al., *supra* note 219, at 433.

This unfortunate reality is perfectly captured in the case of Paul and Tenisha Tate Austin, a Black couple from Marin City near San Francisco. In January 2021, Paul and Tenisha had their home valued at \$989,000 by a professional appraiser. The couple, believing the appraisal was unfairly low, ran a little experiment: They asked for another appraisal, removed their family pictures from their home and asked a white friend to show the house to the second appraiser. The second time, the house was appraised at \$1,420,000, nearly half a million dollars more than the original appraisal.<sup>248</sup>

Paul and Tenisha's example is an extreme one. Sadly, it is reflective of a broader and disturbing trend, namely systematic racial bias in the house appraisal industry. Research shows that professional appraisers tend to give lower valuations to houses owned by members of minority groups.<sup>249</sup> An industry report found that Black homeowners are about twice as likely as white homeowners to have their homes appraised lower than the actual selling price.<sup>250</sup> This finding is especially pertinent to the distinction between property rules and liability rules, indicating that "objective" valuation by a third party (equivalent to a liability rule) is affected by racial biases, making it systematically lower than the price that the right holder themselves find acceptable (property rule). To put these findings in context, it is important to understand that home appraisal, contrary to common misconception, is not an exact science;<sup>251</sup> it is a complex judgment call.<sup>252</sup> Different appraisers will often give different valuations,<sup>253</sup> and regularly even differ in determining the square footage of a home.<sup>254</sup> Considering the complex nature of appraisal decisions, it is unsurprising that racial biases systematically affect them.<sup>255</sup>

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248. James Gordon, *Black Couple Sue Real Estate Agency After Their Bay Area Home Was Valued at Just \$995,000—But \$1.42m When They Removed all Photos and Asked a White Friend to Pose as its Owner for Viewing with Second Expert*, DAILY MAIL (Dec. 5, 2021, 6:57 PM), <https://www.dailymail.co.uk/news/article-10278121/A-black-couple-erased-home-value-went-nearly-500-000.html>; see also Complaint for Injunctive, Declaratory, and Monetary Relief ¶¶ 38–77, *Tate-Austin v. Miller*, No. 3:21-cv-09319 (N.D. Cal. Dec. 2, 2021).

249. Junia Howell & Elizabeth Korver-Glenn, *Neighborhoods, Race, and the Twenty-First-Century Housing Appraisal Industry*, 4 SOCIO. RACE & ETHNICITY 473 (2018); Stephen M. Dane, *A History of Mortgage Lending Discrimination in the United States*, 20 J. INTERGROUP RELS. 16 (1993).

250. Joe Hernandez, *Black and Latino Homeowners Are About Twice as Likely as Whites to Get Low Appraisals*, NPR (Sept. 23, 2021, 6:00 AM), <https://www.npr.org/2021/09/23/1039771981/black-latino-homeownership-real-estate-wealth-disparities-appraisals-undervalue>; Melissa Narragon et al., *Racial and Ethnic Valuation Gaps in Home Purchase Appraisals*, FREDDIE MAC (Sept. 20, 2021), [http://www.freddiemac.com/research/insight/20210920\\_home\\_appraisals.page](http://www.freddiemac.com/research/insight/20210920_home_appraisals.page).

251. Narragon et al., *supra* note 250.

252. *Id.*

253. *Id.*

254. *Id.*

255. *Id.*



Evidence regarding racial bias in the appraisal industry is indicative of similar problems in liability rule protection and the judicial evaluation of real property prices. First, the same implicit biases that affect professional appraisers are likely to also affect judges and jurors,<sup>256</sup> leading them to give low valuations to real property owned by members of racial minority groups. Second, courts often base their evaluations on professional appraisals submitted by expert witnesses; if those are biased, the judicial evaluation will be similarly prejudiced. It is important to note that under property rule protection, even if rights are undervalued, right holders can always retain the full value of their rights simply by choosing not to sell them. This vital option is unavailable under liability rules, which allow for forced removal of the rights.

Court evaluations of real estate values are likely to be racially biased also due to another reason, namely the inability of the judicial system to fully appreciate idiosyncratic value. By idiosyncratic value, I refer here to the private evaluation of a home to its owner, which might significantly differ from its market value.<sup>257</sup> Courts are of course aware of the general notion of idiosyncratic value and may seek to compensate owners accordingly in applying liability rules. Yet courts are particularly ill-equipped to appreciate high idiosyncratic values of real property held by members of racial minority groups. Supposedly, if a low-income family resides in a run-down house of low market value, it would seem to the judge that this house has no special high value. This is of course not true, due to factors relating to geographical mobility and local social capital.<sup>258</sup>

In the United States, members of racial minority groups systematically suffer from low geographical and residential mobility<sup>259</sup> due to a multitude of factors.<sup>260</sup> Research shows that low geographic mobility is correlated with high local social capital.<sup>261</sup> In other words, wealthier households are typically more geographically mobile, and rely less heavily on local community ties.<sup>262</sup> Conversely, poorer families are less geographically mobile, and rely more

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256. See sources cited *supra* notes 228, 229.

257. Colin Read, *Price Strategies for Idiosyncratic Goods—The Case of Housing*, 16 J. AM. REAL EST. & URB. ECON. ASS'N 379, 379 (1988) (explaining the concept of idiosyncratic value in the context of the housing market).

258. Scott J. South & Glenn D. Deane, *Race and Residential Mobility: Individual Determinants and Structural Constraints*, 72 SOC. FORCES 147 (1993).

259. *Id.*

260. Richard Thompson Ford, *The Boundaries of Race: Political Geography in Legal Analysis*, 107 HARV. L. REV. 1841, 1845 (1994) (arguing that “public policy and private actors operate together to create and promote racially identified space and the racial segregation that accompanies it”).

261. Quentin David, Alexandre Janiak & Etienne Wasmer, *Local Social Capital and Geographical Mobility*, 68 J. URB. ECON. 191, 191–92 (2010).

262. *Id.*

heavily on communities, personal friends, and family.<sup>263</sup> This means that for wealthier homeowners, market value is a more-or-less appropriate measure for the actual value of their real property. Thus, for wealthier homeowners, if their house is for some reason taken from them, or becomes uninhabitable, high geographic mobility and low local ties mean that compensation equaling market price of the lost house is an effective remedy. Such homeowners will simply make their home in a new location: Moving is not a particularly great challenge for them, and the change in location does not deprive them of particularly important connections. Conversely, for a lower-income family, market price is a very bad proxy for the true value of their real property. If their house is taken from them, low geographical mobility and high local ties make it all the more difficult to find a suitable alternative.

Low geographic mobility means that a change in location entails additional costs for members of racial minority groups. If the factory makes their home uninhabitable, the harm is significantly larger than market value would indicate, as the move itself can be a great challenge. For one, members of racial minority groups face discrimination in the housing market,<sup>264</sup> meaning that finding another house, or another neighborhood, may not be as easy. Further, local community ties and local social capital are highly valuable assets for members of minority groups,<sup>265</sup> and are strongly correlated with better physical health,<sup>266</sup> mental health,<sup>267</sup> and financial stability.<sup>268</sup> Local support systems, friends and family members offer support in times of need to those who cannot afford to pay for it; this type of help is crucial, for instance, for raising children by working single mothers.

The support of a local community of family and friends is completely idiosyncratic, and is therefore not reflected in market prices. The fact that all

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263. *Id.*

264. Ford, *supra* note 260.

265. Charles R. Lawrence III, *Forbidden Conversations: On Race, Privacy, and Community (A Continuing Conversation with John Ely on Racism and Democracy)*, 114 *YALE L.J.* 1353, 1361–63 (2005); Cheryl I. Harris, *Closing Remarks: Reimagining Community*, 47 *UCLA L. REV.* 1839, 1839–42 (2000).

266. Crystal W. Cené et al., *Understanding Social Capital and HIV Risk in Rural African American Communities*, 26 *J. GEN. INTERNAL MED.* 737, 737–38 (2011); Lorraine Dean et al., *The Role of Social Capital in African-American Women's Use of Mammography*, 104 *SOC. SCI. & MED.* 148, 149 (2014) (showing that women living in a community with tight social ties are more likely to receive health-related information from other community members and neighbors, and thus more likely to access to health-related resources).

267. Kevin M. Fitzpatrick et al., *Depressive Symptomatology, Exposure to Violence, and the Role of Social Capital Among African American Adolescents*, 75 *AM. J. ORTHOPSYCHIATRY* 262, 263 (2005) (observing an inverse relationship between depression and social capital among African American adolescents).

268. Silvia Domínguez & Celeste Watkins, *Creating Networks for Survival and Mobility: Social Capital Among African-American and Latin-American Low-Income Mothers*, 50 *SOC. PROBS.* 111, 113 (2003) (highlighting the connections between social capital and financial opportunities).

family friends live nearby makes the house more valuable for the family living there, but will not make it any more attractive for strangers. Similarly, the fact that a specific area is very welcoming of members of a specific racial minority group will not be reflected in higher housing prices. Courts are likely to ignore these values of community, and see only run-down houses where right holders see homes.

## 2. *Medical Costs*

In some cases, pollution from the factory can cause not only property harm, but also health risks. In such cases, as in many others, liability rules can be applied, necessitating judicial evaluation of rights of bodily integrity and estimation of medical risks and harms. To illustrate, assume that emissions of poisonous smoke from the factory, or a leak of hazardous materials into drinking water, causes increased health risks and health problems to nearby residents. Under a liability rule, the residents are not entitled to an injunction. Instead, they are entitled to compensation for any harms caused, including compensation for any medical costs—past and future. The problem is that state organs are likely to underestimate these compensation amounts when plaintiffs are members of racial minority groups.

Research shows that implicit racial biases cause medical professionals to systematically attribute increased physical resilience to members of racial minorities, especially Black people.<sup>269</sup> Correspondingly, the same biases cause medical professionals to underestimate the severity of injuries and physical harms caused to members of racial minorities.<sup>270</sup> Medical professionals have been shown to underappreciate the severity of the medical condition of hospitalized Black patients,<sup>271</sup> as well as the severity of complaints regarding chest pains<sup>272</sup> and other medical issues<sup>273</sup> when those came from Black patients.

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269. Kelly M. Hoffman et al., *Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites*, 113 PROC. NAT'L ACAD. SCI. 4296, 4298–99 (2016).

270. *Id.*

271. Mark J. Pletcher et al., *Trends in Opioid Prescribing by Race/Ethnicity for Patients Seeking Care in US Emergency Departments*, 299 J. AM. MED. ASS'N 70, 72 (2008) (showing that Black patients in hospital emergency departments are less likely to be prescribed pain medication).

272. Kevin A. Schulman et al., *The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization*, 340 NEW ENG. J. MED. 618, 623 (1999) (finding that the racial identity of patients affected physicians' decision on whether to refer them to additional checkups).

273. Emma Pierson et al., *An Algorithmic Approach to Reducing Unexplained Pain Disparities in Underserved Populations*, 27 NATURE MED. 136, 139 (2021) (advocating the use of AI diagnostics to reduce racial bias in medical treatment).

These findings are related to implicit racial biases, unaware associations of Black racial identity with supposedly superior physical attributes.<sup>274</sup> Such associations can hide under seemingly harmless stereotypes, such as those of Black athleticism,<sup>275</sup> yet they result in undervaluation of medical risks and harms to Black people, as compared to white people with similar symptoms.<sup>276</sup> More broadly, this type of bias is related to people's tendencies to assume that members of other social groups are somehow different in their basic characteristics.<sup>277</sup>

As medical professionals underestimate the severity of injuries and medical risks in members of racial minorities, courts will systematically underestimate compensation for their future medical costs as well: After all, if one's injuries are less severe, they require less medical attention. This form of discriminatory outcome can either occur directly, when judges and juries evaluate the plaintiff's injuries themselves, or indirectly, when judges and juries base their evaluation on biased evaluations by medical professionals.

### 3. *Pain & Suffering*

As explained above, racial biases cause medical professionals and courts to underestimate the severity of medical conditions in members of racial minorities. As Maytal Gilboa has recently shown, this leads not only to low evaluations of damages for medical costs, but also to low evaluations of damages for pain and suffering.<sup>278</sup> Thus, if the nature of the injury or the medical condition is downplayed, the pain and suffering attributed to this medical condition will also naturally be underestimated.<sup>279</sup>

Pain and suffering damages will be estimated even lower due to biases and prejudices relating to supposed imperviousness to pain experienced by members of racial minority groups, especially Black people.<sup>280</sup> These biases are related to myths attributing high pain tolerance to Black people,<sup>281</sup>

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274. Adam Waytz et al., *A Superhumanization Bias in Whites' Perception of Blacks*, 6 SOC. PSYCH. & PERSONALITY SCI. 352, 352 (2014).

275. *Id.* at 358.

276. *Id.*

277. Nick Haslam & Steve Loughnan, *Dehumanization and Infrhumanization*, 65 ANN. REV. PSYCH. 399, 402 (2014).

278. Gilboa, *supra* note 207.

279. *Id.*

280. Sophie Trawalter & Kelly M. Hoffman, *Got Pain? Racial Bias in Perceptions of Pain*, 9 SOC. & PERSONALITY PSYCH. COMPASS 146, 152 (2015) ("Our findings suggest that one reason Black patients may receive less pain medication is that medical professionals assume Black patients feel less pain than do [w]hite patients.").

281. Hoffman et al., *supra* note 269, at 4296; Sophie Trawalter et al., *Racial Bias in Perceptions of Others' Pain*, 7 PUB. LIBR. SCI. ONE 1, 7 (2012) ("[P]eople assume *a priori* that Blacks feel less pain than do [w]hites."); René Bowser, *Racial Profiling in Health Care: An Institutional Analysis of Medical Treatment Disparities*, 7 MICH. J. RACE & L. 79, 85, 90 (2001); Thompson, *supra* note

together with generally high physical capabilities<sup>282</sup> and higher tolerance to hunger,<sup>283</sup> thirst,<sup>284</sup> and extreme temperatures.<sup>285</sup> Since implicit racial bias leads people to believe that Black people experience lower levels of pain,<sup>286</sup> they are systematically awarded lower compensation amounts for pain and suffering.<sup>287</sup>

Research shows such biases are common among medical professionals<sup>288</sup> and affect medical decisions.<sup>289</sup> For example, studies show that patients who are members of racial minorities are less likely to receive pain medication in emergency,<sup>290</sup> potentially life-threatening situations.<sup>291</sup>

Accordingly, scholars have long argued that Black plaintiffs are systematically awarded lower pain and suffering damages, as compared with white plaintiffs;<sup>292</sup> these claims have also been supported through quantitative analysis.<sup>293</sup> The determination of damages for pain and suffering is particularly susceptible to bias, due to the ambiguous nature of the cognitive task. Courts and scholars highlight the highly subjective nature of the concept of pain,<sup>294</sup> and also the great variation in damages awards for pain

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224, at 1244 (“Social science research has made clear that a majority of Americans carry some level of subconscious or implicit bias against racial minorities and that this bias manifests itself in the application of racial stereotypes.”).

282. See, e.g., Waytz et al., *supra* note 274, at 352 (“Whites preferentially attribute superhuman capacities to Blacks versus [w]hites.”); D. MARVIN JONES, RACE, SEX, AND SUSPICION: THE MYTH OF THE BLACK MALE 139 (2005) (“Ideas about the ‘natural’ physical talents of dark-skinned peoples, and the media-generated images that sustain them, probably do more than anything else in our public life to encourage the idea that blacks and whites are biologically different in a meaningful way.”); Patricia Vertinsky & Gwendolyn Captain, *More Myth than History: American Culture and Representation of the Black Female’s Athletic Ability*, 25 J. SPORT HIST. 532, 547 (1998).

283. Waytz et al., *supra* note 274, at 356.

284. *Id.*

285. Hoffman et al., *supra* note 269, at 4297.

286. *Id.* at 4298 (showing in an experiment that people attribute different pain levels based on race, and that those attributions are correlated with beliefs regarding differences between racial groups).

287. Trawalter & Hoffman, *supra* note 280, at 152.

288. See, e.g., Hoffman et al., *supra* note 269, at 4296 (“[A] substantial number of white laypeople and medical students and residents hold false beliefs about biological differences between blacks and whites . . . [that] predict racial bias in pain perception and treatment recommendation accuracy.”).

289. Trawalter & Hoffman, *supra* note 280, at 152.

290. Megann F. Young et al., *Racial Differences in Receiving Morphine Among Prehospital Patients with Blunt Trauma*, 45 J. EMERGENCY MED. 46 (2013).

291. Monika K. Goyal et al., *Racial Disparities in Pain Management of Children with Appendicitis in Emergency Departments*, 169 J. AM. MED. ASS’N PEDIATRICS 996, 999 (2015).

292. Geistfeld, *supra* note 238, at 785; Oscar G. Chase, *Helping Jurors Determine Pain and Suffering Awards*, 23 HOFSTRA L. REV. 763, 770 (1995).

293. Girvan & Marek, *supra* note 235, at 253.

294. See, e.g., I.D. v. Sec’y of Health & Hum. Servs., No. 04-1593V, 2013 WL 2448125, at \*9 (Fed. Cl. May 14, 2013) (“Awards for emotional distress are inherently subjective and cannot be determined by using a mathematical formula.”); Muenstermann v. United States, 787 F. Supp. 499,

and suffering.<sup>295</sup> Due to this ambiguity, and since a “correct answer” in terms of the objectively true value of pain and suffering in a specific case is hard to pinpoint,<sup>296</sup> implicit biases are expected to greatly affect the application of liability rules in this context.

#### 4. Future Earnings

Economic inequality in the United States is racially driven to a striking degree.<sup>297</sup> The racial wage gap is one of the prominent features of this economic disparity,<sup>298</sup> and displays disheartening stability over time.<sup>299</sup>

The racial wage gap translates into racial disparity in the judicial application of liability rules. Thus, assume that the emission of hazardous materials from the factory caused paralysis in a child, costing the child the ability to work in the future.<sup>300</sup> In such case, in addition to other harms, the court will have to determine the value of the child’s future earnings. In doing so, most courts will base their decisions on statistical data regarding future earnings, based on multiple factors, including race.<sup>301</sup> Indeed, some courts have declared it unconstitutional to evaluate future earnings using race-based

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527 (D. Md. 1992) (“The full extent of nonpecuniary damages is difficult to measure. The amorphous nature of the subject and the infinite variables that come into play make it impossible for courts to fashion any precise rule.”); David W. Leebron, *Final Moments: Damages for Pain and Suffering Prior to Death*, 64 N.Y.U. L. REV. 256, 310 (1989); Avraham, *supra* note 207, at 91.

295. Leebron, *supra* note 294, at 310 (“[S]imilarly injured plaintiffs who experience similar pain and endure similar suffering are often awarded vastly differing amounts of damages.”).

296. *Id.* (noting large and difficult to explain variance in jury determinations of pain and suffering damages).

297. Patrick Bayer & Kerwin Kofi Charles, *Divergent Paths: A New Perspective on Earnings Differences Between Black and White Men Since 1940*, 133 Q.J. ECON. 1459, 1459–60 (2018).

298. *Id.*; David Leonhardt, Opinion, *The Black-White Wage Gap Is as Big as It Was in 1950*, N.Y. TIMES (June 25, 2020), <https://www.nytimes.com/2020/06/25/opinion/sunday/race-wage-gap.html>.

299. Leonhardt, *supra* note 298.

300. For a case generally following this pattern, see G.M.M. *ex rel.* Hernandez-Adams v. Kimpson, 116 F. Supp. 3d 126, 136, 152 (E.D.N.Y. 2015) (parties presented race-based statistics as evidence for child’s future earnings).

301. United States v. Bedonie, 317 F. Supp. 2d 1285, 1316 (D. Utah 2004) (“[I]ncluding race and sex adjustments appears consistent with the approach encouraged by some treatises, which suggest use of race and sex based statistics for calculating lost income when a claimant has no established earnings record.”); Powell v. Parker, 303 S.E.2d 225, 228 (N.C. Ct. App. 1983); Johnson v. Misericordia Cmty. Hosp., 294 N.W.2d 501, 527 (Wis. Ct. App. 1980); Kimberly A. Yuracko & Ronen Avraham, *Valuing Black Lives: A Constitutional Challenge to the Use of Race-Based Tables in Calculating Tort Damages*, 106 CALIF. L. REV. 325, 326 (2018) (referring to the use of race-based-tables as a standard practice).

statistical data,<sup>302</sup> yet many courts regularly accept the use of race-based statistics as an integral part of the evaluation of damages for lost earnings.<sup>303</sup>

Implicit racial bias, the focus of the discussion in this Article, presents an even greater problem. Thus, it is not only that minorities earn less; it is also that courts will estimate their potential earnings *even lower*. To illustrate, assume that the court determines a child's future earnings at twenty-five percent lower than the national average. The court of course explains that this evaluation is justified, and not discriminatory: It is simply based, according to standard practice, on the full available information regarding the child's future earnings. Yet this evaluation is extremely prone to implicit racial bias, and it is highly likely that the court's decision was driven, at least partially, by such implicit bias.<sup>304</sup>

The process of determining future earnings is susceptible to implicit bias due to its inherent ambiguity. Ambiguity here is twofold. First, it is difficult to recognize an exact correct answer. In such cases, both parties present their evidence and call expert witnesses.<sup>305</sup> Importantly, it is never completely clear what the child's future earnings will be. The determination of damages is a complicated process, a multifaceted decision requiring consideration of personal-level information and uncertain future estimations. Second, there is always an available justification: It is never clear if a low evaluation originates from an implicit bias, or is due to an objective factual evaluation. Thus, judges can always believe the outcome in a specific case is not the result of a discriminatory calculus, but that it originates with the objectively lower average of yearly earnings by ethnic minorities.

Research shows that these are exactly the situations in which discriminatory outcomes are most likely: When discriminatory decisions are difficult to recognize, and decision-makers can easily justify their decisions to themselves by attributing them to benign factors.<sup>306</sup> Most people care to think of themselves as good people;<sup>307</sup> they will therefore tend to discriminate when they can justify their discriminatory actions to themselves and maintain a virtuous self-image. Therefore, racial bias is highly likely to affect judicial evaluation of the child's possible future earnings. This should not be taken to mean that all judges will always discriminate in the determination of future

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302. See, e.g., *G.M.M.*, 116 F. Supp. 3d at 152; *McMillan v. City of New York*, 253 F.R.D. 247, 248 (E.D.N.Y. 2008); *Yuracko & Avraham*, *supra* note 301, at 325 (arguing that the use of race based statistics is unconstitutional).

303. *Yuracko & Avraham*, *supra* note 301, at 329.

304. See sources cited *supra* note 229.

305. See e.g., *G.M.M.*, 116 F. Supp. 3d at 152.

306. *Feldman & Kaplan*, *supra* note 242, at 52 (discussing “[s]elf-justified wrongdoing”).

307. *Mazar et al.*, *supra* note 212, at 634; *Gino*, *supra* note 211, at 107.

earnings; yet empirical evidence strongly suggests, and we have every reason to believe, that such discrimination will be commonplace.

Strong racial biases are operative when judges estimate the future earnings of members of minority groups. Thus, judges are likely to be affected by prejudiced associations and by prevalent “stereotypes that declare certain jobs suitable or unsuitable for African Americans.”<sup>308</sup> And indeed, studies show widespread and systemic racial bias against Blacks<sup>309</sup> and members of other groups<sup>310</sup> in terms of the way their employability is evaluated.<sup>311</sup> These same racial biases will also affect the way judges and jurors evaluate the employability of racial minority plaintiffs. As explained, the effect of such biases on decision-making becomes especially pronounced in the context of the application of liability rules, due to the complicated nature of the processes of right-evaluation.<sup>312</sup>

There is yet another reason that courts will systematically undervalue future earnings of members of racial minorities in applying liability rules. The reason for this is that courts use past and present information regarding income. And indeed, based on such data, race-based gaps in earnings are extreme.<sup>313</sup> Yet, there is no knowledge that those gaps will persist, for how long, and to what degree. Although the future does not seem bright, some chance for improvement must exist. It does not seem that current practices reflect this chance, thereby undervaluing future earnings, especially when the future earnings of young children are considered. In such cases, the true amount of lost future earnings is practically unknown.<sup>314</sup>

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308. K. Anthony Appiah, *Stereotypes and the Shaping of Identity*, 88 CALIF. L. REV. 41, 51 (2000).

309. Marianne Bertrand & Sendhil Mullainathan, *Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination*, 94 AM. ECON. REV. 991 (2004); Nicolas Jaquemet & Constantine Yannelis, *Indiscriminate Discrimination: A Correspondence Test for Ethnic Homophily in the Chicago Labor Market*, 19 LAB. ECON. 824 (2012).

310. Daniel Widner & Stephen Chicoine, *It's All in the Name: Employment Discrimination Against Arab Americans*, 26 SOCIO. F. 806 (2011).

311. PHILIP MOSS & CHRIS TILLY, *STORIES EMPLOYERS TELL: RACE, SKILL, AND HIRING IN AMERICA* 4 (2001) (“We also found evidence that managers hold negative stereotypes of [B]lacks and, to a lesser extent, Latinos, and act on these stereotypes by discriminating in hiring.”).

312. See *supra* Section II.A.3.

313. Bayer & Charles, *supra* note 297, at 1459–60.

314. Yuracko & Avraham, *supra* note 301, at 326 (explaining that the use of race-based tables is standard practice).



### 5. Innovation & Creativity

The choice between property rules and liability rules is a central issue in intellectual property law.<sup>315</sup> Thus, in patent law, scholars discuss possible shifts from property rule protection to liability rule protection through the use of compulsory licensing.<sup>316</sup> Compulsory licensing allows a forced taking of patent rights for a fair payment of the patent value, objectively determined by the state.<sup>317</sup> Compulsory licensing is considered advantageous, like other forms of liability rule protection, in preventing inefficient holdouts by patent holders.<sup>318</sup> Similarly, in copyright law, scholars explore the possibility of moving from injunctive relief to compensatory damages in cases of copyright infringement.<sup>319</sup>

As is the case in other areas of law, the analysis above raises concerns regarding implicit racial bias in the evaluation of intellectual property rights under liability rule protection. Intellectual property law has been shown to systematically disfavor creators who are members of racial minorities.<sup>320</sup> For instance, copyright law systematically offers lower levels of protection to Black musicians.<sup>321</sup> Copyright law simply does not recognize some forms of artistic expression as deserving of legal protection; it just so happens that by making such omissions, “copyright law’s structure predisposes it to

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315. Dan L. Burk, *Intellectual Property in the Cathedral*, in ACCESS TO INFORMATION AND KNOWLEDGE: 21ST CENTURY CHALLENGES IN INTELLECTUAL PROPERTY AND KNOWLEDGE GOVERNANCE 95 (Dana Beldiman eds., 2013).

316. Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 7 (2012).

317. See generally Reto Hilty, *Licensing for Competition, Innovation and Creation*, in INTELLECTUAL PROPERTY AND INNOVATION: A FRAMEWORK FOR 21ST CENTURY GROWTH AND JOBS 51 (Ian Hargreaves & Paul Hofheinz, eds., 2012); Burton Ong, *Compulsory Licenses of Pharmaceutical Patents to Remedy Anti-Competitive Practices Under Article 31(k) of the TRIPS Agreement: Can Competition Law Facilitate Access to Essential Medicines?*, in COMPULSORY LICENSING: PRACTICAL EXPERIENCES AND WAYS FORWARD 235, 238 n.6 (Reto M. Hilty & Kung-Chung Liu eds., 2015); Fredrick M. Abbott & Jerome H. Reichman, *The Doha Round’s Public Health Legacy: Strategies for the Production and Diffusion of Patented Medicines Under the Amended TRIPS Provisions*, 10 J. INT’L ECON. LAW 921, 935 (2007); Jean E. Akl, *Patent Exceptions in the Time of a Pandemic*, 55 LES NOUVELLES: J. LICENSING EXECS. SOC’Y 204, 205 (2020); Miriam Marcowitz-Bitton & Yotam Kaplan, *Recalibrating Patent Protection for COVID-19 Vaccines: A Path to Affordable Access and Equitable Distribution*, 12 U.C. IRVINE L. REV. 423, 450 (2022).

318. Chien & Lemley, *supra* note 316, at 7.

319. Abraham Bell & Gideon Parchomovsky, *Restructuring Copyright Infringement*, 98 TEX. L. REV. 679, 686 (2020).

320. K.J. Greene, *Copyright, Culture & Black Music: A Legacy of Unequal Protection*, 21 HASTINGS COMM. & ENT. L.J. 339, 340 (1999) [hereinafter Greene, *A Legacy of Unequal Protection*].

321. *Id.*; Greene, *supra* note 193, at 385.

disadvantage Black forms of music production.”<sup>322</sup> Basic structural features of copyright law, such as the requirement of single authorship,<sup>323</sup> the idea-expression dichotomy,<sup>324</sup> and the requirement that the work is fixed in a tangible medium,<sup>325</sup> deny protection to group collaborative efforts, improvisational artistic expression, and forms of musical expression that defy notation.<sup>326</sup> As a result, “copyright does not protect styles of performance pioneered by Black innovators,”<sup>327</sup> including rap,<sup>328</sup> jazz,<sup>329</sup> blues,<sup>330</sup> ragtime<sup>331</sup> and R&B.<sup>332</sup>

Similarly, intellectual property law consistently failed to protect Black inventors.<sup>333</sup> In patent law, for instance, the multitude of technical formalities has systematically disadvantaged inventors who are members of racial minorities, favoring affluent and legally well-informed inventors.<sup>334</sup>

Combined, these findings illustrate the racially biased nature of intellectual property law and the manner of its application by courts and regulators. Such findings suggest that racial bias will also distort the determination of damages in cases involving the infringement of intellectual property rights.<sup>335</sup> The structure of intellectual property law reveals a deeply-ingrained, biased under-appreciation of the cultural, artistic, and intellectual contributions of members of racial minorities. This biased under-appreciation is sure to translate to low evaluation of rights under a liability rule regime.

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322. K.J. Greene, “*Copynorms*,” *Black Cultural Production, and the Debate Over African-American Reparations*, 25 CARDOZO ARTS & ENT. L.J. 1179, 1200 (2008) [hereinafter Greene, “*Copynorms*”].

323. Roberta Rosenthal Kwall, “*Author-Stories: Narrative’s Implications for Moral Rights and Copyright’s Joint Authorship Doctrine*,” 75 S. CAL. L. REV. 1, 5 (2001).

324. Greene, “*Copynorms*,” *supra* note 322, at 1200.

325. *Id.* at 1201.

326. *Id.* at 1200.

327. *Id.*

328. *Id.* at 1186, 1191.

329. *Id.* at 1185, 1188, 1191, 1198, 1201.

330. *Id.* at 1190, 1219.

331. *Id.* at 1192.

332. *Id.* at 1191.

333. *Id.* at 1181.

334. Miriam Marcowitz-Bitton & Emily Michiko Morris, *The Distributive Effects of IP Registration*, 23 STAN. TECH. L. REV. 306, 308–09, 346–47 (2020); Miriam Marcowitz-Bitton, Yotam Kaplan & Emily Michiko Morris, *Unregistered Patents & Gender Equality*, 43 HARV. J.L. & GENDER 47, 50, 60–61 (2020).

335. Greene, *A Legacy of Unequal Protection*, *supra* note 320, at 370 (“Given the context of inferiority fostered by the ideology of separation, it is likely that society would not generally value a work by a minority artist as much as the same work by a white artist.”).

### III. NORMATIVE IMPLICATIONS

Part II showcases the disadvantage of liability rules once the possibility of racial bias in adjudication is considered. Part III moves on to discuss the normative implications of this analysis. In particular, Part III evaluates the implications of the analysis in Part II for the normative comparison between property rules and liability rules in terms of equality, efficiency, and corrective justice. This Part also considers the implications of the analysis for the need to improve liability rules.

#### *A. Property Rules & Liability Rules Reconsidered*

The analysis in Part II showcases the disadvantage of liability rules as compared with property rules. Liability rules require right evaluation by state organs, while property rules leave the task of right evaluation to right holders. Since state organs can be racially biased, liability rules offer insufficient protection. At the same time, property rules allow right holders to maintain control over the evaluation process, thus permitting holders to tell their own story regarding the value of their right. Property rules allow right holders to evaluate their own rights and to decide to hold on to those rights if others undervalue them. This is a key normative advantage of property rules, unavailable under liability rights protection, which allows for forced removal of rights. The key normative takeaway is, therefore, that property rule protection should be preferred over liability rule protection whenever possible.

Of course, property rules are not a panacea, and the analysis suggested here should not be taken to mean that property rules offer complete protection against racial bias in the judicial system. Under property rules and liability rules alike, the stage of the assignment of the right remains exclusively controlled by the state; therefore, any racial bias at this stage will disadvantage members of racial minority groups under both liability rules and property rules. The analysis in Part II merely suggests that—all other things being equal—property rule protection, granting evaluation authority to right holders, offers an advantage over liability rule protection, which creates an additional layer of potentially biased judicial discretion. Thus, all other things being equal, a system that tends toward property rules is likely to be less discriminatory compared to a system that tends toward liability rules. This conclusion offers a normative contribution to current debates, dominantly emphasizing the advantages of liability rules and the disadvantages of property rules.<sup>336</sup>

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336. *See supra* Section I.B.2.

Existing literature emphasizes the problems of inefficient holdouts and rent-seeking under property rules;<sup>337</sup> the current Article highlights the problem of discriminatory outcomes under liability rules. In balancing these two issues, I suggest it is better to err towards more holdouts and less discrimination and to prefer property rules over liability rules.

This analysis also relates to another problem that comes into view once *The Cathedral* is considered with the problem of racial bias in mind. Recall that under Calabresi and Melamed's framework, the choice between property rules and liability rules depends on the magnitude of transaction costs.<sup>338</sup> In particular, property rules are to be preferred when transaction costs are low,<sup>339</sup> and liability rules are to be preferred when transaction costs are high.<sup>340</sup> The problem of racial bias can cause state organs to mismanage this important choice between the modalities of protection. When racial bias prevents state organs from understanding the value of rights to holders, this can further push them to inappropriately shift from property rule protection to liability rule protection.

To illustrate this claim, assume that the factory's neighbors refuse the factory's offer to buy their homes for a price slightly above their market value. Under the "objective" evaluation of the judge, the factory's offer seems generous and reasonable. From the judge's perspective, if the residents refuse the offer, this can mean but one thing: The residents are trying to extort a better deal. It simply seems that transaction costs are high in this case, as a mutually beneficial bargain can be made, but problems of freeriding or opportunistic behavior are barring these beneficial arrangements. This is simply a form of high transaction cost that might hinder the socially desirable operation of the factory. The simple answer, the judge would reason, would therefore be to switch from property rule to liability rule protection and effectively force a sale of the homes to the factory at an objectively fair price.

Such a decision to shift to liability rule protection, although it seems entirely reasonable under the traditional framework offered by Calabresi and Melamed, is problematic for reasons already described in Part II.<sup>341</sup> Thus, the judge attributes the homeowner's refusal to sell to an attempt to hold out, indicative of a high transaction cost problem. The judge's bias and prejudice prevent them from considering the possibility that the reason residents refuse the supposedly beneficial offer is due to high idiosyncratic value of the house

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337. Calabresi & Melamed, *supra* note 1, at 1107.

338. *Id.* at 1106.

339. See *supra* note 86 and accompanying text; Calabresi & Melamed, *supra* note 1, at 1107.

340. See *supra*, note 87 and accompanying text; Calabresi & Melamed, *supra* note 1, at 1107.

341. See *supra* Section II.B.1 (judges might undervalue real property rights held by members of racial minority, either because they base their evaluations on racially biased market estimates, or because they are racially biased themselves).

to them, because they have no outside options, or because the cost of accepting the factory's offer is actually far beyond what the judge can appreciate. Even when judges entertain these options, they are unlikely to find them credible. This is unsurprising. A judge, as a member of social and economic elite, with no malice or ill intention, will usually find it intuitively odd that people will refuse what seems like a beneficial deal, to buy their low-value houses from them at prices beyond market value, and will find it difficult to truly imagine the types of costs people encounter that they themselves have never encountered.

### *B. Property Versus Liability Rules: A Normative Assessment*

This Section connects the analysis of property and liability rules, described above in general terms, to prevailing normative principles used by legal scholars to assess the justification of legal norms. In particular, liability rules suffer a disadvantage in terms of equality, legal coherence,<sup>342</sup> economic efficiency,<sup>343</sup> and the requirements of correlative justice.<sup>344</sup>

#### *1. Discrimination, Equality & Legal Coherence*

Ever since *The Cathedral*, legal scholars have emphasized the advantages of liability rules and the disadvantages of property rules.<sup>345</sup> Yet, the analysis here shows that property rules offer more equality, and less racial bias, as compared with liability rules. Equality here refers to the elementary requirement that like cases are treated alike,<sup>346</sup> often connected to notions of legal coherence,<sup>347</sup> the requirements of the rule of law,<sup>348</sup> and concepts of fairness and justice.<sup>349</sup>

Under liability rules, racial bias creates divergence from this core principle. Thus, assume that white neighbors of the polluting factory are compensated fully for their harms, while Black neighbors, due to implicit judicial bias, are only compensated for some of their harm. This is due, for

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342. See *infra* Section III.B.1.

343. See *infra* Section III.B.2.

344. See *infra* Section III.B.3.

345. See *supra* Section I.B.2.

346. W. VON LEYDEN, ARISTOTLE ON EQUALITY AND JUSTICE: HIS POLITICAL ARGUMENT 9, 112 (1985); Joseph William Singer, *Normative Methods for Lawyers*, 56 UCLA L. REV. 899, 948 (2009); Hans Kelsen, *Aristotle's Doctrine of Justice*, in WHAT IS JUSTICE? JUSTICE, LAW, AND POLITICS IN THE MIRROR OF SCIENCE 110–136 (1957).

347. RONALD DWORKIN, LAW'S EMPIRE 19–20, 312 (1986); NEIL MACCORMICK, LEGAL REASONING AND LEGAL THEORY 106–08, 152–53 (1978). See generally Kenneth I. Winston, *On Treating Like Cases Alike*, 62 CALIF. L. REV. 1 (1974).

348. LON L. FULLER, THE MORALITY OF LAW (1964); JOHN RAWLS, A THEORY OF JUSTICE § 38 (1971).

349. H.L.A. HART, THE CONCEPT OF LAW, ch. VIII (1961).

instance, to the fact that the court undervalued their homes, or the medical harms caused by pollution. This outcome is discriminatory, and harms the principle of equality, in the simplest sense that it fails to treat like cases alike.

## 2. *Economic Efficiency*

The analysis in Part II illustrates an advantage of property rule protection over liability rule protection not only in terms of equality, but also in terms of efficiency. Efficiency in this context refers to efficient incentives generated under different rules.<sup>350</sup> Under liability rule protection, if harms are undervalued as described above, this distorts ex ante incentives in several ways.

To illustrate this claim, assume that the factory generates an overall social benefit of 10, but also causes a harm of 15 to nearby residents. Under property rule protection, the neighbors will be entitled to an injunction, and the factory will cease to operate. There is no sum the factory can pay the residents that will make it worthwhile for them to bear its presence. This is also a socially desirable, or economically efficient, outcome: The factory generates benefits equal to 10, but harms equaling 15, meaning its operation nets negative 5. This efficient outcome is not necessarily achieved under a liability rule. Thus, under liability rule protection, assume that implicit bias causes the court to evaluate the harm to nearby residents at 5 only. Under these assumptions, the factory will choose to operate, obtain a benefit of 10, and pay compensation of 5 to the residents. This is an economically inefficient outcome: The factory generates a benefit of 10 but causes harms of 15. The factory is allowed to operate despite its net social negative value, since implicit bias prevented state organs from correctly valuing some of the harms it is causing.

Liability rules can cause inefficiency not only in the factory's choice of whether or not to operate, but also in terms of its decision to invest in precautionary measures.<sup>351</sup> Thus, assume again that the factory generates an overall social benefit of 10, causes a harm of 15 to nearby residents, and can prevent this harm at a cost of 6 by investing in precautionary measures. Under

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350. THOMAS J. MICELI, *THE ECONOMIC APPROACH TO LAW* 1 (2004) ("The economic approach to law assumes that rational individuals view legal sanctions (monetary damages, prison) as implicit prices for certain kinds of behavior, and that these prices can be set to guide these behaviors in a socially desirable direction."); WERNER Z. HIRSCH, *LAW AND ECONOMICS: AN INTRODUCTORY ANALYSIS* 1 (2d ed. 1988) ("[L]aws are authoritative directives that impose costs and benefits on participants in a transaction and in the process alter incentives."); Steven Shavell, *Law Versus Morality as Regulators of Conduct*, 4 *AM. L. & ECON. REV.* 227, 227 (2002) ("It is evident that both law and morality serve to channel our behavior. Law accomplishes this primarily through the threat of sanctions if we disobey legal rules.").

351. This analysis follows the distinction offered by Shavell, between precautions and levels of activity. Steven Shavell, *Strict Liability Versus Negligence*, 9 *J. LEGAL STUD.* 1 (1980).

property rule protection, the neighbors will be entitled to an injunction, and have the power to stop the factory from operating. Knowing this, the factory has no choice but to invest 6 in preventing the harm; otherwise, it cannot operate, and can make no offer to the residents that they will agree to. Once the factory invests 6 in precautions, and the factory causes no harm to the residents, they will accept any offer by the factory (say, for a price of 1) and the factory will be allowed to operate. This is an economically efficient outcome: The factory is allowed to produce, generating a benefit of 10, and invests 6 in preventing a harm of 15. The overall positive value of the operation of the factory equals 4. This efficient outcome is not necessarily achieved under a liability rule. Thus, under liability rule protection, assume again that implicit bias causes the court to evaluate the harm to nearby residents at 5 only. Under these assumptions, the factory will again choose to operate, but will see no reason to invest 6 in precautions. Instead of making such investment, the factory will simply operate and pay damages of 5 to the residents. This is an economically inefficient outcome. The factory causes harm of 15 that is preventable at the low investment of 6. But, the factory is allowed to operate without making this efficient investment due to the fact that implicit bias prevented a correct evaluation of the harms it is causing.

Finally, the racially biased application of liability rules can distort incentives also in the choice of the factory's location. Assume for instance that two possible locations are considered for the construction of the factory. The factory can be constructed next to an all-white neighborhood, where it will cause an overall harm of 10, or next to an all-Black neighborhood, where it will cause an overall harm of 15.<sup>352</sup> Yet, due to implicit racial biases, assume that harm to residents in the all-Black neighborhood is estimated at only 5, or that the factory, based on past experience, knows it will be estimated at 5 if the matter ever reaches the court. Under these assumptions, the factory will choose the economically inefficient location for the factory, near the all-Black neighborhood, where it is in fact more harmful.<sup>353</sup> Under property rule protection, this inefficient outcome is less likely. The residents of the all-Black neighborhood will not agree to have the factory near their home for any price lower than 15. At the same time, if the factory offers residents in the all-white neighborhood compensation of say, 13, they might

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352. This can be for any number of reasons. For instance, it might be that the all-Black neighborhood is more populous and dense, that residents there have higher idiosyncratic valuations of their property, or simply due to the specifics of the possible locations of the factory in relation to the houses in both neighborhoods.

353. This exacerbates related problems. If liability rules are applied, injurers have an incentive to move their harmful activities so that they harm poorer populations. Yotam Kaplan, *In Defense of Compensation*, 70 ALA. L. REV. 573, 605 (2018); Yehonatan Givati & Yotam Kaplan, *Harm Displacement and Tort Doctrine*, 49 J. LEGAL STUD. 73 (2020). If the harms to poorer populations are systematically undervalued, this further strengthens this incentive.

as well agree to have the factory near their neighborhood, seeing as it only causes a harm of 10. Thus, the efficient, less harmful location of the factory is chosen.

More generally, this analysis illustrates a simple point: Property rule protection facilitates efficiency by allowing right holders to express the true value of their rights. Liability rule protection, being susceptible to bias, fails in this regard.

### 3. *Corrective Justice*

The analysis in Part II also shows that liability rule protection can offend the requirements of corrective justice. Corrective justice refers here to the requirements of justice between two parties, the injurer and the injured, the defendant and the plaintiff.<sup>354</sup> Under the requirements of corrective justice, the goal of legal remedy is to reverse the harm caused in the bipolar relationship between the defendant and the plaintiff, to right the wrong, and to restore the plaintiff's right by bringing the plaintiff as close as possible to their position before the wrong was committed.<sup>355</sup>

Bias in the application of liability rules offends each of these goals. Thus, if compensation is less than full, it does not serve to restore the plaintiff's right, and does not correct the wrongful violation of the plaintiff's right. If compensation from the factory is partial and does not represent the true harm caused to the residents, it does not satisfy the requirements of corrective justice. Conversely, under property rule protection, rights are fully protected. Thus, under an injunction, the factory is prevented from operating, the residents' right is validated, and the harm prevented.

### C. *De-biasing Liability Rules*

In addition to preferring property rules, another possible response to the analysis above would be to try to fix liability rules by removing implicit bias or minimizing its effect. De-biasing mechanisms can include better jury instructions,<sup>356</sup> ones that offer a more structured process of right evaluations, or alert jurors to the possible effects of racial bias. It might also be desirable to restructure decision-making in ways that will remove biasing factors from the process of damages evaluations, or to offer mechanisms for the corrections of biased assessments. The legal literature on de-biasing

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354. ERNEST J. WEINRIB, *THE IDEA OF PRIVATE LAW* 159 (1995); JULES L. COLEMAN, *RISKS AND WRONGS* 367–69 (1992); Peter Cane, *Corrective Justice and Correlativity in Private Law*, 16 *OXFORD J. LEGAL STUD.* 471, 471–72 (1996).

355. John C.P. Goldberg & Benjamin C. Zipursky, *Torts as Wrongs*, 88 *TEX. L. REV.* 917, 917–19 (2010).

356. Thompson, *supra* note 224, at 1300–03 (suggesting improvements to jury instructions that might reduce implicit racial bias).



techniques is rich, and rapidly growing;<sup>357</sup> yet, it seems racial biases are persistent,<sup>358</sup> and de-biasing efforts present significant challenges and are not always successful.<sup>359</sup> Therefore, it remains advantageous to prefer property rules over liability rules, when possible.

### *1. Informing Decision-Makers*

One de-biasing method would be to alert jurors and other decision-makers to the possibility of racial bias in right evaluation, in order to increase their awareness and help them overcome implicit racial biases.<sup>360</sup> For instance, in the context of damages for pain and suffering, Gilboa has suggested presenting jurors with statistical information regarding the discrepancies between damage awards granted to Black and white plaintiffs.<sup>361</sup> Ideally, this will serve to alert jurors to implicit biases and help them overcome these biases.<sup>362</sup> Following Gilboa, similar de-biasing mechanisms can be employed beyond pain and suffering damages to equalize the application of liability rules more generally. Thus, in any area of law where members of racial minority groups systematically receive low damage awards, jurors can be made aware of such discrepancies in the hope that this will help them overcome bias.

One problem with this approach is that it is difficult to anticipate how jurors will respond to such de-biasing efforts. In fact, if jurors receive information regarding low compensation amounts awarded to members of racial minorities, this might run the risk of increasing biased decision-making. Thus, this type of information might prime jurors to award lower compensation amounts: If jurors are reminded of the fact that members of racial minorities usually receive lower damage amounts, this might reinforce implicit biases, or even award them a sense of legitimacy.<sup>363</sup>

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357. *E.g.*, Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199, 200–01 (2006); FELDMAN, *supra* note 245, at 58, 200; Yuval Feldman & Yotam Kaplan, *Big Data and Bounded Ethicality*, 29 CORNELL J.L. & PUB. POL'Y 39 (2019); Jennifer S. Lerner & Philip E. Tetlock, *Accounting for the Effects of Accountability*, 125 PSYCH. BULL. 255, 255–56 (1999); Shahar Ayal et al., *Three Principles to REVISE People's Unethical Behavior*, 10 PERSP. PSYCH. SCI. 738, 739–40 (2015); Yuval Feldman & Eliran Halali, *Regulating "Good" People in Subtle Conflicts of Interest Situations*, 154 J. BUS. ETHICS 65 (2017) (studying the usefulness of reminders as de-biasing mechanisms).

358. Lawrence, *supra* note 30.

359. Yuval Feldman & Yotam Kaplan, *Preferences Change & Behavioral Ethics: Can States Create Ethical People?*, 22 THEORETICAL INQUIRIES L. 85 (2021).

360. Feldman & Kaplan, *supra* note 357, at 69–70 (discussing the use of ethical reminders).

361. Gilboa, *supra* note 207, at 690–91.

362. *Id.*

363. See Yuval Feldman & Janice Nadler, *Expressive Law and File-Sharing Norms*, 43 SAN DIEGO L. REV. 577, 577, 584–87 (2006) (suggesting that people find it easier to justify their own misconduct if they believe everyone is acting in the same wrongful manner).

## 2. *Adjusting Compensation Amounts*

Another way to de-bias liability rules is to use statistical data to correct compensation amounts. Thus, in the context of pain and suffering damages, Gilboa suggests to bypass racial bias by adjusting damages amounts awarded by jurors to Black plaintiffs.<sup>364</sup> These adjustments should be calibrated to the average discrepancies in damages awards granted to Black plaintiffs relative to white plaintiffs.<sup>365</sup> Thus, under this proposal, statistical evidence will be compiled to ascertain the average ratio between compensations granted to Black and white plaintiffs in the area of pain and suffering.<sup>366</sup> Then, this ratio can be used to adjust compensation amounts determined by juries in specific cases.<sup>367</sup> After the jury decides the (presumably biased) damage award, the judge will simply adjust it using statistical data, multiplying the award granted by the jury by the average ratio, to generate an unbiased damage calculation.<sup>368</sup> Following this proposal, compensation amounts might be adjusted in similar ways more generally, and not only in the context of damages for pain and suffering. Thus, in any area of law where compensation amounts are shown to be discriminatory, courts can simply adjust compensation awards using the appropriate multiplier to remove bias.

This mechanism also presents some challenges. It is difficult to anticipate how jurors will react to the fact that the damage amounts they award are later adjusted by the judge. Jurors might react strategically or be further biased by such measures. Additionally, the application of such proposals in practice entails significant technical and informational challenges.<sup>369</sup>

## 3. *Removing Biased Justifications*

Another way to de-bias the application of liability rules would be to remove ambiguity and to provide clearer guidelines for the evaluation of rights. For instance, Ronen Avraham suggests that evaluation of damages for pain and suffering can be rendered less biased if such damages are based more directly on the severity of injury and not on the jurors' subjective evaluation of pain.<sup>370</sup> This proposal has been criticized: Since the determination of the severity of injury is itself susceptible to bias,<sup>371</sup> it is not clear that basing damages for pain and suffering on the severity of injury

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364. Gilboa, *supra* note 207, at 688–89.

365. *Id.*

366. *Id.*

367. *Id.*

368. *Id.*

369. *E.g., id.* at 685 (discussing the practices required for the implementation of such proposals).

370. Avraham, *supra* note 294, at 91–92.

371. *See supra* Section II.B.2.

offers any significant improvement.<sup>372</sup> In any event, the general notion of reducing bias by reducing ambiguity seems correct for the application of liability rules more generally.<sup>373</sup> This is of course not easy to do, as technical and formal application carries its own disadvantages.

One important manner of reducing ambiguity is by removing factors that might provide justifications for racially biased decisions. Thus, in some cases, the law currently allows for race-based information to be considered as part of the legitimate evaluation of rights under liability rule protection. This is the case, for instance, in the evaluation of future earnings, where race-based statistics are presented as evidence of standard practice in many courts.<sup>374</sup> This practice presents unnecessary normative ambiguity into the process of right evaluation. Once race-based statistics are introduced, jurors and judges are required to offer members of minority groups low right evaluations and to consider race-based information. Given such authorization, decision-makers will be even less able to control their implicit racial biases. This type of mental licensing to consider race-based data will legitimize implicit racial biases, thus inducing jurors to award even lower compensation amounts.

Therefore, the analysis offered here supports the conclusion, advocated by some scholars,<sup>375</sup> that race-based statistics should not be presented as evidence in the process of the application of liability rules. This will help remove normative ambiguity, thus de-biasing decision-makers and making the application of liability rules more objective.

## CONCLUSION

Ever since *The Cathedral*, scholars have been debating the relative advantages and disadvantages of property and liability rules. Within this ongoing debate, scholars have highlighted the attractive qualities of liability rules in preventing holdout problems and rent-seeking and in facilitating efficient allocation of resources. This analysis has developed into an argument for the general superiority of liability rules.

This debate was never viewed from the perspective of racial bias and racial discrimination. Once these are considered, weighty disadvantages of liability rules become apparent, and the justification for property rules is

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372. Gilboa, *supra* note 206, at 656–57.

373. Boussalis et al., *supra* note 236, at 277–78.

374. Yuracko & Avraham, *supra* note 301, at 331.

375. See, e.g., Ronen Avraham & Kimberly Yuracko, *Torts and Discrimination*, 78 OHIO ST. L.J. 661 (2017) (arguing against the use of race-based statistics in the determination of damages); Martha Chamallas, *Questioning the Use of Race-Specific and Gender-Specific Economic Data in Tort Litigation: A Constitutional Argument*, 63 FORDHAM L. REV. 73 (1994); CHAMALLAS & WRIGGINS, *supra* note 194, at 168.

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bolstered. The application of liability rules should not be presented as “objective,” but recognized for what it is: Vulnerable to implicit racial bias. This analysis goes against received wisdom in the rich literature that followed *The Cathedral* and calls for preferring property rules over liability rules.

Critical race theory calls for an inclusive mode of legal analysis. This type of analysis strives to give voice to outsiders,<sup>376</sup> those whose perspective is too often ignored or neglected. Liability rules go against this logic, excluding the viewpoint of minority right holders and their perspective on the value of their rights. Property rules, by comparison, include this viewpoint rather than exclude it by allowing minority right holders to participate in the process of the evaluation of rights and by respecting their point of view. In this sense, the application of critical race theory to *The Cathedral* is especially appropriate: After all, *The Cathedral*, too, is all about perspective. It is just that “*one view*,” simply isn’t enough.

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376. Richard Delgado, *Legal Scholarship: Insiders, Outsiders, Editors*, 63 U. COLO. L. REV. 717, 721 n.34 (1992).