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Behavioral Class Action Law

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ABSTRACT

Behavioral law and economics has been deployed to analyze nearly every field of law. Class action practice and procedure is a notable exception. This Article is the first to supplement stagnating class action debates and the traditional law and economics account of class action law with behavioral psychology. It draws on a litany of behavioral tendencies, biases, and pathologies—ranging from prospect theory, loss aversion, anchoring, and the status quo bias to the availability heuristic, group-attribution error, reactive devaluation, and the endowment effect—and considers their application to class action practice generally and Rule 23 in particular. In addition to this descriptive survey, this Article makes three contributions to class action scholarship. First, it applies behavioral psychology to an unresolved puzzle: how to explain opt-out rights. Traditional law and economics cannot explain why Rule 23 permits absent class members to opt-out of certain class actions, which appears inefficient and dependent on irrational behavior, or why this opt-out right is exercised according to predictably irrational patterns. However, behavioral law and economics fills these analytical gaps. Second, this Article demonstrates the prescriptive power of behavioral law and economics by illustrating how absent class members can be nudged toward class settlement by self-interested choice architects. Finally, this Article crystallizes the judicial role in light of the potency of behavioral psychology, choice architecture, and nudging in class settlement notices.

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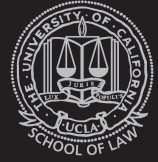


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INTRODUCTION

Behavioral psychology has been deployed to analyze nearly every field of law: administrative,¹ antitrust,² business,³ contracts,⁴ criminal procedure,⁵ environmental,⁶ evidence,⁷ insurance,⁸ intellectual property,⁹ national security,¹⁰ property,¹¹ torts,¹² and more.¹³ Following Professors Christine Jolls,

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1. See Matthew A. Edwards, *The FTC and New Paternalism*, 60 ADMIN. L. REV. 323 (2008); Mark Seidenfeld, *Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking*, 87 CORNELL L. REV. 486, 496 (2002) (discussing the relationship between “agency decisionmaking” and various heuristics and cognitive biases).
 2. See Avishalom Tor, *The Market, the Firm, and Behavioral Antitrust*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 539 (Eyal Zamir & Doron Teichman eds., 2014); Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527 (2011).
 3. See Margaret M. Blair & Lynn A. Stout, *Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law*, 149 U. PA. L. REV. 1735 (2001); Kent Greenfield, *The End of Contractarianism?: Behavioral Economics and the Law of Corporations*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 518; Kent Greenfield, *Using Behavioral Economics to Show the Power and Efficiency of Corporate Law as Regulatory Tool*, 35 U.C. DAVIS L. REV. 581 (2002).
 4. See Melvin A. Eisenberg, *Behavioral Economics and Contract Law*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 438.
 5. See Chad M. Oldfather, *Heuristics, Biases, and Criminal Defendants*, 91 MARQ. L. REV. 249 (2007).
 6. See Adrian Kuenzler & Douglas A. Kysar, *Environmental Law*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 748; Jonathan Remy Nash, *Framing Effects and Regulatory Choice*, 82 NOTRE DAME L. REV. 313 (2006) (arguing that framing can influence public criticism of regulation and particular regulatory mechanisms, rendering some regulatory instruments less viable than others).
 7. See Fredrick E. Vars, *Evidence Law*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 703.
 8. See Tom Baker & Peter Siegelman, *Behavioral Economics and Insurance Law: The Importance of Equilibrium Analysis*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 491.
 9. See Christopher Buccafusco & Christopher Sprigman, *Valuing Intellectual Property: An Experiment*, 96 CORNELL L. REV. 1, 4 (2010) (“[P]rivate transactions in creative goods may face significant transaction costs arising from cognitive biases,” which “in turn drive the price that creators and owners of IP are likely to demand considerably higher than buyers will, on average, be willing to pay.”).
 10. See Ganesh Sitaraman & David Zionts, *Behavioral War Powers*, 90 N.Y.U. L. REV. 516 (2015).
 11. See Ward Farnsworth, *Do Parties to Nuisance Cases Bargain After Judgment? A Glimpse Inside the Cathedral*, in BEHAVIORAL LAW AND ECONOMICS 302 (Cass R. Sunstein ed., 2000) (considering the endowment effect of an injunction award in a nuisance lawsuit); Owen D. Jones & Sarah F. Brosnan, *Law, Biology, and Property: A New Theory of the Endowment Effect*, 49 WM. & MARY L. REV. 1935 (2008); Daphna Lewinsohn-Zamir, *Behavioral Law and Economics of Property Law: Achievements and Challenges*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 377.

Cass Sunstein, and Richard Thaler's seminal work on behavioral law and economics,¹⁴ scholars have long explored the innumerable links between behavioral psychology and the law to fill the gaps in traditional law and economics accounts of the content and direction of the law. These efforts have helpfully supplemented—not replaced—the role of conventional economic analysis.

One field, however, has largely escaped analysis through the behavioral lens. Class action law, while often analyzed through traditional law and economics theory,¹⁵ has undergone minimal behavioral analysis.¹⁶ This should

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12. See Yoed Halbersberg & Ehud Guttel, *Behavioral Economics and Tort Law*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW, *supra* note 2, at 405; Boaz Shnoor, *Loss of Chance: A Behavioral Analysis of the Difference Between Medical Negligence and Toxic Torts*, 33 AM. J. TRIAL ADVOC. 71 (2009).
 13. There are, frankly, too many to list here. For a few favorites, see Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 VAND. L. REV. 1653 (1998); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption From Law and Economics*, 88 CALIF. L. REV. 1051 (2000); Edward J. McCaffery, Daniel J. Kahneman & Matthew L. Spitzer, *Framing the Jury: Cognitive Perspective on Pain and Suffering Awards*, in BEHAVIORAL LAW AND ECONOMICS, *supra* note 11, at 259.
 14. In their seminal article, *A Behavioral Approach to Law and Economics*, Professors Jolls, Sunstein, and Thaler outlined the contours of behavioral law and economics. See generally Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998) (discussing and exploring the potential for and utility of behavioral science as a supplement to traditional law and economics). They posit that, in contrast to the assumptions of traditional law and economics, humans “display bounded rationality, bounded willpower, and bounded self-interest.” *Id.* at 1476. These bounds cause individuals to embrace decisionmaking pathologies and heuristics that can “bear[] on the actual operation and possible improvement of the legal system.” *Id.* at 1480. Specifically, Professors Jolls, Sunstein, and Thaler explored three behavioral approaches to the law: “positive, prescriptive, and normative.” *Id.* at 1474 (footnote omitted). The positive, or descriptive, “task . . . is to explain both the effects and content of law.” *Id.* “The prescriptive task is to see how law might be used to achieve specified ends . . .” *Id.* Finally, “[t]he normative task is to assess more broadly the ends of the legal system.” *Id.* Professors Jolls, Sunstein, and Thaler drew support for this tripartite approach from David E. Bell, Howard Raiffa & Amos Tversky, *Descriptive, Normative, and Prescriptive Interactions in Decision Making*, in DECISION MAKING 9 (David E. Bell, Howard Raiffa & Amos Tversky eds., 1988). See *id.* n.4.
 15. See, e.g., John C. Coffee, Jr., *Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions*, 86 COLUM. L. REV. 669 (1986); Samuel Issacharoff, *The Governance Problem in Aggregate Litigation*, 81 FORDHAM L. REV. 3165, 3183–85 (2013); Jonathan R. Macey & Geoffrey P. Miller, *The Plaintiffs' Attorney's Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform*, 58 U. CHI. L. REV. 1 (1991).
 16. Two articles have touched on both behavioral economics and class action law. First, in *Funding Irrationality*, Professor Zimmerman addresses the intersection between class action settlement funds and behavioral psychology. See Adam S. Zimmerman, *Funding Irrationality*, 59 DUKE L.J. 1105, 1156 (2010) (“Because of the status quo bias, many claimants join funds that they do not necessarily like and never claim their awards.

come as a surprise given the stagnating terms of extant law and economics debates about the nature of the class device. This is particularly surprising because class action law—more so than many other fields—is influenced by the models and terms of traditional law and economics. Some scholars argue that class actions create judicial economies of scale and optimize deterrence by ensuring that low- and negative-value claims are vindicated¹⁷; others maintain that class actions are rife with agency costs¹⁸ and foster collusive bargaining—both anathema to efficiency.¹⁹ This debate informs not only what the law should be, but also what it is. For example, Federal Rule of Civil Procedure

Because of contrast biases, many claimants decide based on irrelevant settlement procedures and substantive awards.”). Professor Zimmerman’s article is less in the vein of a survey or general application of behavioral economics to class action law, and more of a normative proposal to improve fund distribution. See *id.* at 1156–60 (arguing that “fund designers” should “use paternalistic solutions to identify cognitive bias, and in some cases, channel it to benefit as many claimants as possible” without “adopt[ing] procedures that unduly eliminate settlement options for more rational claimants”). Second, Professor Dana argues that in light of behavioral psychology, “fundamental principles of fairness dictate that class members be held to settlements only if the relief provided to them by the settlement is something that a person conceivably could have accepted, before knowing her exact position within the class, in return for ceding for all time her legal claims for redress.” David A. Dana, *Adequacy of Representation After Stephenson: A Rawlsian/Behavioral Economics Approach to Class Action Settlements*, 55 EMORY L.J. 279, 280–81 (2006).

17. See generally Myriam Gilles & Gary B. Friedman, *Exploding the Class Action Agency Costs Myth: The Social Utility of Entrepreneurial Lawyers*, 155 U. PA. L. REV. 103 (2006) (discussing the deterrent value of the class device and in effect of a “deterrence-centric” framework on extant class action law).
18. See John C. Coffee, Jr., *Rethinking the Class Action: A Policy Primer on Reform*, 62 IND. L.J. 625, 628 (1987) (“High agency costs characterize class action litigation, and permit opportunistic behavior by attorneys...”); Issacharoff, *supra* note 15, at 3183 (“Presumably class counsel selected on the basis of an economic commitment to maximize financial returns to the class will be especially likely to succumb to the cross-cutting incentives in any principal-agent relationship.”).
19. See John C. Coffee, Jr., *Rescuing the Private Attorney General: Why the Model of the Lawyer as Bounty Hunter Is Not Working*, 42 MD. L. REV. 215, 243 (1983) (“The potential for collusion, of course, is present in any class or derivative action, because an inherent conflict of interest exists between the attorney and the class he represents. The latter is interested in the size of the settlement; the former, in the size of his fees.”); Susan P. Koniak & George M. Cohen, *Under Cloak of Settlement*, 82 VA. L. REV. 1051, 1170 (1996) (“All the critical findings made by a class action court—that the settlement was fair, class counsel adequate, and collusion absent—may be a product of class counsel’s negligence or fraud, either or both accepted without objection by the all-too-congenial defendant.”); Jay Tidmarsh, *Rethinking Adequacy of Representation*, 87 TEX. L. REV. 1137, 1171–72 (2009) (noting that because the “combination of fronted costs and expected attorneys fees typically makes class counsel the largest stakeholder in the class action,” counsel may seek to “protect that investment in the case rather than undertaking riskier strategies that match up better with the risk positions of the class”).

23(b)(3) requires that, before a “damages class”²⁰ is certified, plaintiffs show “that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.”²¹ Whether a class action is superior depends greatly on the court’s interpretation of what qualifies as a cost or benefit within the scope of the Rule 23(b)(3) superiority requirement and how those considerations are weighed.²²

This Article supplements the class action debate with behavioral law and economics, a heretofore-untapped resource for understanding class action controversies. Although class action law is a compelling study for traditional law and economics,²³ it can also benefit from a rich body of psychological research concerning individual and group decisionmaking, systematic biases, and cognitive heuristics. For example, psychological studies show that an individual’s characteristics are often imputed from the group to which they belong.²⁴ In light of this, perhaps the Rule 23(a) commonality prerequisite²⁵

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20. Class actions brought under Rule 23(b)(3) are colloquially referred to as “damages class actions” or “damages classes.” See 7AA CHARLES ALAN WRIGHT, ARTHUR R. MILLER & MARY KAY KANE, *FEDERAL PRACTICE AND PROCEDURE* § 1775 (3d ed. 2005) (“Typically money-damage class actions fall under Rule 23(b)(3), which imposes additional notice requirements and opt-out rights for the class members, as well as findings that a class action would be superior to individual litigation and that common questions predominate over individual ones.” (footnotes omitted)).
 21. FED. R. CIV. P. 23(b)(3).
 22. See Christine P. Bartholomew, *The Failed Superiority Experiment*, 69 VAND. L. REV. 1295, 1323 (2016) (noting that because of the many “policy goals” that might be facilitated by this requirement, “courts can arbitrarily select a particular policy justification to ground a particular conclusion”).
 23. For an excellent application of traditional neoclassical economic principles to the study of class actions, see generally William H. J. Hubbard, *Optimal Class Size, Dukes, and the Funny Thing About Shady Grove*, 62 DEPAUL L. REV. 693 (2013) (applying marginal cost-benefit analysis to the question of “optimal class size”).
 24. Scott T. Allison & David M. Messick, *The Group Attribution Error*, 21 J. EXPERIMENTAL SOC. PSYCHOL. 563, 563 (1985) (finding “a parallel between our tendency to infer the attitudes of an individual on the basis of his or her behavior . . . and our tendency to infer the attitudes of a group on the basis of the group’s decision,” which leads to “the tendency to assume that group decisions reflect members’ attitudes”); see also Halbersberg & Guttel, *supra* note 12, at 428–29 (“People often perceive groups as more homogenous than they really are. . . . The strength and robustness of this bias are affected by several factors: the out-group size (the larger the group the larger the effect), the social power gap between the in-group and the out-group (the greater the gap between groups the larger the effect), and familiarity with members of the out-group (the more familiarity with group members the lesser the effect).” (citation omitted)); cf. Ruth Hamill, Timothy DeCamp Wilson & Richard E. Nisbett, *Insensitivity to Sample Bias: Generalizing From Atypical Cases*, 39 J. PERSONALITY & SOC. PSYCHOL. 578, 578–79 (1980) (finding that “people may make unwarranted generalizations from samples to populations”).
 25. FED. R. CIV. P. 23(a)(2) (“One or more members of a class may sue or be sued as representative parties on behalf of all members only if . . . there are questions of law or fact common to the class . . .”).

and the Rule 23(b)(3) predominance requirement²⁶ should be strictly applied to combat this group-attribution heuristic. In addition, behavioral psychologists have found that in large and complex litigations, jurors' damages awards closely correlate to the award initially requested by counsel²⁷—a manifestation of “anchoring.”²⁸ Juries are also more likely to find a defendant liable when plaintiffs aggregate their claims, such that jurors are informed that the defendant harmed many individuals in a single (catastrophic) event²⁹—arguably a manifestation of the availability heuristic. Perhaps courts should police these biases with Rule 23(c)(4),³⁰ which permits issue classes and bifurcation,³¹ by isolating liability questions from damage awards.

Behavioral psychologists have identified dozens of other diverse decisionmaking biases, pathologies, and heuristics. Many of these insights have “been used as a corrective to some of the oversights of the more rationalist approaches” embraced by law and economics.³² This Article is the first to apply that correction in the class action context. It is neither exhaustive nor even consistent. Indeed, there may be tension between various behavioral insights, both in form and function. This inconsistency, however, is not unique to behavioral law and economics. Insights drawn from traditional law and economics can also pull in opposite directions. These inconsistencies merely reveal that there is room for debate in both fields. Further inquiry may reveal additional insights, applications, and critiques not considered here. These endeavors may range from the descriptive—explaining the content of Rule 23—to

26. FED. R. CIV. P. 23(b)(3) (“A class action may be maintained if Rule 23(a) is satisfied and if...the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual members . . .”).

27. See John Campbell et al., *Countering the Plaintiff's Anchor: Jury Simulations to Evaluate Damages Arguments*, 101 IOWA L. REV. 543, 547 (2016).

28. Anchoring refers to the tendency to overweigh the first or an important piece of information presented when making decisions. See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1128–30 (1974).

29. Irwin A. Horowitz & Kenneth S. Bordens, *The Consolidation of Plaintiffs: The Effects of Number of Plaintiffs on Jurors' Liability Decisions, Damage Awards, and Cognitive Processing of Evidence*, 85 J. APPLIED PSYCHOL. 909, 914–17 (2000).

30. FED. R. CIV. P. 23(c)(4) (“Particular Issues. When appropriate, an action may be brought or maintained as a class action with respect to particular issues.”).

31. See 1 JOSEPH M. McLAUGHLIN, McLAUGHLIN ON CLASS ACTIONS § 4:43 (13th ed. 2016) (“The Rule recognizes that it may be worthwhile to achieve the efficiencies and benefits of class-wide adjudication of one or more issues that are common to all class members even if other issues will have to be litigated separately by individual class members.”(footnote omitted)); *id.* (“The most commonly requested issue certification is that ‘liability’ be determined on a class-wide basis, and damages to individual class members be determined at follow-on trials or other proceedings.”).

32. Sitaraman & Zions, *supra* note 10, at 520.

the normative. This Article's thesis is simply that behavioral law and economics can inform these discussions and therefore deserves a seat at the class action table.

Accordingly, this Article does not aim to displace traditional law and economics, which has become a hegemon in the field due to its elegant, parsimonious, and often-accurate account of class action law and individual behavior.³³ Indeed, economic insights have explicitly shaped class action law: The U.S. Supreme Court³⁴ and nearly every federal court of appeals³⁵ has referred to or relied on law and economics concepts in assessing the costs and benefits of the class device.³⁶ This Article does also not endeavor to discount this demonstrated importance of traditional law and economics. Rather, it simply posits that law and economics is not without its analytical gaps, and a supplement is readily available.

The Article pursues its aim in three parts. Part I endeavors to further behavioral class action law research by exploring potential connections

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33. For particularly compelling applications in other fields of law, *see generally, e.g.*, Lucian Arye Bebchuk & Louis Kaplow, *Optimal Sanctions When Individuals Are Imperfectly Informed About the Probability of Apprehension*, 21 J. LEGAL STUD. 365 (1992) (applying traditional law and economics precepts to law enforcement regimes); Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968) (applying traditional economics precepts to law enforcement regimes); A. Mitchell Polinsky & Steven Shavell, *Enforcement Costs and the Optimal Magnitude and Probability of Fines*, 35 J.L. & ECON. 133 (1992) (applying traditional law and economics concepts to the design of optimal fine-based enforcement regimes).
 34. *See* Deposit Guar. Nat'l Bank of Jackson v. Roper, 445 U.S. 326, 339 (1980) ("The aggregation of individual claims in the context of a classwide suit is an evolutionary response to the existence of injuries unremedied by the regulatory action of government. Where it is not economically feasible to obtain relief within the traditional framework of a multiplicity of small individual suits for damages, aggrieved persons may be without any effective redress unless they may employ the class-action device."); Zahn v. Int'l Paper Co., 414 U.S. 291, 307 (1973) ("Class actions were born of necessity. The alternatives were joinder of the entire class, or redundant litigation of the common issues. The cost to the litigants and the drain on the resources of the judiciary resulting from either alternative would have been intolerable." (footnote omitted)).
 35. *See, e.g.*, Butler v. Sears, Roebuck & Co., 727 F.3d 796, 798 (7th Cir. 2013) ("A class action is the efficient procedure for litigation of a case such as this, a case involving a defect that may have imposed costs on tens of thousands of consumers, yet not a cost to any one of them large enough to justify the expense of an individual suit."); *In re* Gen. Motors Corp. Pick-Up Truck Fuel Tank Prods. Liab. Litig., 55 F.3d 768, 783 (3d Cir. 1995) ("One of the paramount values in this system is efficiency. Class certification enables courts to treat common claims together, obviating the need for repeated adjudications of the same issues.").
 36. *See, e.g.*, Briseno v. ConAgra Foods, Inc., 844 F.3d 1121, 1128 (9th Cir. 2017) (discussing the "comparative assessment of the costs and benefits of class adjudication," and noting that "[c]lass actions involving inexpensive consumer goods in particular would likely fail at the outset if administrative feasibility were a freestanding prerequisite to certification," thereby overweighing or giving undue influence to this cost).

between behavioral psychology and class action law generally. This Part considers the applicability of a mere sampling of behavioral insights—prospect theory and loss aversion, the status quo bias, group-attribution error, ambiguity aversion, the availability heuristic, and anchoring—to a wide swath of class action law, practice, and procedure, including tightening certification standards, the commonality prerequisite, the predominance requirement for damages class actions, the advent of the class ascertainability requirement, and the use of issues classes. This Part canvasses these varied topics and areas of class action law not to provide an exhaustive defense of behavioral class action law, but to demonstrate its potential.

Part II illustrates the descriptive utility of applied behavioral psychology by focusing on a class action puzzle: Why does Rule 23 provide opt-out rights to absent class members in damages class actions?³⁷ This feature of Rule 23 has been both justified and critiqued by warring law and economics factions. Critics argue that far from explaining the content of the law, law and economics demonstrates that opt-out rights are inefficient, permissive of irrational decisionmaking, and minimize welfare.³⁸ Therefore, the puzzle for law and economics is why this right exists and why it is exercised. Behavioral law and economics can help supply the answers. As Part II explains, prospect theory, a behavioral law and economics cornerstone, predicts that individuals are limited in their decisionmaking capacity and will therefore rely on reference points when evaluating the desirability of a probabilistic event.³⁹ In the legal setting, the litigation rights typically available in individual litigation serve as points of reference for aggregate litigation. These reference rights in turn shape

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37. FED. R. CIV. P. 23(c)(2)(B)(v) (“For (b)(3) Classes. For any class certified under Rule 23(b)(3), the court must direct to class members the best notice that is practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort. The notice must clearly and concisely state in plain, easily understood language . . . that the court will exclude from the class any member who requests exclusion . . .”).
38. See, e.g., David Rosenberg, *Adding a Second Opt-Out to Rule 23(b)(3) Class Actions: Cost Without Benefit*, 2003 U. CHI. LEGAL F. 19, 23 (arguing that “providing any opportunity for exit from the class action will undermine not only the anti-redistribution principle—increasing litigation costs and risks from strategic behavior as well as reducing the recoverable wealth that class action scale advantages make possible—but also the basic deterrence objective of collective adjudication together with any insurance benefit.”).
39. See Jolls, Sunstein & Thaler, *supra* note 14, at 1510 (contending that “people’s commitment to fairness is part of the causal mechanism that establishes [] laws” and “[f]airness norms interact with other forces to produce some of the seemingly anomalous laws we observe”); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263 (1979) (explicating prospect theory and describing “several classes of choice problems in which preferences systematically violate the axioms of expected utility theory”).

fairness norms, which powerfully affect individuals' utility curves. Because plaintiffs in individual litigation are afforded the right to determine whether to commence and participate in a lawsuit, individuals—who cannot be certain whether they will be involved in class litigation—will not accept less in the aggregate setting. There is, therefore, an arguably irrational demand for opt-out rights.

In Part III, this Article aims to demonstrate the prescriptive utility of behavioral law and economics by applying several psychological findings to the design of class-settlement notices. It considers how notice designers can frame a settlement notice to prey on absent class members' behavioral pathologies—including the endowment effect, reactive devaluation, and ambiguity aversion—in order to nudge them away from opting-out and toward settlement. Considering notice designers' ability to subtly nudge absent class members, courts should recalibrate and sharpen their review of the adequacy of class-settlement notice.

I. CLASS ACTION LAW AND BEHAVIORAL PSYCHOLOGY

Traditional law and economics starts with price theory. It assumes that humans are rational decisionmakers who, when well informed, will respond to incentives to maximize utility in line with stable preferences.⁴⁰ As Professor Gary Becker explains, “human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets.”⁴¹ Law and economics applies these principles “to determine the implications of such rational maximizing behavior in and out of markets, and its legal implications for markets and other institutions.”⁴² In criminal law, for example:

40. See Becker, *supra* note 33, at 176 (taking, as a starting point, “economists’ usual analysis of choice,” which turns on “utility” maximization); see also Mark R. Brown, *Deterring Bully Government: A Sovereign Dilemma*, 76 TUL. L. REV. 149, 160 (2001) (“Conventional deterrence models in a wide range of fields have thus turned to a rational-choice paradigm. The standard assumption is that rational, deductive actors with near perfect information will react in a predictable (and preferable) manner.” (footnotes omitted)); Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 27 J. ECON. LITERATURE 1067, 1068 (1989) (“It seems that the acceptance of economic theory into law has been eased by structural similarities between economics and law. For example, the ‘reasonable man’ of the law is not very different from the ‘rational man’ of economics.”).

41. GARY S. BECKER, *THE ECONOMIC APPROACH TO HUMAN BEHAVIOR* 14 (1976).

42. Jolls, Sunstein & Thaler, *supra* note 14, at 1476.

[T]he economists' usual analysis of choice . . . assumes that a person commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities. Some persons become "criminals," therefore, not because their basic motivation differs from that of other persons, but because their benefits and costs differ.⁴³

Behavioral law and economics, by contrast, takes rationality as a hypothesis—a theory rather than a fact. Real decisionmakers are not always, or even often, rational. Individuals frequently make decisions that are not utility maximizing,⁴⁴ or take actions that are detrimental to their interests, such as undersaving for retirement relative to expected future needs.⁴⁵ Such cognitive lapses do not reflect a death wish, but rather that humans "have limited computational skills and seriously flawed memories."⁴⁶ These cognitive gaps are bridged with mental shortcuts or heuristics.⁴⁷ Occasionally these shortcuts are advantageous, but other times they are not.

43. Becker, *supra* note 33, at 176.

44. See Jolls, Sunstein & Thaler, *supra* note 14, at 1477–78 (discussing "bounded rationality" and the behavioral deviations from "expected utility theory").

45. RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 104 (2008) ("The standard economic theory of saving for retirement is both elegant and simple. People are assumed to calculate how much they are going to earn over the rest of their lifetime, figure out how much they will need when they retire, and then save up just enough to enjoy a comfortable retirement without sacrificing too much while they are still working [A] problem with the theory is that it assumes that people have enough willpower to implement the relevant plan.").

46. Jolls, Sunstein & Thaler, *supra* note 14, at 1477.

47. Kahneman and Tversky developed this research in a series of groundbreaking articles. See generally Daniel Kahneman & Amos Tversky, *Choices, Values, and Frames*, 39 AM. PSYCHOL. 341 (1984) (explicating risk-aversion and its relationship to framing); Kahneman & Tversky, *supra* note 39 (explicating prospect theory); Daniel Kahneman & Amos Tversky, *The Psychology of Preferences*, 246 SCI. AM. 160 (1982) (explicating a number of heuristics); Amos Tversky & Daniel Kahneman, *Advances in Prospect Theory: Cumulative Representation of Uncertainty*, 5 J. RISK & UNCERTAINTY 297 (1992) (revisiting prospect theory and its relationship to risk aversion); Amos Tversky & Daniel Kahneman, *Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment*, 90 PSYCHOL. REV. 293, 295 (1983); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCI. 453 (1981) (introducing a host of decisionmaking heuristics with an emphasis on framing); Tversky & Kahneman, *supra* note 28; Amos Tversky & Daniel Kahneman, *Loss Aversion in Riskless Choice: A Reference-Dependent Model*, 106 Q.J. ECON. 1039 (1991) (explicating loss aversion); Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, 59 J. BUS. S251 (1986) (explicating the significance of framing on decisionmaking biases). For a wonderful discussion of the two and their work, see MICHAEL LEWIS, *THE UNDOING PROJECT: A FRIENDSHIP THAT CHANGED OUR MINDS* (2016).

Psychologists and behavioral scientists have identified dozens of these heuristics and pathologies that can result in systematically biased decisionmaking that is suboptimal, inefficient, or otherwise irrational. The ensuing discussion surveys just a few. For each, it outlines the pathology and considers its potential application to a particular class action rule, doctrine, debate, or controversy. This survey is just that—a survey. Subsequent discussion focuses more thoroughly on the application of select behavioral insights to discrete areas of class action law. The goal of this Part is to identify areas for future research by demonstrating the potential for behavioral class action law.

This survey methodology can yield results in tension with one another. This is attributable to the flexibility of behavioral law and economics. Even when confined to descriptive analysis, psychological insights can describe both the content of the law and explain why courts respond to the law as they find it. These conclusions occasionally conflict. A single rule might combat one behavioral pathology and simultaneously foment another.⁴⁸ Inasmuch as this is a flaw, it bears equally on traditional law and economics: Efficiency and deterrence might recommend large class actions, which in turn might foster agency costs and collusive bargaining, suggesting that class actions should be smaller. For both conventional and behavioral law and economics, these conflicts must be balanced against one another. Viewed in this light, tension is a feature, not a bug; debate supplements the analysis of class action law, rather than detracts.

A. Prospect Theory and Status Quo Bias

To the prototypical rational actor, losses are no different than gains when the outcome is the same: Starting with \$100 and gaining \$10 is equivalent to starting with \$120 and losing \$10. But to real humans, the “aggravation that one experiences in losing a sum of money appears to be greater than the pleasure associated with gaining the same amount.”⁴⁹ This observation—helpfully explicated by “prospect theory,” behavioral economists’ rebuttal to price theory—explains risk aversion: Losses weigh heavier than gains, even when the two are economically identical.⁵⁰

48. For an applied discussion of these, at times, competing descriptive inferences, see Vars, *supra* note 7, at 609 (discussing whether “[b]iases [e]xplain or [j]ustify [c]urrent [e]vidence [l]aw”).

49. Kahneman & Tversky, *supra* note 39, at 279 (citation omitted).

50. See Chip Heath et al., *Goals as Reference Points*, 38 COGNITIVE PSYCHOL. 79, 87 (1999) (noting that “[s]tudies of risky choice and riskless choice have presented converging evidence that

Proceeding from this and related observations, prospect theory—developed by Professors Daniel Kahneman and Amos Tversky—provides a framework to describe how individuals make decisions. Individuals rely not only on dispassionate cost-benefit analysis when sorting and ordering preferences, but are also dependent on various mental shortcuts, or heuristics. These heuristics help with assessing probabilistic outcomes by establishing benchmarks or references against which outcomes can be framed as losses or gains. Accordingly, the process of constructing a utility curve is not dictated by cost-benefit analysis alone. It is also heavily influenced by conceptions of loss, the limitations of the human brain, and a dependence on heuristics to overcome those shortcomings.

Prospect theory is familiar in legal scholarship. For example, applied studies show that plaintiffs vastly prefer a guaranteed \$200,000 settlement to a 50 percent chance of winning either \$400,000 or \$0 at trial.⁵¹ In economic terms, these options are equivalent: The expected value of a 50 percent chance of \$400,000 is \$200,000. To most humans, however, certainty is itself valuable; when sorting preferences, certainty is priced in, reflecting risk aversion. In the above example, the decisionmaking process is affected by the benchmark established by the certainty of settlement. Other options are judged against that reference, which sets a floor below which individuals prefer to avoid the possibility of suffering a loss. In other words, individuals are often unable to assign purely economic values to probabilistic outcomes.

Because of loss and risk aversion, individuals also exhibit a “status quo bias.”⁵² This bias is most pronounced when one of several options is presented as the status quo choice, which sets a reference, default, or benchmark against which potential losses must be avoided.⁵³ “People tend to stick to the old, even when they would choose the new if they were starting afresh.”⁵⁴ This bias can foster irrational decisionmaking. To illustrate, one study presented respondents

losses are weighted approximately two times more than equivalent gains....” (citations omitted)).

51. See Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, 70 S. CAL. L. REV. 113, 128–29 (1996).
52. See William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 8 (1988) (finding that “[s]ubjects in ... experiments adhered to status quo choices more frequently than would be predicted by the canonical [rational choice] model”).
53. See James Powers, Note, *A Status Quo Bias: Behavioral Economics and the Federal Preliminary Injunction Standard*, 92 TEX. L. REV. 1027, 1046 (2014) (“Status quo bias involves the alteration of decision making when one option is presented as the default, or status quo.” (footnote omitted)).
54. JONATHAN BARON, THINKING AND DECIDING 468 (3d ed. 2000).

with a series of choices, some of which were framed as the status quo default. Controlling for other factors, including respondents' preferences when identical options were not presented as the default choice, respondents disproportionately preferred the status quo option.⁵⁵ Applied in the legal context, scholars anticipate that individuals are more likely to accept an otherwise-objectionable contract provision when it is presented as a default.⁵⁶

These findings resonate in class action law. Consider, for example, the recent tightening of class certification standards.⁵⁷ To obtain certification of a damages class, class plaintiffs must satisfy both the Rule 23(a) prerequisites—numerosity, commonality, typicality, and adequacy—and the Rule 23(b)(3) requirement that “questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” With respect to the commonality prerequisite, in *Wal-Mart Stores, Inc. v. Dukes*,⁵⁸ the Supreme Court instructed that “[w]hat matters to class certification . . . is not the raising of common ‘questions’—even in droves—but, rather, the capacity of a classwide proceeding to generate common answers . . .”⁵⁹ Similarly, with respect to the predominance requirement, the Supreme Court held in *Comcast Corp. v. Behrend*⁶⁰ that individual damages theories predominate notwithstanding an otherwise uniform theory of class liability.⁶¹

Traditional law and economics explains this tightening of the certification requirements in terms of efficiency: Large class actions risk overdeterrence, foster agency costs, and are administratively cumbersome.⁶² Nevertheless,

55. See Samuelson & Zeckhauser, *supra* note 52, at 7–8.

56. See Robert A. Prentice & Jonathan J. Koehler, *A Normality Bias in Legal Decision Making*, 88 CORNELL L. REV. 583, 598–99 (2003).

57. See generally Robert H. Klonoff, *The Decline of Class Actions*, 90 WASH. U. L. REV. 729, 730 (2013) (remarking on the recently curtailed “ability of plaintiffs to obtain class treatment”); Georgene Vairo, *Is the Class Action Really Dead? Is That Good or Bad for Class Members?*, 64 EMORY L.J. 477 (2014) (commenting on the effect of “tightened up” standards for class certification in federal courts).

58. 564 U.S. 338 (2011).

59. *Id.* at 350 (quoting Richard A. Nagareda, *Class Certification in the Age of Aggregate Proof*, 84 N.Y.U. L. REV. 97, 132 (2009)).

60. 133 S. Ct. 1426 (2013).

61. See *id.* at 34–38.

62. See Noah Smith-Drelich, *Curing the Mass Tort Settlement Malaise*, 48 LOY. L.A. L. REV. 1, 19 (2014) (“[O]ver-deterrence will result if plaintiffs are permitted to craft classes that include unlike claims, compelling defendants (who lose) to pay for the claims of class members whom they may not have wronged.”); cf. Patrick A. Luff, *Bad Bargains: The Mistake of Allowing Cost-Benefit Analyses in Class Action Certification Decisions*, 41 U. MEM. L. REV. 65, 80–83 (2010) (discussing several “overdeterrence” scenarios).

there are efficiency costs to tightening certification standards: Meritorious low and negative value claims may be abandoned, thereby underdetering socially costly behavior, and even if a rush of individual claims are pursued, such claims may overwhelm courts, exacting social costs of their own.⁶³ These competing observations—both grounded in efficiency and concepts familiar to traditional law and economics—yield a stalemate.

Courts often prioritize certification costs relative to benefits, further muddling the law and economics account.⁶⁴ Far from reflecting a balanced cost-benefit analysis—both as advised and as predicted by law and economics—this often appears as cost-cost analysis. For example, in *Thorogood v. Sears, Roebuck & Co.*,⁶⁵ the Seventh Circuit reversed a class certification order and assiduously outlined the numerous costs of certification. The court stated that there is “a much greater conflict of interest between the members of the class and the class lawyers than there is between an individual client and his lawyer.”⁶⁶ Moreover, the court noted, a “further problem with the class action is the enhanced risk of costly error.”⁶⁷ The court opined that this risk itself fosters another cost: The risk of error “is asymmetric when the number of claims aggregated in the class action is so great that an adverse verdict would push the defendant into bankruptcy, for then the defendant will be under great pressure to settle even if the merits of the case are slight.”⁶⁸ While this analysis is not impeachable in isolation, it is in context. Against these many costs, the court considered—in one half of a paragraph—two benefits to certification: class actions “economiz[e] on the expense of litigation and enable[e] small claims to be litigated.”⁶⁹ In light of this balancing, it is no wonder that the court advised “caution in class certification *generally*.”⁷⁰

This analysis breaks with the traditional law and economics prediction that the law reflects a balanced cost-benefit assessment. Neither costs nor

63. See *Hughes v. Kore of Ind. Enter., Inc.*, 731 F.3d 672, 677 (7th Cir. 2013) (“A class action, like litigation in general, has a deterrent as well as a compensatory objective. Society may gain from the deterrent effect of financial awards. The practical alternative to class litigation is punitive damages, not a fusillade of small-stakes claims.” (internal quotation marks, alterations, and citation omitted)); see also *Carnegie v. Household Int’l, Inc.*, 376 F.3d 656, 661 (7th Cir. 2004) (“The *realistic* alternative to a class action is not 17 million individual suits, but zero individual suits, as only a lunatic or a fanatic sues for \$30.”).

64. Cf. Luff, *supra* note 62, at 68 (“Opponents of the class action mechanism believe that the harms associated with class actions outweigh their benefits.”).

65. 547 F.3d 742 (7th Cir. 2008).

66. *Id.* at 744.

67. *Id.* at 745.

68. *Id.*

69. *Id.* at 744.

70. *Id.* at 746 (emphasis added).

benefits should be given priority; rather, rational decisionmakers should equalize losses and gains. However, prospect theory predicts that decisionmakers will systematically overweigh losses—or costs—both generally and in the class action context. That, in turn, will lead loss- and risk-averse decisionmakers to preserve the status quo. It is therefore unsurprising that judicial decisionmakers who internalize these costs generally emphasize certification costs over benefits and hesitate to certify extremely large classes that might significantly alter the legal status quo.

To illustrate both the shortcoming of conventional law and economics and the utility of behavioral psychology in this regard, consider a particular certification cost: the risk of *in terrorem* settlements.⁷¹ Courts frequently lament “blackmail settlements”⁷²—the notion that “the defendant [will be] bludgeoned into settling [class claims] for more than they are worth”⁷³ because “class counsel is able to threaten the defendant with a costly and risky trial.”⁷⁴ As Judge Posner explained:

Suppose that 5,000 of the potential class members are not yet barred by the statute of limitations. And suppose the named plaintiffs in [the class action] win the class portion of this case to the extent of establishing the defendants’ liability It is true that this would only be *prima facie* liability, that the defendants would have various defenses. But they could not be confident that the defenses would prevail. They might, therefore, easily be facing \$25 billion in potential liability (conceivably more), and with it bankruptcy. They

71. In *terrorem* settlements are simply agreements to resolve a dispute out of a fear of potentially ruinous litigation. See *In terrorem*, BLACK’S LAW DICTIONARY (10th ed. 2014) (defining *in terrorem* as “by way of threat”).

72. See, e.g., *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 259 F.3d 154, 168 n.8 (3d Cir. 2001) (“Although finding the hydraulic pressure to settle should not dispositively affect a certification decision . . . it should be balanced against the benefits of a class action.”); *Castano v. Am. Tobacco Co.*, 84 F.3d 734, 746 (5th Cir. 1996) (“In addition to skewing trial outcomes, class certification creates insurmountable pressure on defendants to settle, whereas individual trials would not.”); *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1298 (7th Cir. 1995) (“Judicial concern about [blackmail settlements] is legitimate, not ‘sociological’ . . .”) (quoting *In re Sugar Antitrust Litigation*, 559 F.2d 481, 483 n.1 (9th Cir. 1977)). But see *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 145 (2d Cir. 2001), *superseded by statute on other grounds*, Fed. R. Civ. P. 23(g) (amended 2003), as recognized in *Mazzei v. Money Store*, 829 F.3d 260, 267 n.7 (2d Cir. 2016) (“The effect of certification on parties’ leverage in settlement negotiations is a fact of life for class action litigants. While the sheer size of the class in this case may enhance this effect, this alone cannot defeat an otherwise proper certification.”).

73. Bruce Hay & David Rosenberg, “Sweetheart” and “Blackmail” Settlements in Class Actions: Reality and Remedy, 75 NOTRE DAME L. REV. 1377, 1378 (2000).

74. Matthew J. Goodman, Comment, *The Private Attorney General Act: How to Manage the Unmanageable*, 56 SANTA CLARA L. REV. 413, 447 (internal citation omitted).

may not wish to roll these dice. That is putting it mildly. They will be under intense pressure to settle.⁷⁵

Courts occasionally police blackmail settlements by denying class certification to extremely large classes for which the threat is particularly salient.⁷⁶ This is arguably overreach; courts have other post-certification tools at their disposal “to ensure that class action settlements generally give the class as a whole an amount approximately equal to the total value of its claims.”⁷⁷ But these guardrails are reactive to an altered status quo; only by denying certification can the court preserve the preexisting status quo. Post-certification alternatives would allow the class action to proceed, and while it is easy to conceptualize the costs that might attend those proceedings (that is, the feared blackmail settlement), it is harder to imagine potential gains because the probability of the class action succeeding on the merits is unknown.

In any event, the blackmail settlement concern faces a more fundamental shortcoming when viewed through the lens of conventional law and economics. In this view, if a defendant settles a certified class action, then the cost of settlement must be less than or equal to the defendant’s expected value of the class’s claims at trial, including anticipated litigation costs and the defendant’s assessment of the class’s probability of success. If the cost of settlement were greater than the defendant’s expected value of the class claims at trial, then it would not settle for that amount. Consider Judge Posner’s hypothetical: The defendant faced at least \$25 billion in potential liability. Assume for the sake of the hypothetical that the defendant engaged in a

75. See *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d at 1298.

76. See, e.g., *Rutstein v. Avis Rent-A-Car Sys., Inc.*, 211 F.3d 1228, 1241, n.21 (11th Cir. 2000) (remarking that in light of individual issues, “there is nothing to be gained by certifying this case as a class action; nothing, that is, except the blackmail value of a class certification that can aid the plaintiffs in coercing the defendant into a settlement”); *In re Gen. Motors Corp. Pick-Up Truck Fuel Tank Prods. Liab. Litig.*, 55 F.3d 768, 784–85 (3d Cir. 1995) (vacating a certification order and observing that “class actions create the opportunity for a kind of legalized blackmail: a greedy and unscrupulous plaintiff might use the threat of a large class action, which can be costly to the defendant, to extract a settlement far in excess of the individual claims’ actual worth”).

77. Hay & Rosenberg, *supra* note 73, at 1393. Courts might, for example, employ a sampling technique to “hold a series of trials and award the class an amount equal to the average of the amounts awarded by individual juries,” thereby lessening the risk “that the defendant will suffer a total loss.” *Id.* at 1404–05. For an explication of applied sampling, see Luke McCloud & David Rosenberg, *A Solution to the Choice of Law Problem of Differing State Laws in Class Actions: Average Law*, 79 GEO. WASH. L. REV. 374, 401–02 (2011) (discussing sampling and the possibility of “applying average law to overcome the choice of law impediment to class action certification” where “the court finds it necessary, useful, or simply practical to determine the defendant’s aggregate liability and damages separately from undertaking the distribution of any classwide recovery”).

reasoned case evaluation and assessed that the class had a 10 percent probability of success on the merits. From the defendant's perspective, the fair value of the class claim would be \$2.5 billion, and the defendant should have an identical utility preference between settling for that amount or proceeding to trial because the two outcomes are economically identical.

Yet the blackmail settlement concern posits that "class actions subject defendants to *excessive* settlement pressure."⁷⁸ Or, as Judge Posner wrote, defendants "will be under intense pressure to settle" for a greater than warranted amount.⁷⁹ In other words, the defendant in Judge Posner's hypothetical will sue for peace and pay a premium above the \$2.5 billion expected economic value of the class claim.⁸⁰ But this observed behavior is irrational. Expounding on Judge Posner's opinion, one commentator explained that:

[C]ertification increases the variance associated with the expected trial outcome. To see this, compare a single coin toss where the stakes are win \$1 million or lose \$1 million with one thousand coin tosses worth +/- \$1000 each. The two sets of gambles have the same expected value: $(.5)(\$1 \text{ million}) + (.5)(-\$1 \text{ million}) = \$0$; and $(1000)((.5)(\$1000) + (.5)(-\$1000)) = \$0$. Yet, in the single large gamble, the only possible outcomes are +\$1 million and -\$1 million.⁸¹

To rationalist economists, that observation is both correct and wholly irrelevant, precisely because both options "have the same expected value."⁸² Yet courts often view the former option as far more costly than conventional economics predicts. This is classic risk aversion.

It might be that judges are not acting on their own biases or aversions, but rather against defendants' biases or aversions. Tightened certification standards may reflect the judiciary's reasoned concern that defendants will behave irrationally in the face of risk and accede to welfare-minimizing blackmail settlements. Risk and loss aversion are particularly potent where the decisionmaker faces a low-probability but high-magnitude loss,⁸³ which is often

78. Charles Silver, "We're Scared to Death": *Class Certification and Blackmail*, 78 N.Y.U. L. REV. 1357, 1357 (2003) (emphasis added).

79. *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d at 1298.

80. *See id.*

81. Silver, *supra* note 78, at 1370.

82. *Id.*

83. *Cf. id.* at 1374 ("Variance matters to risk-averse decisionmakers, however, because they give a gamble's downside potential disproportionate weight. A risk-averse person would fear a \$1 million loss more than he would value an equally likely \$1 million gain. Such a person therefore would pay something to avoid the gamble, even though its expected value is \$0.").

the case in the class action context. “If the defendant is risk-averse, it will be willing to pay a handsome premium to avoid going to trial, even if its chances of winning at trial are strong.”⁸⁴ And, as prospect theory predicts, defendants indeed frequently behave in a risk averse manner when presented with the possibility of low-probability losses.⁸⁵ From a purely economic perspective, any settlement premium paid by defendants to avoid trial is a suboptimal wealth transfer. Yet it is the experience of courts that “[w]hen the potential liability created by a lawsuit is very great, even though the probability that the plaintiff will succeed in establishing liability is slight, the defendant will be under pressure to settle rather than to bet the company, even if the betting odds are good.”⁸⁶ Perhaps, courts have tightened the Rule 23 certification standards to paternalistically police this behavior.

B. Group-Attribution Error

Class actions are large number propositions: In the classic case, a multitude of plaintiffs seek millions or even billions of dollars in aggregate damages.⁸⁷ Indeed, some of the highest profile class actions have sought certification on behalf of millions of plaintiffs.⁸⁸ These big numbers present something of a cognitive problem. Because the human brain has “difficulties with large numbers,”⁸⁹ it relies on heuristics to help quickly process complex information and avoid decision paralysis.⁹⁰ Though helpful, these heuristics

84. Hay & Rosenberg, *supra* note 73, at 1391; *see id.* at 1392 (noting the frequent refrain in the class action context that “plaintiffs may be able to extract a substantial settlement even for weak claims”).

85. *See* Jennifer K. Robbennolt, *Litigation and Settlement*, in *THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW*, *supra* note 2, at 623, 628.

86. *Kohen v. Pac. Inv. Mgmt. Co.*, 571 F.3d 672, 678 (7th Cir. 2009) (citation omitted) (commenting on the “*in terrorem* character of a class action”).

87. *See* Hay & Rosenberg, *supra* note 73, at 1377 (“[T]he class action frequently involves thousands or even millions of claims, often worth billions of dollars.”).

88. *See, e.g.*, *Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1429 (2013) (approximately “2 million” plaintiffs); *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 342 (2011) (approximately “one and a half million plaintiffs”); *In re Gen. Motors Corp. Pick-Up Truck Fuel Tank Prods. Liab. Litig.*, 55 F.3d 768, 781 (3d Cir. 1995) (approximately “5.7 million” plaintiffs).

89. Sitaraman & Zions, *supra* note 10, at 538 (footnote omitted). For example, “[w]hen making moral judgments about saving the lives of others, individuals are cognitively better equipped to deal with a few discrete individuals than large masses of nameless, faceless people.” *Id.* at 538–39 (footnote omitted). This is referred to as “psychic numbing.” *Id.* at 539.

90. *See generally* Tversky & Kahneman, *supra* note 28 (introducing and explicating a host of decisionmaking heuristics); *see also* Jolls, Sunstein & Thaler, *supra* note 14, at 1477–78 (“While [] heuristics are useful on average (which explains how they become adopted), they lead to errors in particular circumstances. This means that someone using such a rule of thumb may be behaving rationally in the sense of economizing on thinking time, but

can give rise to systematic biases and result in decisionmaking errors. For example, there is a tendency to exaggerate or misremember the extent to which a person's characteristics are shared amongst a large group to which that person belongs.⁹¹ This heuristic—group-attribution error—may lead an individual to assume that two people, one 5'9" and the other 7'6", are very different until told that they both play in the National Basketball Association, at which point their similarities will become outweighed. Far more nefariously, individuals may attribute the negative characteristics of an individual to that person's ethnic group, gender, religion, or race.

This heuristic has clear salience in the class action context. Rule 23's commonality prerequisite and predominance requirement might be understood as defenses or guardrails designed to combat group-attribution error by screening out dissimilar claims. To illustrate, consider that members of a certified class might be subject to individualized defenses at trial.⁹² Although this is not a per se barrier to certification under Rule 23,⁹³ courts often hold that the prospect of individualized defenses warrants denying certification on commonality or predominance grounds.⁹⁴ Rather than fearing that these individualized issues would predominate at trial, these courts might instead or also reasonably doubt that jurors will accurately evaluate and parse differences among class members. This can be understood as a prophylactic defense against group-attribution error. Indeed, behavioral psychologists are skeptical of jurors' ability to assess objectively an individual class member's unique

such a person will nonetheless make forecasts that are different from those that emerge from the standard rational-choice model." (footnote omitted)).

91. See Allison & Messick, *supra* note 24, at 564; see also Anne van Aaken, *Behavioral International Law and Economics*, 55 HARV. INT'L L.J. 421, 447 (2014) (applying this concept and remarking that, for example, "a politician's decision or behavior is attributed to the population, although the leader might be a dictator or reign by a minority government").
92. See Allan Erbsen, *From "Predominance" to "Resolvability": A New Approach to Regulating Class Actions*, 58 VAND. L. REV. 995, 1074 & n.181 (2005) (documenting cases in which courts have held "that the possibility that a defendant will have unique defenses to individual claims is generally not a basis for denying certification").
93. See *Waste Mgmt. Holdings, Inc. v. Mowbray*, 208 F.3d 288, 296 (1st Cir. 2000) ("As long as a sufficient constellation of common issues binds class members together, variations in the sources and application of statutes of limitations will not automatically foreclose class certification under Rule 23(b)(3)."); see also *Jimenez v. Allstate Ins. Co.*, 765 F.3d 1161, 1167–69 (9th Cir. 2014) (noting that a certification order did not prevent the defendant from raising individualized defenses with respect to particular class members at trial). The Supreme Court recently recognized the right to "litigate individual defenses" post-certification. See *Tyson Foods, Inc. v. Bouaphakeo*, 136 S. Ct. 1036, 1047 (2016).
94. See, e.g., *Coastal Neurology, Inc. v. State Farm Mut. Auto. Ins. Co.*, 458 F. App'x 793, 794 (11th Cir. 2012) (per curiam); *Heaven v. Trust Co. Bank*, 118 F.3d 735, 738 (11th Cir. 1997).

characteristics after being informed that the individual is part of a large group of similarly situated individuals unified by a shared experience (the defendant's wrongdoing).⁹⁵ To avoid this behavioral lapse, the Rule 23(a) commonality prerequisite and Rule 23(b)(3) predominance requirement screen out dissimilar claims and with them the risk of group-attribution error at trial.

One might question why judges would think they are better positioned than jurors to avoid group-attribution error. In addition to judges' specialized experience with and expertise in evaluating class actions, behavioral psychology supplies two explanations of its own. First, priming⁹⁶: Judges applying the Rule 23 certification requirements are primed to seek out dissimilarities, whereas jurors are presented with an ostensibly similar group of individuals that was prejudged as sufficiently cohesive to warrant class certification. These framing differences will likely affect each decisionmaker's perception of the class.⁹⁷ Second, positive illusion bias: Individuals tend to overestimate their own abilities.⁹⁸ It is therefore unsurprising that a decisionmaker at stage one (a judge) would think he or she is better suited to avert a cognitive error than a second decisionmaker at stage two (a jury).⁹⁹

95. See *supra* note 91; cf. Ruth Hamill, Timothy DeCamp Wilson & Richard E. Nisbett, *Insensitivity to Sample Bias, Generalizing From Atypical Cases*, 39 J. PERSONALITY & SOC. PSYCHOL. 578, 586 (1980) (finding over two experiments that subjects were "[W]illing to generalize from samples of unknown typicality, and even to generalize from samples known to be atypical.").

96. As one scholar explained: "Priming plants a seed in the brain. This 'seed' causes us to form an impression that we then use to interpret new information. So, for example, we are more likely to see Pete Rose as a 'baseball player' rather than a 'gambler' if we had earlier been exposed to words about baseball like *bat*, *strike*, or *New York Yankees*." Kathryn M. Stanchi, *The Power of Priming in Legal Advocacy: Using the Science of First Impressions to Persuade the Reader*, 89 OR. L. REV. 305, 307–08 (2010) (footnote omitted). In other words, the "primed" individual "uses the excited or primed knowledge category to evaluate the new information." *Id.* at 308 (footnote omitted). This effect is even more pronounced in the Rule 23 context, where judges are expressly directed to consciously seek out dissimilarities between class members.

97. See Daniel G. Linz & Steven Penrod, *Increasing Attorney Persuasiveness in the Courtroom*, 8 L. & PSYCHOL. REV. 1, 9 (1984) ("First impressions provide a convenient way for observers to integrate their subsequent impressions of an individual.").

98. See Sitaraman & Zionts, *supra* note 10, at 527 ("[Positive] illusions cause the decisionmaker to unrealistically value her own abilities, inflate the importance of those abilities relative to those of her adversary (or relative to situational factors), and view probabilistic outcomes through the prism of an optimism bias." (footnote omitted)); see also Ellen J. Langer, *The Illusion of Control*, 32 J. PERSONALITY & SOC. PSYCHOL. 311 (1975) (discussing the "illusion of control").

99. This is not to say that courts are wrong to so assume. As noted, judges have far more experience and expertise in evaluating class actions than the average person.

C. Ambiguity Aversion

Individuals are systematically biased against uncertain outcomes.¹⁰⁰ “If before we make a certain choice there is some salient information about an option that we would like to obtain, but cannot, we are more likely to avoid this option.”¹⁰¹ Behavioral scientists demonstrate this bias with an experiment in which participants are presented with two buckets containing red and black marbles.¹⁰² Participants are told that one bucket contains 50 red marbles and 50 black marbles; the other bucket also contains 100 marbles, each either red or black, but participants are told that all combinations of the two—50 red and 50 black, 70 red and 30 black, and so forth—are equally likely. Participants are then told that they will be awarded \$100 for drawing a red marble and are asked to choose one of the two buckets to draw from. The probability of selecting a winning ball is the same for both options: It is equally probable that the second bucket contains 100 red marbles and 0 black marbles; 99 red marbles and 1 black marble; 49 red marbles and 51 red marbles; and so on. Yet when this experiment is performed, participants widely prefer the first option, for which the probability of drawing a red marble is certain.¹⁰³

This bias toward certainty can cause systematic errors in daily decisionmaking. Homebuyers, for example, prefer fixed-rate mortgages to variable-rate mortgages,¹⁰⁴ even though the latter are empirically more cost-effective over time.¹⁰⁵ The ambiguity “heuristic predicts that consumers may tend to select fixed-rate mortgages . . . even when doing so is inefficient simply

100. See Daniel Ellsberg, *Risk, Ambiguity, and the Savage Axioms*, 75 Q. J. ECON. 643 (1961); David Schmeidler, *Subjective Probability and Expected Utility Without Additivity*, 57 ECONOMETRICA 571 (1989).

101. Maurits Barendrecht & Berend R. de Vries, *Fitting the Forum to the Fuss With Sticky Defaults: Failure in the Market for Dispute Resolution Services?*, 7 CARDOZO J. CONFLICT RESOL. 83, 102 (2005).

102. See generally Ellsberg, *supra* note 100 (describing this experiment’s parameters); see also David Weisbach, *Introduction: Legal Decision Making Under Deep Uncertainty*, 44 J. LEGAL STUD. § 319, § 321–22 (2015) (describing Ellsberg’s experiment).

103. See generally Ellsberg, *supra* note 100 (describing this experiment’s observed results).

104. Emanuel Moench, James Vickery & Diego Aragon, *Why Is the Market Share of Adjustable-Rate Mortgages So Low?*, CURRENT ISSUES ECON. & FIN., Dec. 2010, at 1, https://www.newyorkfed.org/medialibrary/media/research/current_issues/ci16-8.pdf [<https://perma.cc/K7EX-6GCL>].

105. For example, the average rate for a five-year adjustable-rate mortgage was 2.94 percent in 2015, and 2.87 percent in 2016. *5-Year Adjustable-Rate Mortgages (ARMs) Since 2005*, FREDDIE MAC, <http://www.freddiemac.com/pmms/pmms5.html> [<https://perma.cc/7S8W-D96H>]. For those years, the comparable average thirty-year fixed-rate mortgages were 3.85 percent and 3.65 percent, respectively. *30-Year Fixed-Rate Mortgages Since 1971*, FREDDIE MAC, <http://www.freddiemac.com/pmms/pmms30.html> [<https://perma.cc/4CLS-U5AA>].

because [fixed-rate] mortgages are more common . . . and so they are simply more aware of them.”¹⁰⁶ Similarly, many investors prefer Treasury bills—for which coupon rates are certain—over volatile stock-based mutual funds, notwithstanding that the latter have historically generated greater returns.¹⁰⁷

In the class action context, the ambiguity effect explains in part the rise of the class-ascertainability requirement. Several federal courts “have identified an additional, implicit requirement for class certification: the class must be ascertainable.”¹⁰⁸ This atextual pre-certification requirement—often expressed as the rule that a putative class must present an administratively feasible mechanism for identifying who would be in the class if it were certified¹⁰⁹—is not without detractors. The Ninth Circuit, for example, doubted the utility of ascertainability, reasoning that textual requirements such as the “manageability criterion of the superiority requirement” render ascertainability duplicitous at best.¹¹⁰ Nevertheless, several courts have embraced the rule.¹¹¹ These courts’ insistence on additional information about precisely who would be in a putative class and how those individuals would be contacted is a manifestation of ambiguity aversion and a bias toward certainty.

The decision to certify a class is fraught with costs and benefits. Costs are generally certain—defendants are typically few in number, and potential aggregate damages are often easy to approximate.¹¹² Benefits, however, can be more difficult to conceptualize, particularly without knowing with some degree

106. Todd Zywicki, *The Behavioral Law and Economics of Fixed-Rate Mortgages (and Other Just-So Stories)*, 21 SUP. CT. ECON. REV. 157, 179 (2013) (using the related term “availability bias” to refer to a similar concept of “people predicting the frequency of an event based on how easily an example can be brought to mind”).

107. Cf. CONSTANTINOS ANTONIOU, RICHARD D. F. HARRIS & RUOGU ZHANG, AMBIGUITY AVERSION AND STOCK MARKET PARTICIPATION: EVIDENCE FROM FUND FLOWS at 1 (2013) [ftp://ftp.repec.org/opt/ReDIF/RePEc/wbs/Repec/2013/AntoniouHarrisZhang2013AASMPEFF.pdf](http://ftp.repec.org/opt/ReDIF/RePEc/wbs/Repec/2013/AntoniouHarrisZhang2013AASMPEFF.pdf) (showing that stock-market participation rates decline as ambiguity increases).

108. Geoffrey C. Shaw, Note, *Class Ascertainability*, 124 YALE L.J. 2354, 2357 (2015) (footnote omitted).

109. See, e.g., *Carrera v. Bayer Corp.*, 727 F.3d 300, 307 (3d Cir. 2013) (“If a class cannot be ascertained in an economical and administratively feasible manner, significant benefits of a class action are lost.” (internal quotation marks and citation omitted)); *Little v. T-Mobile USA, Inc.*, 691 F.3d 1302, 1304 (11th Cir. 2012) (“Before a district court may grant a motion for class certification, a plaintiff seeking to represent a proposed class must establish that the proposed class is ‘adequately defined and clearly ascertainable.’” (quoting *DeBremaeker v. Short*, 433 F.2d 733, 734 (5th Cir. 1970))).

110. *Briseno v. ConAgra Foods, Inc.*, 844 F.3d 1121, 1127 (9th Cir. 2017).

111. See, e.g., *In re Nexium Antitrust Litig.*, 777 F.3d 9, 19 (1st Cir. 2015); *Brecher v. Republic of Argentina*, 806 F.3d 22, 24–25 (2d Cir. 2015); *Karhu v. Vital Pharms. Inc.*, 621 F. App’x 945, 948 (11th Cir. 2015); *Byrd v. Aaron’s Inc.*, 784 F.3d 154, 162 (3d Cir. 2015); *EQT Prod. Co. v. Adair*, 764 F.3d 347, 359–60 (4th Cir. 2014).

112. In no small part because of the often precise demand for damages in the class complaint.

of certainty the scope of the putative class. Absent greater ascertainability to bridge this gap, judicial decisionmakers predictably prefer certainty and eschew ambiguity.

D. The Availability Heuristic and Anchoring

Decisionmakers often rely on immediately available memories, the recall of which is determined both by how recent and how unique or emotionally charged the event was to the perceiver.¹¹³ In particular, when establishing the reference points that shape utility curves, there is a tendency to overweigh and prioritize information based on its availability.¹¹⁴ As a result, individuals overestimate objectively low-probability risks that are associated with extremely memorable and visceral events or catastrophes, such as plane crashes, relative to high-probability risks considered banal, such as car crashes.¹¹⁵

A related anchoring heuristic causes decisionmakers to depend upon numbers that are more readily recalled based on how recently the number was presented or the degree to which the number provides a handy reference point.¹¹⁶ These numbers are anchored onto and, as prospect theory explains, used as references when forming utility curves, sorting preferences, processing information, and making decisions. To illustrate, Tversky and Kahneman asked a group of study participants to quickly compute the product of the numbers one through eight ($1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8$). Respondents gave very different estimates depending on the order in which the numbers were presented: When the sequence started with one (1), the smallest number, the median estimate was 512; when the sequence started with eight (8), the largest number, the median estimate was 2250.¹¹⁷ In other words, individuals' initial

113. See Tversky & Kahneman, *supra* note 28, at 1127; see also Jolls, Sunstein & Thaler, *supra* note 14, at 1518 (“[Individuals’] judgments about probabilities will often be affected by how ‘available’ other instances of the harm in question are, that is, on how easily such instances come to mind.”).

114. Cf. Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 685 (1999).

115. See Cass R. Sunstein, *What’s Available? Social Influences and Behavioral Economics*, 97 NW. U. L. REV. 1295, 1297 (2003) (“If an incident is readily available but statistically rare, the heuristic will lead to overestimation of risk; if examples do not come to mind, but the statistical risk is high, the heuristic can give people an unjustified sense of security.”).

116. See Tversky & Kahneman, *supra* note 28, at 1128–30 (“In many situations, people make estimates by starting from an initial value that is adjusted to yield the final answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a partial computation. . . . That is, different starting points yield different estimates, which are biased toward the initial values.”).

117. *Id.* at 1128.

reference points served as an anchor for their estimates. Anchoring is occasionally devoid of any rational explanation. In another study conducted by Tversky and Kahneman, participants were shown a roulette wheel that stopped on either the number ten or sixty-five. The wheel was spun in front of the participants, who were then immediately asked to guess what percentage of the United Nations is comprised of African nations. On average, participants who observed the wheel stop at ten guessed that 25 percent of the United Nations is comprised of African nations; participants who saw the wheel stop at sixty-five guessed 45 percent.¹¹⁸ Anchoring and the reliance on easily recalled numbers and events are powerful phenomena that can overwhelm any semblance of reasoned analysis.

These twin information-processing heuristics can significantly affect a jury's decisionmaking in ways that powerfully affect class action law. Studies have shown that when awarding damages, jurors are likely to anchor to the initial damage award proposed by plaintiffs' counsel.¹¹⁹ Another study into juror decisionmaking found that jurors are more likely to issue damages awards when told that the defendant injured multiple plaintiffs.¹²⁰ Stated differently, juries are particularly influenced by (catastrophic) incidents involving multiple injuries and cling to that reference when making decisions. It is easy to imagine how these biases might impact a jury's evaluation of a class action that includes thousands or millions of claimants demanding astronomical aggregate damages.

Setting aside whether it should be applied in this fashion, Rule 23 supplies tools to combat these biases. Courts concerned with the availability heuristic or anchoring might employ Rule 23(c)(4) to bifurcate liability questions from damage awards.¹²¹ Within the same class action, one jury might be tasked with assessing the defendant's liability, while another assesses damages.¹²² Courts might further utilize bifurcation to combat jurors' tendency to anchor to damage requests by conducting a sample of individual bellwether trials, the

118. *Id.*

119. Campbell et al., *supra* note 27, at 547.

120. Horowitz & Bordens, *supra* note 29, at 914–17.

121. FED. R. CIV. P. 23(c)(4) (“Particular Issues. When appropriate, an action may be brought or maintained as a class action with respect to particular issues.”).

122. See, e.g., *Mulvania v. Sheriff of Rock Island Cty.*, 850 F.3d 849, 859 (7th Cir. 2017) (stating that in class actions “where damages must be assessed individually, district courts may ‘bifurcate the case into a liability phase and a damages phase.’”) (quoting *Mullins v. Direct Dig., LLC*, 795 F.3d 654, 671 (7th Cir. 2015)); *Olden v. LaFarge Corp.*, 383 F.3d 495, 509 (6th Cir. 2004) (stating that the trial court “can bifurcate the issue of liability from the issue of damages, and if liability is found, the issue of damages can be decided by a special master or by another method” (footnote omitted)).

results of which could then be applied to the class writ large.¹²³ These tactics might enable the court to mitigate the risk that biases will infect juror decisionmaking.

The foregoing survey highlights just a handful of behavioral phenomena and their applicability to class action practice and procedure. At times, courts appear to apply Rule 23 in a manner designed to combat observed—and costly—behavioral pathologies. Other times, it appears that courts themselves fall prey to the very biases they police in other contexts. Future inquiry can expand on these observations both in breadth and depth—there are more connections between behavioral law and economics and class action law to explore and much to say about each of those individual connections. The present inquiry next turns to one such connection: the interrelationship between behavioral law and economics and class action opt-out rights.

II. A POSITIVIST (BEHAVIORAL) ACCOUNT OF OPT-OUT RIGHTS

Traditional law and economics aims “to explain the content of the law”¹²⁴ as an efficient means of organizing society, the result of rent-seeking, or a combination of both. “The positive theory of law reflected in the conventional account predicts that the legal rules we observe will be rules that either maximize social wealth...or redistribute wealth to interest groups able to influence the legislative process.”¹²⁵ Law and economics might suggest, for example, that the Rule 23 requirement that courts scrutinize attorneys’ fees functions to mitigate welfare-minimizing agency costs¹²⁶; similarly, it might be argued courts scrutinize class settlements to prevent collusive bargains because

123. See, e.g., *Hilao v. Estate of Marcos*, 103 F.3d 767, 782–84 (9th Cir. 1996) (describing a sampling methodology for ascertaining class-wide liability and damages); see also Alexandra D. Lahav, *Bellwether Trials*, 76 GEO. WASH. L. REV. 576, 624–25 (2008) (describing the use of bellwether trials to assess, *inter alia*, damages in cases related to the events of September 11, 2001); Edward F. Sherman, *Segmenting Aggregate Litigation: Initiatives and Impediments for Reshaping the Trial Process*, 25 REV. LITIG. 691, 699 (2006) (noting that one judge, who “was faced with a docket of some 3,000 asbestos cases, proposed the use of sample trials from which damage awards would be extrapolated for all of the cases”).

124. Jolls, Sunstein & Thaler, *supra* note 14, at 1508.

125. *Id.*

126. See Coffee, Jr., *supra* note 18, at 628 (“High agency costs characterize class action litigation, and permit opportunistic behavior by attorneys . . .”).

they undermine deterrence.¹²⁷ On the other hand, the Class Action Fairness Act of 2005¹²⁸ (CAFA), which makes it easier to remove class actions from plaintiff-friendly state courts,¹²⁹ might be explained as the result of repeat defendants' (such as very large corporations) lobbying.¹³⁰ Not all class action law, however, is so readily explained. This Part considers one aspect of class action law—Rule 23 opt-out rights—that is neither readily explained as welfare-maximizing nor as a response to concentrated rent-seeking. In order to explain the existence and application of this law, one must look for interpretative and analytical tools beyond traditional law and economics. This Part demonstrates that behavioral law and economics provides a ready supplement.

A. A Puzzle: Opt-Out Rights

Damages classes are “opt-out” actions¹³¹: Absent class members are afforded the opportunity to opt-out of the group litigation at key

127. See Jonathan R. Macey & Geoffrey P. Miller, *Judicial Review of Class Action Settlements*, 1 J. LEGAL ANALYSIS 167, 185 (2009) (“In the rare cases where judges do reject a settlement on purported adequacy grounds three factors are typically present: (1) unmistakable indications of inadequacy; (2) failure to provide a reasoned explanation for the choices made; and (3) indications of unfairness in the settlement bargaining such as possible collusion or lack of bargaining power on the part of class counsel.”).

128. Pub. L. No. 109-2, 119 Stat. 4 (2005) (codified as amended at 28 U.S.C. §§ 1, 1332, 1453, 1711–15).

129. See Jeffrey L. Roether, Note, *Interpreting Congressional Silence: CAFA’s Jurisdictional Burden of Proof in Post-Removal Remand Proceedings*, 75 FORDHAM L. REV. 2745, 2761 (2007) (“By broadening federal jurisdiction over class actions, CAFA naturally expanded a class action defendant’s opportunities to remove a state class action to federal court. Additionally, CAFA eliminated several long-standing barriers to removal through the creation of a new removal statute, 28 U.S.C. § 1453.”).

130. See Edward F. Sherman, *Class Action Fairness Act and the Federalization of Class Actions*, 238 F.R.D. 504, 535 (2007) (“Nevertheless, CAFA is the most significant change in class action practice since the 1966 amendment of Rule 23 and is likely to have considerable impact on how attorneys structure and conduct class actions. It represents years of lobbying by business interests and should limit forum-shopping in target state courts for multistate class actions.”); Guyon Knight, Note, *The CAFA Mass Action Numerosity Requirement: Three Problems with Counting to 100*, 78 FORDHAM L. REV. 1875, 1884 (2010) (describing the CAFA as the result of years of “aggressive lobbying and partisan wrangling”); Michael R. Pennington & Robert J. Campbell, *The Class Action Fairness Act and the New Federal e-Discovery Rules: To Remove or Not to Remove?*, FED. LAW., Feb. 2009, at 42 (“[The CAFA is] [t]he culmination of an extensive lobbying effort over several years by many business organizations, the aim of the law was to expand federal jurisdiction over class actions and to curb perceived abuses of the class action device.”).

131. See Ryan C. Williams, *Due Process, Class Action Opt Outs, and the Right Not to Sue*, 115 COLUM. L. REV. 599, 606–07 (2015) (considering the contours of the opt-out right).

junctures.¹³² Plaintiffs who decline to exercise their opt-out right submit to the court's jurisdiction and are bound by the disposition of the class action.¹³³ According to the law and economics account, opt-out rights are:

[A] market check on the propensity of counsel to serve their own interests over those of the class. If bad representation triggers opt-outs and objections, counsel will make an effort to provide good representation *ex ante* in order to prevent their deficiencies from being brought to the attention of the court *ex post*.¹³⁴

This explanation is sound, in theory. In practice, however, absent class members rarely opt-out, undermining the law and economics account. One study found that “on average[] less than 1 percent of class members opt-out,”¹³⁵ while “[t]he median percentage of class members opting out . . . is a mere 0.1 percent.”¹³⁶ Opt-out rates are anemic for the same reason that absent class members are poor monitors of class counsel¹³⁷—the typical class member is neither apprised of nor able to monitor the litigation's nuances.¹³⁸ It is difficult to explain a law, rule, or right as a market corrective when it is so rarely used to that effect.

132. FED. R. CIV. P. 23(c)(2)(B)(v) (post-certification); FED. R. CIV. P. 23(e)(4) (post-settlement).

133. See *Phillips Petroleum Co. v. Shutts*, 472 U.S. 797, 812 (1985) (rejecting the argument that the Fourteenth Amendment's due process clause “requires that absent plaintiffs affirmatively ‘opt in’ to the class, rather than be deemed members of the class if they do not ‘opt out’”; noting that the “essential question . . . is how stringent the requirement for a showing of consent will be”; and holding that an “opt-out” right “satisfies due process”).

134. Theodore Eisenberg & Geoffrey Miller, *The Role of Opt-Outs and Objectors in Class Action Litigation: Theoretical and Empirical Issues*, 57 VAND. L. REV. 1529, 1536 (2004).

135. *Id.* at 1532.

136. *Id.* at 1546; see also Zimmerman, *supra* note 16, at 1107 n.1 (“Over 95 percent of plaintiffs join class action settlements—that is, they do not affirmatively opt out of the class—after receiving notice of the class action. But a similar percentage will never claim their awards.”).

137. See Pauline T. Kim, *Beyond Principal-Agent Theories: Law and the Judicial Hierarchy*, 105 NW. U. L. REV. 535, 574 (2011) (noting that “principal-agent theories suggest that informational asymmetries allow agents to avoid scrutiny of their activities and thereby afford them greater discretion.”). There is a related collective-action problem: Each absent class member is incentivized to free ride on other's monitoring. Professor Christopher Leslie writes:

The lawyer acts as a faithless agent when she pursues her own interests at the expense of her client's. This is a particular problem in class action litigation because there are so many putative principals, and none possess sufficient incentive to ensure that their agent is protecting their common interests.

Christopher R. Leslie, *Cartels, Agency Costs, and Finding Virtue in Faithless Agents*, 49 WM. & MARY L. REV. 1621, 1636 (2008).

138. See Alon Klement, *Who Should Guard the Guardians? A New Approach for Monitoring Class Action Lawyers*, 21 REV. LITIG. 25, 51–55 (2002).

Of course, some class members do opt-out. Not infrequently, however, these are “serial objectors”¹³⁹—absent class members who are included in many nationwide class definitions and routinely opt-out of group litigation.¹⁴⁰ They can serve a valuable monitoring function by drawing the court’s attention to some deficiency in the proceedings,¹⁴¹ but that role may be duplicative of the court’s own efforts. More problematically for the traditional account, serial objectors can create a law and economics headache: the holdout problem.¹⁴² There is a veritable cottage industry of would-be objectors who threaten to opt-out unless compensated for their silence.¹⁴³ Quid pro quos of this nature

139. See Bruce D. Greenberg, *Keeping the Flies out of the Ointment: Restricting Objectors to Class Action Settlements*, 84 ST. JOHN’S L. REV. 949, 981–82 (2010) (commenting on courts’ efforts to “rebuff[] . . . the objections of [a] serial objector,” and observing the phenomenon of “[p]rofessional objectors”).

140. See 7B WRIGHT, MILLER & KANE, *supra* note 20, § 1797.4 (describing “concerns . . . that many objectors inject themselves into class-action settlement proceedings primarily to obstruct or delay those proceedings, thereby inducing other counsel to give them a special recovery in return for dropping their objections”).

141. Professor Edward Brunet writes:

Informational input from objectors regarding a proposed settlement could, in theory, improve the monitoring problem. By definition, the objector is a monitor, who is evaluating a proposed settlement and then investing resources to either improve the settlement terms or reject the settlement. Assuming the value of such objector input, a policy of liberalizing the ability to object and intervene in class actions would provide efficiency. Such a change may also advance fairness policies by broadening participation and the ability to be heard. Objectors create an adversary contest, usually regarding the difficult process of settlement approval, and thereby can perform a positive function.

Edward Brunet, *Class Action Objectors: Extortionist Free Riders or Fairness Guarantors*, 2003 U. CHI. LEGAL F. 403, 408–09.

142. Brunet writes:

Some objecting by attorneys who represent small stakes plaintiffs may be only an effort to obtain attorneys fees’ for the objecting attorney. Such claim-jumping attorneys are able to free ride off the efforts of the initial class counsel, who had already identified an alleged legal wrong and spent considerable time procuring a settlement. Objectors and their attorneys may be engaged in a form of extortion, seeking to hold up court approval of a settlement in exchange for a piece of a limited settlement pot.

Id. at 409 (footnote omitted).

143. See *In re Countrywide Fin. Corp. Customer Data Sec. Breach Litig.*, No. 3:08-MD-01998, 2010 WL 3328249, at *2 (W.D. Ky. Aug. 24, 2010) (“[I]n some cases a cottage industry has developed of professional objectors, where again the emphasis or at least the primary motivation is attorneys’ fees.”); Brunet, *supra* note 141, at 429 (“One attorney who has filed objections to class actions has conceded that objections to class action settlements have ‘basically become a cottage industry.’” (footnote omitted)); Joshua Levy, *When the Stars Align: Narrowing the Scope of Appellate Reversals of Judicially Approved Class Action Settlements*, 44 SETON HALL L. REV. 631, 654 (2014) (“Giving objectors the power and encouragement to object when they are the only parties who will benefit financially, only fuels the cottage industry of objecting for its own sake.” (footnote omitted)).

represent inefficient wealth transfers from absent class members to holdouts who add minimal value to the class writ large.

Further complicating the law and economics account of opt-out rights, many law and economics adherents argue that this right is in fact inefficient. Professor David Rosenberg argues:

[P]roviding any opportunity for exit from the class action will undermine not only the anti-redistribution principle—increasing litigation costs and risks from strategic behavior as well as reducing the recoverable wealth that class action scale advantages make possible—but also the basic deterrence objective of collective adjudication together with any insurance benefit.¹⁴⁴

Another scholar posits that the exercise “of opt-out rights in cases where it is feasible for litigants to exercise them can thus destroy the effectiveness of the class action mechanism”¹⁴⁵ Thus, far from explaining the content of the law, law and economics provides several potent critiques.

These critiques resonate both post-certification and post-settlement. Following certification, opt-outs reduce class size and, therefore, the potential aggregate recovery, lessening the class action’s value as a deterrent and vehicle for achieving judicial economies of scale. Even in the best case, in which an absent class member rationally opts-out because individual litigation presents a better risk-return profile, the potential benefit to that individual must be weighed against administrative costs to judicial efficiency generally. Similarly, post-settlement opt-outs reduce the aggregate recovery attained by the class and risk duplicative litigation. And, in both instances, a high volume of opt-outs can lead courts to revisit certification or the settlement—vitiating any class-efficiency benefits.¹⁴⁶

It is also difficult to square the law and economics account of the content of this law with the decidedly law and economics observation that for many class members—principally those with low- or negative-value claims—it is

144. Rosenberg, *supra* note 38, at 23.

145. Michael A. Perino, *Class Action Chaos? The Theory of the Core and an Analysis of Opt-Out Rights in Mass Tort Class Actions*, 46 EMORY L.J. 85, 85 (1997).

146. See Eisenberg & Miller, *supra* note 134, at 1537 (“Courts frequently look to the number of opt-outs or objections as bearing on [] the fairness of the settlement”); see also 2 MCLAUGHLIN, *supra* note 31, § 6:21 (noting that defendants often “insist on a ‘blow-up’ provision in the settlement agreement, which allows the defendant to terminate the settlement if a predetermined number or proportion of the members of the class timely and validly request exclusion from the settlement class pursuant to any second opt-out opportunity”).

irrational to opt-out.¹⁴⁷ In these cases, no rational actor would pursue an individual claim in light of the transaction costs of opting-out, in addition to the costs of pursuing an individual claim.¹⁴⁸ These costs can dwarf a class member's maximum potential recovery, particularly in the low-value context, and definitionally in the negative-value context. This well-settled observation has led some law and economics scholars to posit that not only are opt-out rights inefficient, but the entire notion of obtaining any recovery for low- or negative-value claims should be revisited.¹⁴⁹

Traditional law and economics is thus at best undecided on opt-out rights. Are they an efficient market corrective, or anathema to rational decisionmaking? And should the right be regularly exercised to resolve inefficiencies, or should it be avoided precisely because it is inefficient? The conventional law and economics account—valuable though it may be—is incomplete. And yet, Rule 23 guarantees absent class members this rarely executed, arguably inefficient, and potentially irrational right. Why? The positivist framework dictates that a fulsome account of opt-out rights should address not only why this right exists, but also when and why it is exercised. Behavioral law and economics can help fill the analytical gaps.

147. Professor Coffee remarked that “opting out (at least in the case of negative value claims) is generally irrational.” John C. Coffee, Jr., *Litigation Governance: Taking Accountability Seriously*, 110 COLUM. L. REV. 288, 305 (2010). This sentiment is universally shared. For example, John Massaro writes:

Even in the context of positive value class actions under Rule 23(b)(3), the utilitarian sees little benefit in opt-out rights. For the most part, all litigation will be lawyer driven and the opt-out right is largely symbolic as a practical matter. To the extent that opt outs become significant, they reflect irrational behavior. It is undeniable that by sticking together plaintiffs will achieve for themselves the greatest leverage and, thereby, the best overall results.

John C. Massaro, *The Emerging Federal Class Action Brand*, 59 CLEV. ST. L. REV. 645, 668 (2011) (footnote omitted); see also Brian Wolfman & Alan B. Morrison, *What the Shutts Opt-Out Right Is and What It Ought to Be*, 74 UMKC L. REV. 729, 743 (2006) (“In ‘negative-value,’ small-claims damages class actions, class members rarely opt out because litigating individually would be economically irrational.”).

148. See *Carnegie v. Household Int’l, Inc.*, 376 F.3d 656, 661 (7th Cir. 2004) (“The realistic alternative to a class action is not 17 million individual suits, but zero individual suits, as only a lunatic or a fanatic sues for \$30.”).

149. See Gilles & Friedman, *supra* note 17, at 105 (“[T]here is generally no legitimate utilitarian reason to care whether class members with small claims get compensated at all Nor is there any economic reason to fret that entrepreneurial plaintiffs’ lawyers are being overcompensated” because there “is but one true objective here . . . whether the practice causes the defendant-wrongdoer to internalize the social costs of its actions.” (footnote omitted)).

B. The Behavioral Approach to Opt-Out Rights

The law and economics critique of opt-out rights appears as strong as—if not stronger than—law and economics positivism. Nonetheless, opt-out rights are considered fundamental to due process and class action law.¹⁵⁰ Why does this right exist, and what explains when it is exercised? Behavioral law and economics provides helpful answers. The ensuing discussion, which explicates four positivist behavioral accounts for opt-out rights and the exercise thereof, adopts the lawmaking framework articulated by Professors Jolls, Sunstein, and Thaler:

Legislators interested in their own reelection will be responsive to the preferences and judgments of their constituents and those of powerful interest groups. If constituents believe that a certain practice is unfair or dangerous, and should be banned or regulated, self-interested legislators will respond, even if they do not share these views. Likewise, if a mobilized group holds such views, legislators' response will be affected, in much the same way as if the group sought legislation to serve a narrowly defined financial self-interest, as posited by the standard account.¹⁵¹

Opt-out rights are codified in Rule 23, itself the result of a rule-making process that is ultimately blessed by self-interested legislators.¹⁵² Therefore, Rule 23 is

150. See *Phillips Petroleum Co. v. Shutts*, 472 U.S. 797, 812 (1985); *Robinson v. Metro-North Commuter R.R. Co.*, 267 F.3d 147, 165 (2d Cir. 2001) (noting that “where non-incident monetary relief such as compensatory damages are involved, due process may require the enhanced procedural protections of notice and opt out for absent class members”); *Crawford v. Honig*, 37 F.3d 485, 487 n.2 (9th Cir. 1994) (observing that “the due process required in order to bind known absent class members in a class action suit for money damages includes adequate notice to the absent members, adequate representation, and an opportunity for the members to opt out of the suit”).

151. Jolls, Sunstein & Thaler, *supra* note 14, at 1509.

152. The FRCP was enacted pursuant to the Rules Enabling Act (REA), 28 U.S.C. § 2072 (2012), which authorizes the federal judiciary to promulgate uniform rules of procedure. The rulemaking process begins with the Judicial Conference, which authorizes the commission of discrete committees assigned to various topic areas, such as civil procedure. *Id.* § 2073(a)(2). Committees draft rules, which are then subject to a form of notice and comment, *id.* § 2073(c), before being sent to the so-called “standing committee” for review. *Id.* § 2073(b). Rules approved by the Standing Committee are submitted to the Supreme Court of the United States. *Id.* § 2072(a). The REA thereupon states that the “Supreme Court shall transmit to the Congress . . . a rule prescribed under [the REA] to become effective.” *Id.* § 2074(a). Congress must affirmatively vote to reject a rule so submitted. *Id.* (“Such rule shall take effect no earlier than December 1 of the year in which such rule is so transmitted unless otherwise provided by law.”); see also Stephen B. Burbank, *Procedure, Politics and Power: The Role of Congress*, 79 NOTRE DAME L. REV. 1677, 1693–94 (2004) (discussing Congress’s negative review authority to “block” proposed Rules).

in part the result of a considered process shaped by societal preferences expressed through the legislative, voting, and lobbying processes.

Proceeding from this framework, behavioral insights can help break through the opt-out fog. The ensuing discussion applies findings from behavioral psychology to address four puzzles surrounding Rule 23 opt-out rights. Subpart II.B.1 addresses why Rule 23 contains an opt-out right in the first instance, drawing on prospect theory and the concept of reference rights. Subpart II.B.2 explains why some absent class members (perhaps irrationally) exercise that right. Subpart II.B.3 considers why, even with the behavioral framework, most class members do not exercise opt-out rights, including those with high-value individual claims. Finally, Subpart II.B.4 discusses why these predictions hold even after settlement, when absent class members are equipped with superior information and should be well-positioned to make a rational choice based on cost-benefit analysis.

1. Prospect Theory and Reference Rights

First, prospect theory and reference rights help explain why Rule 23 provides an opt-out right. Price theory is incomplete. Economic preferences are shaped by more than dispassionate cost-benefit analysis. Individuals' utility curves also depend on highly contextualized notions of fairness. Notwithstanding law and economics's focus on efficiency, some laws exist because "[m]ost people think the result is fair."¹⁵³ These norms are not drawn from thin air. Rather, reference points or baselines based on lived experience shape societal norms as to what qualifies as fair and against which alternatives are evaluated and judged. For instance, certain market transactions are prohibited—such as “usurious lending, price gouging, and ticket scalping”—because they represent “a significant departure from [a] ‘reference transaction.’”¹⁵⁴ Even if some usurious lending is efficient, it is also a significant deviation from reference transactions such as traditional community banking. Accordingly, there is a palpable public demand for laws prohibiting the practice. Consider a more recent example: Although the mandatory bumping of some airline customers from overbooked flights might be efficient, it generates public scorn¹⁵⁵ in part because it is a substantial departure from

153. Jolls, Sunstein & Thaler, *supra* note 14, at 1509.

154. *Id.* at 1511.

155. See, e.g., Robert Kuttner, *How the Airlines Became Abusive Cartels*, N.Y. TIMES (Apr. 17, 2017), <https://www.nytimes.com/2017/04/17/opinion/how-the-airlines-became-abusive-cartels.html>.

reference transactions in the service industry.¹⁵⁶ As Jolls, Sunstein, and Thaler observe, “[b]ehavioral analysis predicts that if trades are occurring frequently in a given jurisdiction at terms far from those of the reference transaction, there will be a strong pressure for a law banning such trades.”¹⁵⁷

Prospect theory explains why reference points are potent when sorting preferences and making decisions.¹⁵⁸ Individuals assess options through “an initial editing stage that ‘frames’ a situation and defines the reference points against which behavioral alternatives will be evaluated.”¹⁵⁹ In other words, context influences outcome. Individuals with a particular frame or reference will evaluate options and establish preferences through that prism, even if the resultant decisions are inefficient or ostensibly irrational. Consider an individual who needs gas for her car, is willing to pay \$4/gallon, and is presented with a price of \$4/gallon, which also happens to be precisely where the supply and demand curves meet. Although it might be rational for her to purchase gas from the vendor for \$4/gallon, she might decline that offer as unfair if first informed that every customer before her received a discount and paid only \$1/gallon.¹⁶⁰ Her utility curve is dependent on more than just the assumptions underlying price theory; it also turns in large part on context, framing, and references.

References influence norms in the legal setting as well. And, importantly, these reference rights, which are derived from an individual’s baseline understanding of the available legal rights in a situation, can help construct a positivist account for the content of the law. Consider the Eighth

156. Individuals are not typically, for example, asked to remove themselves from a restaurant where they have been seated or exit a taxi in which they are riding.

157. Jolls, Sunstein & Thaler, *supra* note 14, at 1511–12.

158. See Daniel Kahneman et al., *Fairness as a Constraint on Profit Seeking: Entitlements in the Market*, 76 AM. ECON. REV. 728, 729–31 (1986) (“[A] central concept in analyzing the fairness of actions in which a firm sets the terms of future exchanges is the *reference transaction*, a relevant precedent that is characterized by a reference price or wage, and by a positive reference profit to the firm,” which “provides a basis for fairness judgments because it is normal, not necessarily because it is just.”); see also John Richardson, *How Negotiators Choose Standards of Fairness: A Look at the Empirical Evidence and Some Steps Toward a Process Model*, 12 HARV. NEGOT. L. REV. 415, 422 (2007) (“The standard view in the behavioral economic literature is that people evaluate the result of a transaction (such as a negotiation) by comparing it to a ‘reference point.’ They first look for an appropriate comparison standard and then apply it to the case at hand.” (footnote omitted)).

159. Karyl A. Kinsey, Harold G. Grasmick & Kent W. Smith, *Framing Justice: Taxpayer Evaluations of Personal Tax Burdens*, 25 L. & SOC’Y REV. 845, 846–47 (1991) (citation omitted).

160. This assumes that our customer is a one-off purchaser—perhaps visiting a town—rather than a repeat player, in which case the customer might rationally decline the offer to establish her reputation or a superior bargaining position.

Amendment's prohibition on cruel and unusual punishments¹⁶¹: Even if a particularly gruesome or public form of punishment might achieve superior deterrence,¹⁶² society sacrifices utility where punishments grossly deviate from reference punishments.¹⁶³ Similarly, consider the prohibition on unconscionable terms of contract¹⁶⁴: Even if a rational decisionmaker might agree to a particularly punitive or cumbersome term because it is efficient over time or in that one-off instance, society sacrifices that efficiency where the term deviates from notions of what constitutes a fair deal as determined by reference to familiar terms.

Reference rights can also help explain the content of Rule 23. A particularly salient reference right is the right to one's day in court.¹⁶⁵ Class actions are an exception to the common-law prohibition on aggregate litigation and the abrogation of this day-in-court principle. Nevertheless, individuals remain acclimated to the notion that they have some degree of autonomy in choosing whether to pursue litigation, particularly when the aim of that litigation is a damages award in their favor. Just as "evidence of price stickiness shows that firms' behavior seems to be affected greatly by their customers' perceptions of unfair price increases,"¹⁶⁶ rights stickiness is affected by individuals' notions of legal autonomy. Reference rights—such as the right to one's day in court—shape fairness norms, which in turn shape Rule 23. Indeed, several commentators have explained opt-out rights as a response to society's appetite for something approximating individual autonomy in the aggregate litigation process.¹⁶⁷

161. U.S. CONST. amend. VIII.

162. Cf. David Lat & Zachary Shemtob, *The Execution Should Be Televised: An Amendment Making Executions Public*, 78 TENN. L. REV. 859 (2011) (noting that public executions would draw greater public attention to the death penalty).

163. See, e.g., *Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (stating that to pass constitutional muster, "the punishment must not involve the unnecessary and wanton infliction of pain," nor "be grossly out of proportion to the severity of the crime").

164. See RESTATEMENT (SECOND) OF CONTRACTS § 208 (AM. LAW INST. 1981) (stating that "a contract or term thereof [may be] unconscionable").

165. Indeed, "[i]t is a fundamental principle of American law that every person is entitled to his or her day in court." *Tice v. Am. Airlines, Inc.*, 162 F.3d 966, 968 (7th Cir. 1998).

166. Jolls, Sunstein & Thaler, *supra* note 14, at 1515 (footnote omitted).

167. See, e.g., Sergio J. Campos, *Mass Torts and Due Process*, 65 VAND. L. REV. 1059, 1110–11 (2012) (addressing the notion that the autonomy provided by opt-out rights is "a fundamental liberty"); Richard A. Epstein, *Class Actions: Aggregation, Amplification, and Distortion*, 2003 U. CHI. LEGAL F. 475, 510 (2003) ("[A]ll options have some positive value, and the control of one's own litigation cannot be regarded as a small detail within the overall scheme of civil procedure.").

Rule 23 provides opt-out rights in part because individuals' utility curves are powerfully shaped by reference to the right to control their participation in and pursuit of individual litigation. This may be irrational. It is possible, for example, that the average class settlement would be greater absent the existence of any opt-out rights because those rights enable holdout objectors, who functionally exercise a tax upon the class writ large. In that case and without any other information, voting citizens, all of whom are likely to be an absent class member at some point in their lives (but relatively unlikely to be an opt-out member), should demand action against—not in support of—opt-out rights.¹⁶⁸ And yet, society demands just the opposite because of reference rights. Whether individuals actually exercise their opt-out rights is no more important to the behavioral account than whether the existence of this right is inefficient. Even declining to opt-out is, in theory, an autonomous choice. The existence of this right, inefficient though it may be, satisfies a demand—dictated by individuals' reference dependent utility curves—for rights that do not fall below an established baseline.

2. Bounded Self-Interest and the Ultimatum Game

From an economic perspective, opting-out of a low- or negative-value class action is irrational—even when presented with a paltry settlement, something is better than nothing. Indeed, the negative-value plaintiff who opts-out is necessarily unable to attain a greater return on their own. And yet absent class members occasionally opt-out. Why? Behavioral science suggests this phenomenon might be attributable, in part, to a particularly vindictive shade of bounded self-interest: Humans are willing to harm their own interests in order to punish unfair behavior.

Humans occasionally exhibit bounded self-interest, declining welfare-maximizing opportunities that do not comport with references or notions of fairness generally.¹⁶⁹ The so-called ultimatum game is illustrative.¹⁷⁰ “In this game, one player, the Proposer, is asked to propose an allocation of a sum of

168. At least with respect to low- or negative-value claims.

169. See Jolls, Sunstein & Thaler, *supra* note 14, at 1479 (“Self-interest is bounded in a much broader range of settings than conventional economics assumes, and the bound operates in ways different from what the conventional understanding suggests. In many market and bargaining settings (as opposed to nonmarket settings such as bequest decisions), people care about being treated fairly and want to treat others fairly if those others are themselves behaving fairly.”).

170. Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Fairness and the Assumptions of Economics*, 59 J. BUS. S285, S288–89 (1986).

money between herself and the other player, the Responder.”¹⁷¹ The responder can accept or reject the offer; if the responder rejects the offer, neither player receives anything. Just as conventional law and economics assumes that no low- or negative-value claimant would opt-out of a class action that returns any positive value, it also predicts that the proposer “will offer the smallest unit of currency available, say a penny, and the Responder will accept, since a penny is better than nothing.”¹⁷² Yet when the game is actually played, responders tend to reject “offers of less than twenty percent of the total amount available.”¹⁷³ Responders are, in other words, willing to cut off their nose to spite their face. They behave as though nothing is better than something.

This bounded self-interest—the willingness to harm oneself “to punish unfair behavior”¹⁷⁴—might shed light on why low- and negative-value claimants occasionally opt-out. When presented with a settlement offer that includes, for example, an exorbitant attorneys’ fee award that does not comport with notions of equity or fairness, the negative-value objector may choose to punish class counsel by opting-out even though she has no prospect of realizing a superior outcome on her own. Class settlements are, in that respect, a real-world ultimatum game. From an economic perspective, this observed behavior is irrational; from a behavioral perspective, it is predictable.

3. Ambiguity Aversion and the Status Quo Bias

However, the overwhelming majority of absent class members decline to opt-out, particularly post-certification and pre-settlement.¹⁷⁵ Conventional law and economics might predict this outcome: The transaction costs alone of first determining whether to opt-out and then in fact opting-out frequently exceed potential gains.¹⁷⁶ Although this prediction holds for low- and negative-value claimants, it cannot so readily explain comparably anemic opt-out rates in

171. Jolls, Sunstein & Thaler, *supra* note 14, at 1489–90.

172. *Id.* at 1490.

173. *Id.*

174. *Id.*

175. See *supra* notes 136–138.

176. Cf. Christopher R. Leslie, *The Significance of Silence: Collective Action Problems and Class Action Settlements*, 59 FLA. L. REV. 71, 123 (2007) (“If one’s claim is so small that the claimholder would not litigate after opting out, then it makes no sense to incur the transaction costs of opting out merely to let one’s claim lie fallow. It would be rational to simply accept the fruits of an inadequate settlement, even if one recovers nothing from that settlement.” (footnote omitted)); David Marcus, *Some Realism About Mass Torts*, 75 U. CHI. L. REV. 1949, 1983 (2008) (book review) (“[T]ransaction costs may thwart solo efforts to vindicate even abstractly valuable rights to sue.”).

medium- or high-value class actions. And notwithstanding the familiarity of low- and negative-value class claims, well-known examples of medium- and high-value class actions abound. Individual class members in *Wal-Mart Stores, Inc. v. Dukes*¹⁷⁷ claimed an average of \$11,000 in non-punitive damages each—surely a significant amount.¹⁷⁸ And, objectors to class certification in *Amchem Products, Inc. v. Windsor*¹⁷⁹ argued that the average absent claimant was entitled to hundreds of thousands of dollars in individual damages.¹⁸⁰ Similarly, in *Messner v. Northshore University HealthSystem*,¹⁸¹ the Seventh Circuit certified¹⁸² an antitrust class action seeking thousands of dollars in damages (pre-trebling under the antitrust laws) per absent class member,¹⁸³ certainly qualifying it as a medium-value class action. Nonetheless, only 0.1 percent of the *Messner* class had opted-out by the close of the first notice period.¹⁸⁴

Messner is far from an outlier. It instead fits into a predictable pattern of minuscule opt-out rates even amongst medium- and high-value class actions. The well-reasoned law and economics account notwithstanding, it seems implausible that 99.9 percent of absent class members across medium- to high-value class actions all happen to conclude—with remarkable consistency—that the optimal, rational, and wealth-maximizing choice is to remain within the class. It seems far more likely that, at least on occasion, more than a de minimis number of medium- and high-value claimants seeking tens or hundreds of thousands in individual damages should be able to obtain a superior result on their own.

177. 564 U.S. 338 (2011).

178. See Cathy Ventrell-Monsees, *Wal-Mart v. Dukes: Is 1.6 Million Women 0.6 Million Too Many?*, 2 LAB. & EMP. L.F. 155, 156 (2012).

179. 521 U.S. 591 (1997).

180. *Id.* at 610 n.14 (noting objectors' claim "that 15 percent of current mesothelioma claims arise in California, where the statewide average recovery is \$419,674—or more than 209 percent above the \$200,000 maximum specified in the settlement for mesothelioma claims not typed 'extraordinary'").

181. 669 F.3d 802 (7th Cir. 2012).

182. See *id.* at 815–16 (holding that "common questions clearly predominate in regard to whether [defendant's] merger violated federal antitrust law").

183. Rebuttal Expert Report of Dr. David Dranove Supporting Motion for Class Certification at 3–6, *In re Evanston Nw. Healthcare Corp. Antitrust Litig.*, 268 F.R.D. 56 (N.D. Ill. 2010) (No. 07-CV-4446), 2010 WL 1437374 (discussing possible damages attributable to exercise of market power).

184. Declaration of Eric J. Miller on Behalf of A.B. Data, Ltd. Regarding Notice of Pendency of Class Action at 3, 5, *In re Evanston Nw. Healthcare Corp. Antitrust Litig.*, 268 F.R.D. 56 (No. 07-CV-4446).

Why then do so few medium- and high-value class claimants opt-out? Again, behavioral law and economics supplies an answer: ambiguity aversion.¹⁸⁵ Remaining in a certified class presents a degree of certainty: Although the probability of success is unknown, several known factors can help absent class members roughly estimate their odds of success. Specifically, the absent class member knows that their claim is represented by counsel, and that their counsel was evidently competent enough to achieve certification.¹⁸⁶ Moreover, the absent class member also knows that their claim will be included in any settlement and that class actions frequently settle. Opting-out, by contrast, presents significant uncertainty: Individual litigation can be a black box to non-lawyers; the individual claimant may not find superior representation or any representation at all; the individual claim may not advance; and, of course, there is no guarantee or even probability of a settlement in individual litigation.¹⁸⁷ Even if opting-out might yield a greater return, the probability of realizing that outcome is ambiguous at best. Ambiguity-averse class members may therefore prefer to remain within the comfortable confines of the class.

4. The Endowment Effect

Traditional law and economics might predict that the rational absent class member would choose to remain within a class post-certification and revisit that decision once more information is available post-settlement.¹⁸⁸ Yet opt-out rates remain anemic even at this later stage. Once again, this might reflect a rational cost-benefit analysis: Absent class members might decline to opt-out post-settlement in light of transaction costs, or they may accurately assess—although at a suspiciously high rate—that the proffered settlement is superior to any alternative. While these traditional law and economics explanations are sound, behavioral law and economics suggests that more is at play.

185. See *supra* notes 100–107 (discussing ambiguity aversion).

186. Although monitoring is generally unavailing in the class context, medium- and high-value claimants are far more likely to be aware of—even if not engaged with—the class proceeding.

187. One can certainly question the degree to which the market for alternative, non-class litigation is efficient. Cf. David Rosenberg, *Mass Tort Class Actions: What Defendants Have and Plaintiffs Don't*, 37 HARV. J. ON LEGIS. 393, 414 (2000) (arguing that, “compared to litigation class actions, market alternatives . . . are inferior”).

188. Cf. Rosenberg, *supra* note 38, at 34–35 (lamenting comparable free riding “to reap opportunistic gains” outside the class action).

Individuals attribute greater value to what they own simply because it is theirs.¹⁸⁹ In an illustrative experiment, some participants are given a coffee mug, while others are given tokens with which to purchase those coffee mugs.¹⁹⁰ Eventually, the roles are reversed. Conventional economics predicts that because rational actors have stable preferences, participants will value the coffee mug according to a stable utility curve and be equally willing to buy or sell the coffee mug for an identical number of tokens. In practice, however, participants are willing to pay less than half as much than for someone else's mug than the amount they are willing to accept to sell their own identical mugs.¹⁹¹ In other words, participants assign their mug greater value because it is theirs.

The phenomenon this experiment illustrates is known as the endowment effect. As prospect theory predicts, contra price theory, an individual's "willingness to pay" is not always equal to their willingness to accept because humans are loss-averse.¹⁹² In other words, humans are not consistently capable of transacting in purely economic terms. Rather, transactions are framed as losses or gains, with losses outweighing the latter, resulting in a greater willingness to purchase than to sell identical goods.¹⁹³ The endowment effect is closely related to other prospect theory concepts and can manifest as a status quo bias.¹⁹⁴

Behavioral law and economics has long recognized the influence of the endowment effect in various legal contexts, settlement foremost amongst them.¹⁹⁵ Individual litigants own and pursue a legal right; a settlement offer asks the litigant to sell or exchange that right for the settlement amount. Studies show that the above-described endowment effect is particularly

189. See James K. Beggan, *On the Social Nature of Nonsocial Perception: The Mere Ownership Effect*, 62 J. PERSONALITY & SOC. PSYCHOL. 229, 229 (1992) ("[O]wnership creates a psychological association between the object and the owner").

190. Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990). A comparable experiment was performed in Jolls, Sunstein & Thaler, *supra* note 14, at 1483–84.

191. Jolls, Sunstein & Thaler, *supra* note 14, at 1483–84.

192. See Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193, 197 (1991) (finding "that the main effect of endowment is not to enhance the appeal of the good one owns, only the pain of giving it up"); see also Jolls, Sunstein & Thaler, *supra* note 14, at 1484 (describing the endowment effect as "a central building block of Kahneman and Tversky's prospect theory").

193. See Charles R. Plott & Kathryn Zeiler, *The Willingness to Pay-Willingness to Accept Gap, the "Endowment Effect," Subject Misconceptions, and Experimental Procedures for Eliciting Valuations*, 95 AM. ECON. REV. 530, 530–31 (2005).

194. See Kahneman, Knetsch & Thaler, *supra* note 192, at 197–98.

195. See Jolls, Sunstein & Thaler, *supra* note 14, at 1497–98.

pronounced in settings where the entitlement owner believes that she earned or deserves an award, compelling the litigant to ask for more than the rational value of her claim.¹⁹⁶ Accordingly, behavioral psychology predicts that a party that obtains a court order—for example, an injunction—will overvalue that endowment in settlement negotiations.¹⁹⁷

This analysis is inverted in the class action context: Many absent class members are not aware that they have a cause of action, let alone that their claim is represented by counsel. Often, an absent class member's first introduction to the class is notice that she has been awarded an entitlement as part of a common fund settlement.¹⁹⁸ Class members are told that they must affirmatively choose to exchange that award for the right to pursue individual litigation. This subtle change in framing flips the endowment effect on its head: An individual claimant might be unwilling to sell her claim in exchange for what is perceived to be a paltry settlement offer, but the same individual might place a greater value on an identical settlement having been informed that settlement is hers and that she must purchase the right to sue as an individual at the cost of her share of the common fund. Behavioral psychology thus predicts that, compared to an individual litigant, an absent class member will be more likely to settle by remaining within the class. And that is in fact what occurs far more often than not.

III. BEHAVIORAL TECHNIQUES FOR NUDGING RESPONSES TO CLASS-SETTLEMENT NOTICE

Having surveyed potential applications of behavioral psychology to class action law and considered its utility in resolving the puzzle of opt-out rights, this Part now turns to the prescriptive potency of behavioral law and economics. Specifically, it considers how choice architects—individuals or

196. See George Loewenstein & Samuel Issacharoff, *Source Dependence in the Valuation of Objects*, 7 J. BEHAV. DECISION MAKING 157, 159–61 (1994).

197. See Eric Talley, *Liability-Based Fee-Shifting Rules and Settlement Mechanisms Under Incomplete Information*, 71 CHI.-KENT L. REV. 461, 491 (1995) (“The endowment effect can exacerbate the offer-asking gap in negotiations, thereby forestalling or defeating settlement efforts. Such phenomena may be especially prevalent in litigation contexts, where parties feel either wronged or unjustly accused, and are therefore less willing to surrender the opportunity to litigate their competing claims.” (footnote omitted)).

198. See Debra Lyn Bassett, *Class Action Silence*, 94 B.U. L. REV. 1781, 1790–91 (2014) (recognizing “the reality that absent class members are [occasionally] unaware of the class action’s pendency”); John C. Coffee, Jr., *Class Wars: The Dilemma of the Mass Tort Class Action*, 95 COLUM. L. REV. 1343, 1447 (“[P]roviding individual notice and opt-out rights to persons who are unaware of an injury would probably do little good.” (quoting *In re Agent Orange Prod. Liab. Litig.*, 996 F.2d 1425, 1435 (2d Cir. 1993))).

entities that attempt to nudge others into making desired choices—might deploy behavioral psychology to their advantage in class action practice.

Rule 23 requires that absent class members be given settlement notice and the opportunity to opt-out.¹⁹⁹ Judicial review of class settlement notice often focuses on how widely that notice is disseminated and the ensuing response rate.²⁰⁰ This reflects a belief that absent class members will act in their self-interest when provided with complete information. Similarly, as it relates to the content of settlement notice, courts prefer notice that presents the terms of settlement in a clear and concise manner.²⁰¹ This too turns on the conventional economic assumption that absent class members will act rationally if information asymmetries are resolved.²⁰² Because these individuals are utility maximizers, they—like all individuals according to conventional economics—will make rational, self-interested decisions when well informed.²⁰³ They will choose whether to opt-out or settle following a reasoned cost-benefit analysis.

199. See FED. R. CIV. P. 23(e)(1) (“The court must direct notice in a reasonable manner to all class members who would be bound by the proposal.”); see also FED. R. CIV. P. 23(e)(4) (“If the class action was previously certified under Rule 23(b)(3), the court may refuse to approve a settlement unless it affords a new opportunity to request exclusion to individual class members who had an earlier opportunity to request exclusion but did not do so.”).

200. See *In re Am. Bank Note Holographics, Inc.*, 127 F. Supp. 2d 418, 425 (S.D.N.Y. 2001) (“It is well settled that ‘the reaction of the class to the settlement is perhaps the most significant factor to be weighed in considering its adequacy.’”) (citation omitted); Leslie, *supra* note 176, at 85–86 (noting that “almost all federal courts consider ‘the reaction of the class to the settlement’ as one of the factors determining the fairness of a proposed class action settlement”) (quoting *City of Detroit v. Grinnell Corp.*, 495 F.2d 448, 463 (2d Cir. 1974)); see also *Wal-Mart Stores, Inc. v. Visa U.S.A. Inc.*, 396 F.3d 96, 114 (2d Cir. 2005) (stating that “the settlement notice must fairly apprise the prospective members of the class of the terms of the proposed settlement and of the options that are open to them in connection with the proceedings”) (internal quotation marks omitted) (quoting *Weinberger v. Kendrick*, 698 F.2d 61, 70 (2d Cir. 1982)); *In re Prudential Ins. Co. Am. Sales Litig.*, 148 F.3d 283, 317 (3d Cir. 1998) (identifying “the reaction of the class to the settlement” as one of the “appropriate factors to be considered when determining the fairness of a proposed settlement”) (quoting *Girsh v. Jepson*, 521 F.2d 153, 157 (3d Cir. 1975)).

201. See 32B AMERICAN JURISPRUDENCE (2d ed. 2007) § 1859 (“[S]ettlement notices have been held adequate or sufficient to satisfy the requirements of the class-action rule or the requirements of due process where—the notice provided, in language easily understandable to a layperson, the essential terms of the settlement . . .”).

202. See *Koniak & Cohen*, *supra* note 19 at 1074 n.65 (critiquing the settlement notice in a case on the ground that “it did not provide enough information for a rational actor to be able to determine whether it was in his economic interest to remain in th[e] suit”).

203. There are “rational explanations” for why an absent class member might not respond to class-settlement notice even if she calculated that she stood to gain by opting out on a relative value basis. See Zimmerman, *supra* note 16, at 1107. Transaction costs, for example, might be too great. That said, whether the benefit of remaining in the class outweighs the benefit of opting-out less transaction costs is a cost-benefit question that requires something approaching complete information.

As previously discussed, however, humans are not always rational. In addition to those pathologies already reviewed, individuals are deeply affected by how information is presented: They are susceptible to being nudged by framing.²⁰⁴ Individuals are, for example, more inclined to save for retirement when employer-contribution plans are a default rather than an opt-in choice.²⁰⁵ And we are more likely to become organ donors if we are required to decide whether to opt-out.²⁰⁶ The way information is presented can be just as outcome-determinative as the information itself.

It is therefore myopic to ensure only that settlement notice is widely distributed and that it conveys information in a digestible manner. Subtleties in how that information is framed can be outcome determinative because settlement notice fundamentally serves to present absent class members with a choice: opt-out or settle. Rule 23 requires courts to ensure that absent class members are armed with the information necessary to make that choice. But behavioral psychology predicts that absent class members will make decisions based on more than the content of the information provided: They will also act on how that information is framed.

Courts and commentators pay scant attention to how settlement notice can be framed by choice architects to nudge absent class members toward desired responses.²⁰⁷ This is a glaring omission. The outcome desired by notice designers is obvious: minimize opt-outs. Settlement notice is issued after the named litigants have resolved their dispute, memorialized an agreement, and expressed a preference to end the class action. Because opt-outs and objectors threaten that peace, notice designers are interested in presenting information in a manner that minimizes opt-outs. Insights from behavioral psychology can help them design notice with that preference in mind.

This all might be desirable. After all, it is often irrational to opt-out. A paternalistic court might turn a blind eye to obvious nudges in order to lead class members to the right, or rational, choice. On the other hand, paternalism may not be warranted in this setting, particularly given the due process and

204. See generally THALER & SUNSTEIN, *supra* note 45 (discussing how individuals can be “nudged” to avoid suboptimal decisionmaking).

205. *Id.* at 110–11; LAURA D. KUBZANSKY ET AL., BIOLOGICAL PATHWAYS LINKING SOCIAL CONDITIONS AND HEALTH: PLAUSIBLE MECHANISMS, IN *SOCIAL EPIDEMIOLOGY* 478, 502 (Lisa Berkman et al. eds., 2014) (discussing the framing effects of describing a snack as “healthy” or “tasty”).

206. See Victor Kumar, *Nudges and Bumps*, 14 *GEO. J.L. & PUB. POL’Y* 861, 861–62 (2016).

207. Professors Thaler and Sunstein describe “choice architects” as individuals or entities that implement and design policies, practices, or terms that influence individuals’ decisionmaking. See THALER & SUNSTEIN, *supra* note 45, at 11–13.

property-right underpinnings of opt-out notice. That normative debate is beyond the scope of this inquiry. The focus here is only the potential for—not the merits of—savvy notice designers to manufacture a low opt-out rate by subtly deploying framing techniques that take advantage of behavioral biases, pathologies, and quirks. Courts must decide whether this is a desirable outcome. But to answer that question, courts must be aware of and monitor behavioral design choices and their potential to nudge decisionmaking.

A. Framing Effects and Nudging Class-Settlement Responses

Rule 23(e)(1) requires that before a settlement is approved “[t]he court must direct notice in a reasonable manner to all class members who would be bound by the proposal.”²⁰⁸ Notice apprises absent class members of their options. They might remain in the class and take the settlement, or they might choose to opt-out of the putative settlement rather than be bound by its provisions. Or, more dramatically, they might become objectors and formally raise their concerns with the court.²⁰⁹ Fundamentally, notice informs to enable action. Thus, when designing and reviewing settlement notice, named litigants and courts occasionally go as far as to employ “notice experts” who specialize in how to best convey complex legal information in a comprehensible manner.²¹⁰ Courts then review the adequacy of the resulting notice designs,²¹¹ typically emphasizing distribution, response rates, and ease of comprehension.²¹² These factors are important inasmuch as it is assumed that well-informed absent class members will behave rationally by reading the notice, balancing the costs and benefits of their options, and acting accordingly.

208. FED. R. CIV. P. 23(e)(1).

209. For a discussion on objectors, see 4 WILLIAM B. RUBENSTEIN, *NEWBERG ON CLASS ACTIONS* § 13:20 (5th ed. 2017). See generally Eisenberg & Miller, *supra* note 134 (discussing the effect of objectors on class litigation, the frequency of opt-outs, and the prevalence of objectors, among other issues).

210. See *Kaufman v. Am. Express Travel Related Servs., Inc.*, 283 F.R.D. 404, 408 (N.D. Ill. 2012) (ordering “the appointment of an expert in class action notification”); see also 1 MCLAUGHLIN, *supra* note 31, § 5:80 (14th ed. 2017) (“The district court has discretion to appoint an expert in class notification when serious questions about the effectiveness of a notice campaign exist.”); Theodore Z. Wyman, *Sufficiency of Legal Notice Provided by Online Publication or Electronic Mail in Class Action Suits*, 84 A.L.R. 2d 103 § 3 (2014) (collecting cases in which “the parties utilized expert witnesses to help conceive of notification programs that amounted to the best notice practicable under the circumstances”).

211. See *Torrisi v. Tucson Elec. Power Co.*, 8 F.3d 1370, 1373–74 (9th Cir. 1993).

212. See, e.g., *Kyriazi v. W. Elec. Co.*, 647 F.2d 388, 395 (3d Cir. 1981) (stating that settlement notice should be amenable to “lay comprehension”).

Behavioral psychology explains that the link between information and action is more nuanced and complex than assumed by conventional law and economics. Individuals are neither reliably rational in their decisionmaking nor always capable of dispassionately consuming raw information. Rather, information framing powerfully affects decisionmaking.²¹³ Consistent with prospect theory, individuals are more likely to act if action is framed as a way to avoid a loss, rather than as a way to realize a gain.²¹⁴

To illustrate this phenomenon, Tversky and Kahneman provided two groups of cancer patients with identical treatment statistics.²¹⁵ Although the “same statistics were presented” to both groups, the information was provided to “some respondents in terms of mortality rates and to others in terms of survival rates.”²¹⁶ Specifically, respondents provided information in a “survival frame” were asked to choose between: (i) surgery, for which “90 [percent] live through the post-operative period, 68 [percent] are alive at the end of the first year and 34 [percent] are alive at the end of five years”; or (ii) radiation therapy, for which “all live through the treatment, 77 [percent] are alive at the end of one year and 22 [percent] are alive at the end of five years.”²¹⁷ Of the survival-frame respondents, 82 percent preferred surgery.²¹⁸ A second group was provided the same information in a “mortality frame.” These individuals were asked to choose between: (i) surgery, for which “10 [percent] die during surgery or in the post-operative period, 32 [percent] die by the end of the first year and 66 [percent] die by the end of five years”; or (ii) radiation therapy, for which “none die during treatment, 23 [percent] die by the end of one year and 78 [percent] die by the end of five years.”²¹⁹ Only 56 percent of the mortality-frame respondents preferred surgery—a 26 percent difference from those presented with the survival frame.²²⁰

This study and others like it yield two behavioral insights. First, how information is framed can be as significant to decisionmakers as the content of that information. Second, per prospect theory, individuals are risk averse “for

213. See Jolls, Sunstein & Thaler, *supra* note 14, at 1536–37.

214. *Id.* at 1536 (“[F]raming consequences in terms of losses rather than gains is likely to be far more effective in changing behavior.” (footnote omitted)).

215. See generally Tversky & Kahneman, *Rational Choice and the Framing of Decisions*, *supra* note 47 (describing the study and results).

216. *Id.* at S254.

217. *Id.*

218. See *id.* at S255.

219. *Id.* at S254–55.

220. See *id.* at S255.

positive prospects.”²²¹ Choice architects who are aware of these phenomena can use the former insight to capitalize on the latter. For example, a doctor who prefers radiation therapy to surgery might frame the choice to a patient using mortality rates, rather than survival rates. So too for notice designers. Absent class members are presented with a choice: opt-out or settle. Law and economics assumes that this decision will be made following a rational balancing of the information contained in settlement notice. Behavioral psychology, by contrast, predicts that absent class members’ decisions will also be influenced by how that information is framed. Notice designers interested in minimizing opt-outs can employ a variety of framing techniques to nudge absent class members toward settlement. The following Subparts highlight how behavioral psychology can be applied to notice design.

1. The Endowment Effect

As discussed, one of the strongest behavioral pathologies is the endowment effect.²²² Individuals rarely equalize their willingness to pay and willingness to accept. Rather, as prospect theory predicts, individuals overvalue what they own simply because it is theirs.²²³ An individual might be willing to pay no more than \$10 for a coffee mug, while simultaneously unwilling to sell her identical coffee mug for anything less than \$20.²²⁴

Notice designers can take advantage of the endowment effect to nudge absent class members away from opting-out and toward settlement. Notice can frame a settlement proposal in one of two ways: First, it can inform absent class members that they own a cause of action²²⁵ that can be exchanged or sold for an

221. See Tversky & Kahneman, *Advances in Prospect Theory: Cumulative Representation of Uncertainty*, *supra* note 47, at 306; see also Chris Guthrie, *Framing Frivolous Litigation: A Psychological Theory*, 67 U. CHI. L. REV. 163, 165–67 (2000).

222. See *supra* Subpart II.B.4.

223. See Jolls, Sunstein & Thaler, *supra* note 14, at 1497–98 (discussing the impact of the endowment effect on bargaining in the context of litigation).

224. See Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV. 1227, 1228 (2003) (describing “the offer-asking gap,” which is the empirically observed phenomenon that people will often demand a higher price to sell a good that they possess than they would pay for the same good if they did not possess it at present” (footnote omitted) (citing Donald Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499, 1503–04 (1998))).

225. Absent class members have an ownership interest in their cause of action. See *Logan v. Zimmerman Brush Co.*, 455 U.S. 422, 428 (1982) (stating that it is “settled” that “a cause of action is a species of property protected by the Fourteenth Amendment’s Due Process Clause”); see also Jeremy A. Blumenthal, *Legal Claims as Private Property: Implications for Eminent Domain*, 36 HASTINGS CONST. L.Q. 373, 373 (2009) (“A lawsuit is property. A

award (the settlement). Alternatively, notice can inform absent class members that they have been awarded a settlement²²⁶ that can be exchanged or sold for the right to pursue individual litigation. This distinction makes a difference. In light of the endowment effect, prospect theory predicts that the first frame will nudge absent class members toward opting-out, while the second will nudge them toward settlement.²²⁷

An informal survey carried out in connection with this Article confirms that prediction. A sample of 119 adults, the vast majority of whom have a bachelor's or graduate-level degree,²²⁸ were recruited using Amazon's Mechanical Turk service.²²⁹ Survey participants were presented with a series of hypotheticals that were followed by questions asking them to choose between two options. They were asked, for example, whether they would purchase loss insurance in certain scenarios.²³⁰ Interspersed amongst these hypotheticals, respondents were also presented with two questions designed to test whether the endowment effect can nudge absent class members.²³¹ Respondents were first told:

You are part of a group lawsuit. The lawsuit settles and you have been awarded \$1,500.00. You can exchange that money for the opportunity to sue the defendant on your own. If you prevail, you will be entitled to \$5,000.00. Would you like to exchange \$1,500.00 for the right to sue for \$5,000.00?

plaintiff has a private property right in his claim of action—i.e., in the right to sue—and in his lawsuit once filed.”).

226. Absent class members also have an ownership interest in any common fund or settlement that results from the litigation. See *Klier v. Elf Atochem N. Am., Inc.*, 658 F.3d 468, 474 (5th Cir. 2011); see also 2 McLAUGHLIN, *supra* note 31, § 8:15 (14th ed.) (“It bears emphasis that class members have a property interest in settlement funds, including unclaimed funds.”); *Ortiz v. Fibreboard Corp.*, 527 U.S. 815, 846–47 (1999).

227. As previously noted, see *supra* Subpart II.B.4, settlement notice is structurally prone to the endowment effect. This Part makes clear that, although the nature of settlement notice lends itself to seizing on the endowment effect, this is ultimately the choice of the notice designer. Of course, any savvy notice designer would frame settlement notice in a manner that seizes on the endowment effect.

228. Respondent demographic information on file with the author.

229. This service “is commonly used in the social sciences and in law as a means of low-cost data collection.” Matthew B. Kugler, *The Perceived Intrusiveness of Searching Electronic Devices at the Border: An Empirical Study*, 81 U. CHI. L. REV. 1165, 1191 n.192 (2014).

230. Participants were presented with fourteen hypothetical scenarios (such as “you have purchased a piece of jewelry and have the option of purchasing insurance”) for which they had to choose between two options (for example, to choose whether purchase insurance or leave the jewelry uninsured). Two of these hypothetical scenarios were pertinent to the present inquiry.

231. Survey questions on file with the author.

Later in the survey, respondents were separately told:

You have been injured by a company. A statute gives you the right to sue the company. If you prevail, the statute entitles you to \$5,000.00. The company offers you 30 percent of that amount in exchange for your right to sue. Would you like to exchange your right to sue?

Traditional law and economics predicts that these questions—designed to simulate settlement notice in a medium-value class action—will elicit identical responses. After all, both pose an economically identical scenario: The respondent has been injured, can obtain a maximum of \$5000 in damages, and is offered a \$1500 settlement. But the framing is subtly different: The first question—the “settlement frame”—emphasizes that the respondent owns a settlement; the second—the “cause-of-action frame”—highlights that the respondent owns an individual cause of action. Behavioral law and economics predicts that because of the endowment effect, individuals will be more willing to settle when presented with the settlement frame than when presented with an identical choice in the cause-of-action frame.²³²

As predicted by behavioral law and economics, framing matters. When presented with the settlement frame, 61 percent of participants preferred to settle; that figure dropped to 56 percent in response to the cause-of-action frame.²³³ Merely changing how an identical settlement was framed resulted in a 5 percent shift, notwithstanding that the two questions plainly presented the same respondents with economically identical choices. These results are even more pronounced when considering only those individuals who were willing to settle. In other words, omitting those not inclined to settle in either case, nearly 10 percent of those who were willing to settle were so inclined only when presented with the settlement frame. On average, survey participants were more hesitant to sell their cause of action for \$1500 than they were to accept that exact amount in exchange for the same cause of action when told that the settlement award was already theirs. Participants apparently wanted more to sell their litigation right than they were willing to pay to acquire an identical right.²³⁴

232. See Jolls, Sunstein & Thaler, *supra* note 14, at 1497–98 (discussing the endowment effect).

233. Survey design and results on file with the author.

234. This is consistent with a number of studies illustrating the endowment effect. “In one notable study, 2000 duck hunters were surveyed about the value they would place on protecting a wetland from development. Hunters were willing to pay \$247 per person per season, on average, for the right to prevent development to make hunting viable, while they would demand, on average, \$1044 dollars each to give up an entitlement to hunt there.” Korobkin, *The Endowment Effect*, *supra* note 224, at 1232 (footnote omitted) (citing JUDD HAMMACK & GARDNER MALLARD BROWN, JR., *WATERFOWL AND WETLANDS: TOWARD BIOECONOMIC ANALYSIS* 26 (1974)).

These findings, though limited and informal, suggest that notice designers may be able to nudge absent class members with subtle framing techniques. Absent class members, like all individuals, place a greater value on assets that they own. In light of the endowment effect, absent class members can be nudged by framing information in a manner that highlights particular ownership interests over others.

2. Reactive Devaluation

Humans are not dispassionate. They are often unable to disassociate their view of a proposal from their view of the proposer. This can be irrational. An individual might reject an objectively desirable offer simply because it was proposed by an adversary. Behavioral psychologists refer to this as “reactive devaluation,”²³⁵ the tendency to diminish one’s view of a proposal simply because it was presented by a foe.²³⁶ There are, of course, rational reasons to devalue an adversary’s proposal in a multi-round game.²³⁷ A party might obtain a superior result by resisting an initial offer. Or it might be rational to assume that a self-interested adversary is unlikely to advance an offer detrimental to its interests.²³⁸

These rationalizations are largely inapposite, however, outside the multi-round negotiation context, particularly when individuals are asked to evaluate one-off proposals. For example, Professors Sitaraman and Zionts recounted a study conducted during the Cold War in which American respondents were asked whether they supported a proposal that would result in a 50 percent reduction in the size of both the American and Soviet nuclear arsenals.²³⁹ Ninety percent of respondents favored the policy when told that it was proposed by the United States; that number fell to 44 percent when respondents were told that Mikhail Gorbachev proposed the same arms deal.²⁴⁰

Prospect theory predicts this irrational strain of reactive devaluation:

[T]he aversiveness of a given loss tends to be greater than the attractiveness of a gain of the same objective magnitude. Thus, the

235. See Lee Ross, *Reactive Devaluation in Negotiation and Conflict Resolution*, in BARRIERS TO CONFLICT RESOLUTION 25, 28 (Kenneth J. Arrow, et al., eds. 1995).

236. See Russell Korobkin, *Psychological Impediments to Mediation Success: Theory and Practice*, 21 OHIO ST. J. ON DISP. RESOL. 281, 316 (2006) (explaining that “a concession or compromise that is offered appears less desirable than it appeared before it was offered.”).

237. See *id.*

238. This, however, requires a zero-sum game or—at a minimum—the perception thereof.

239. Sitaraman & Zionts, *supra* note 10, at 537.

240. *Id.*

very act of framing a proposal in a manner that invites the other side to give up some things it values in order to receive some other things it also values may leave the recipients of the proposal convinced that the loss in question will not be commensurate with the gain—even when a prior elicitation of the recipients’ values might have led one to anticipate that the proposed trade of concessions would be welcomed quite eagerly.²⁴¹

So explained, reactive devaluation is the result of a framing that primes the decisionmaker to focus on losses over gains.

Reactive devaluation can affect the opt-out decision. Class-settlement notice asks absent class members to choose between opting-out or tacitly endorsing the proposed settlement by remaining in the class.²⁴² Notice designers can choose whether to discuss the origin of a proposed settlement. As the Cold War study illustrates, how information about the settlement’s genesis is framed can be just as determinative as the description of the proposal itself. In particular, if a defendant proposed the class settlement, then notice designers seeking to avoid opt-outs should, as much as possible, omit discussing the settlement’s origins. Highlighting the defendant’s role might trigger a reactive devaluation amongst absent class members.²⁴³ Notice designers could therefore emphasize (if true, as is undoubtedly the case in nearly every instance) that the settlement was the result of bargaining by both parties. As a corollary, if class counsel proposed the settlement, then notice designers would be well advised to highlight the plaintiffs’ role initiating the resolution.

3. Ambiguity Aversion

Ultimately, settlement notice aims to inform. It can do so by providing information and by highlighting what information is not yet available. The latter can be accomplished with an intent to nudge. As previously discussed, individuals are ambiguity averse.²⁴⁴ They disproportionately prefer certainty over uncertain risks, even if the certain option is the worse of the two. Ambiguity aversion is thus distinguishable from loss aversion, the latter of

241. Ross, *supra* note 235, at 37.

242. See 2 MCLAUGHLIN, *supra* note 31, § 6:10 (14th ed. 2017) (“Courts have generally assumed that silence constitutes tacit consent to the proposed settlement, so that the absence of objectors or receipt of a relatively small number of objections and opt-outs supports the conclusion that the settlement is adequate.”).

243. See generally Daniel Bar-Tal & Eran Halperin, *Socio-Psychological Barriers to Conflict Resolution*, in INTERGROUP CONFLICTS AND THEIR RESOLUTION 217 (Daniel Bar-Tal, ed. 2011) (discussing reactive devaluation in context of international crisis resolution).

244. See *supra* Subpart II.B.3.

which operates where probability distributions between choices are generally known.²⁴⁵ The ambiguity effect, by contrast, causes decisionmakers to magnify and overestimate the unknown probability of downside risks simply because that probability is unknown.²⁴⁶ That is, a “person may be willing to accept a risk he or she understands, even though the risk may be substantial, whereas he [or she] may feel unwilling to accept a risk he or she does not understand.”²⁴⁷

Class settlement presents absent class members with a choice between certainty and ambiguity. From the perspective of an absent class member, remaining in the class preserves the status quo and assures a certain return of a known amount. Opting-out, by contrast, affords the absent class member the right to pursue an individual claim that might entitle the individual to an unknown amount.²⁴⁸ The probability of success is uncertain at each stage of the litigation, particularly for a layperson and even for medium- and high-value claimants. The individual claim may not survive motion practice, withstand summary judgment, or ultimately persuade a jury.

Notice need not highlight these ambiguities, which are properly understood as features of individual litigation, not the class settlement itself. But nothing prohibits notice designers from highlighting the uncertainty of individual litigation, which is, after all, pertinent information. By highlighting ambiguity—that is, providing information about the lack of information—notice designers can nudge absent class members away from opting-out and toward settlement. Specifically, settlement notice could include a disclaimer alerting absent class members to the uncertainties of individual litigation. This alert need not exaggerate to effectively trigger ambiguity aversion. One psychological study found that individuals were reluctant to vaccinate when

245. See Daniel A. Farber, *Uncertainty*, 99 GEO. L.J. 901, 904–05 (2011) (explaining that “[r]isk analysis . . . assumes that the probability of harm can be quantified with reasonable confidence,” while ambiguity presents a scenario in which “multiple plausible models of reality confront a decision maker”).

246. See Elena Kantorowicz-Reznichenko, *Any-Where Any-Time: Ambiguity and the Perceived Probability of Apprehension*, 84 UMKC L. REV. 27, 34–35 (2015) (citing studies that demonstrate the “empirically well-established phenomenon” that “people are averse to ambiguous choices”).

247. Terrence R. Chovrat, *Ambiguity and Income Taxation*, 23 CARDOZO L. REV. 617, 627 (2002).

248. That said, the available damages award is presumably known in the context of statutory damages. As but one of many examples, the Telephone Consumer Protection Act, 47 U.S.C. § 227, provides a private right of action for injunctive relief in the amount of “actual monetary loss” or “\$500 . . . for each [] violation.” 47 U.S.C. § 227(b)(3).

merely told that a vaccine had side effects, without being told what those side effects might entail.²⁴⁹

This nudge also need not offend the operative rule that settlement notice should contain pertinent information about the class settlement.²⁵⁰ In other words, this nudge does not require the notice designer to omit information. Ambiguity can be created by providing more information, namely information about the individual litigation process as an alternative to settlement. There is little to suggest that courts would resist this nudge. Notice review typically turns on how thoroughly the notice describes the putative settlement,²⁵¹ eliding any discussion about whether the settlement notice can also provide supplemental information about available alternatives,²⁵² which might be thought to only enhance individuals' decisionmaking capability. Objectors may find it difficult to argue that a proffered notice is faulty because it provides too much information. Yet behavioral psychology suggests that even an ostensibly innocuous disclaimer of this sort, which might fly under the judicial radar, can nudge absent class members away from opting-out.

B. Judges, Nudges, and Choice Architecture

Nudging is, in a sense, inevitable.²⁵³ Nudges are typically thought of as affirmative design features. But even the absence of an affirmative nudge to action is itself a nudge toward the status quo. For example, individuals tend to undersave for retirement,²⁵⁴ but they can be nudged to invest in a 401k if they are automatically enrolled in an opt-out program.²⁵⁵ The absence of such a nudge itself causes individuals to act on their initial inclination and undersave. So too in the class action context. Class members can be nudged to opt-out by

249. Ilana Ritov & Jonathan Baron, *Reluctance to Vaccinate: Omission Bias and Ambiguity*, 3 J. BEHAV. DECISION MAKING 263, 263–64 (1990).

250. See, e.g., *Rodriguez v. W. Publ'g Corp.*, 563 F.3d 948, 962 (9th Cir. 2009) (finding no fault with settlement notice that apprised absent class members of the settlement terms and where more information can be obtained because “[n]otice is satisfactory if it generally describes the terms of the settlement in sufficient detail to alert those with adverse viewpoints to investigate and to come forward and be heard”) (internal quotation marks omitted) (citing *Churchill Vill., LLC v. Gen. Elec.*, 361 F.3d 566, 575 (9th Cir. 2004)).

251. See 7B WRIGHT, MILLER & KANE, *supra* note 20, § 1797.6.

252. *Weinberger v. Kendrick*, 698 F.2d 61, 70 (2d Cir. 1982) (Friendly, J.).

253. See CASS R. SUNSTEIN, *WHY NUDGE?: THE POLITICS OF LIBERTARIAN PATERNALISM* 118 (2014) (“There can be (and often is) choice architecture without choice architects.”(footnote omitted)); THALER & SUNSTEIN, *supra* note 45, at 3 (“[M]any real people turn out to be choice architects, most without realizing it.”).

254. See *supra* note 45 and accompanying text.

255. THALER & SUNSTEIN, *supra* note 45 at 110–11.

being informed, for example, that they own a right to pursue individual litigation that can be sold for a settlement fee. The absence of this nudge, by contrast, will render absent class members more likely to settle. Tautological and obvious though it sounds, where information must be conveyed, it must be conveyed in some form and manner. Thus, nudging is inevitable.

Courts should be cognizant of the inevitability of choice architecture when reviewing the adequacy of settlement notice. The decision to inform absent class members that a settlement was proposed by class counsel is a decision of consequence. So too is decision to omit that information. This and countless other design features bear on absent class members' decisionmaking. And although it might be easy to spot and scrutinize an affirmative nudge, the omission of any obvious or positive nudge can be equally impactful. Notice designers might decline to highlight absent class members' ownership interest in their individual causes of action, omit mention of the defendant's role in proposing the settlement, or elide the certainty of group litigation.²⁵⁶ Each of these design features, though innocuous, can nudge.

Consequently, judges should not consider response rates in a vacuum. Several courts have held that a settlement was acceptable merely because the vast majority of absent class members declined to opt-out.²⁵⁷ The Ninth Circuit, for example, opined that a minuscule opt-out rate "reveals two things: (1) at least some portion of the class understood the notice and chose not to participate in the settlement for whatever reason; and (2) the vast majority of the class . . . agreed to be bound."²⁵⁸ Although a low opt-out rate might suggest a desirable settlement, it might alternatively reveal that the notice designers were savvy choice architects. Indeed, a low opt-out rate might only evince that the settlement notice was so fraught with nudges—preying on reactive devaluation, risk-aversion, ambiguity-aversion, and more—that absent class members were unwittingly compelled to remain in the class. It might even be that choice architects nudged absent class members to remain in a class when they would otherwise have rationally preferred to opt-out.

256. See, e.g., *UAW v. Gen. Motors Corp.*, 497 F.3d 615, 630 (6th Cir. 2007) (approving a settlement notice that declined to inform class members of a potential conflict of interest between the settling parties because "Rule 23(e) does not require the notice to set forth every ground on which class members might object to the settlement" as long as it contains "the terms of the proposed settlement so that class members may come to their own conclusions about whether the settlement serves their interests") (internal quotation marks omitted) (quoting *Grunin v. Int'l House of Pancakes*, 513 F.2d 114, 122 (8th Cir. 1975)).

257. See *supra* note 200 (discussing the importance of realized opt-out rates to courts' review of the adequacy of class settlement).

258. *Hanlon v. Chrysler Corp.*, 150 F.3d 1011, 1025–26 (9th Cir. 1998).

Whether this choice architecture should be policed is not considered here. It can be policed, however, by simply considering opt-out rates in context. A low opt-out rate coupled with settlement notice that, for example, highlights the defendant's role in proposing the settlement might suggest that the settlement is sufficiently desirable to overwhelm any reactive devaluation. Alternatively, a low opt-out rate coupled with settlement notice that includes an individual-litigation disclaimer might suggest that absent class members were nudged because of ambiguity aversion.

In addition to reviewing for nudges, courts can use nudges to their benefit by performing natural experiments using class actions themselves as laboratories. Courts and notice designers could segment absent class members into groups, providing each group with identical information framed in subtly differently ways. One group of absent class members could be told that they own a settlement that can be exchanged for the right to pursue individual litigation, while another is informed that they own a right to pursue individual litigation that can be sold for a settlement fee. If opt-out rates are consistent across both groups, then one might conclude that the terms of settlement are uniformly compelling, notwithstanding the endowment effect. If opt-out rates noticeably diverge between groups, however, further review may be warranted. This comparative experimentation would allow courts to utilize different tranches or subsets of a class as control groups against which to test the effects of notice design. In this way, courts can deploy nudges to their advantage as a means of actively testing the adequacy of settlement offers.

Regardless of the approach taken by courts, the inevitability of choice architecture advises against relying on opt-out rates in a vacuum. Opt-out rates should be considered in context. And, that context should include the design features that frame the content of settlement notice. Absent such contextual review, judges might errantly approve a settlement notice or even a settlement itself as adequate where, on closer inspection, the settlement terms are poor but the notice designers' choice architecture excels.

CONCLUSION

Class actions elicit a litany of law and economics concepts—efficiency, economization, deterrence, and more. These concepts inform, animate, and enliven debates about the function of the class device, the content of Rule 23, and how class action law should be applied. The importance of traditional law and economics to these subjects cannot be displaced. But class actions should also elicit a litany of behavioral law and economics concepts. These, too,

can enrich debates about class actions, Rule 23, and aggregate litigation generally. Understanding how behavioral tendencies, pathologies, and biases shape individuals' decisionmaking can supplement traditional law and economics analysis. In particular, psychological insights can help inform interpretations of Rule 23, resolve vexing puzzles about the content of class action law, and shape how practitioners and courts engage in and review class action practice and procedure. Behavioral law and economics should have a seat at the class action table.

BEHAVIORAL CLASS ACTION LAW
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ABSTRACT

Behavioral law and economics has been deployed to analyze nearly every field of law. Class action practice and procedure is a notable exception. This Article is the first to supplement stagnating class action debates and the traditional law and economics account of class action law with behavioral psychology. It draws on a litany of behavioral tendencies, biases, and pathologies—ranging from prospect theory, loss aversion, anchoring, and the status quo bias to the availability heuristic, group-attribution error, reactive devaluation, and the endowment effect—and considers their application to class action practice generally and Rule 23 in particular. In addition to this descriptive survey, this Article makes three contributions to class action scholarship. First, it applies behavioral psychology to an unresolved puzzle: how to explain opt-out rights. Traditional law and economics cannot explain why Rule 23 permits absent class members to opt-out of certain class actions, which appears inefficient and dependent on irrational behavior, or why this opt-out right is exercised according to predictably irrational patterns. However, behavioral law and economics fills these analytical gaps. Second, this Article demonstrates the prescriptive power of behavioral law and economics by illustrating how absent class members can be nudged toward class settlement by self-interested choice architects. Finally, this Article crystallizes the judicial role in light of the potency of behavioral psychology, choice architecture, and nudging in class settlement notices.

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