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Restoring American Antitrust's Moral Arc

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RESTORING AMERICAN ANTITRUST'S MORAL ARC

THOMAS J. HORTON*

I. INTRODUCTION

As a law professor, my Antitrust & Consumer Protection Law courses begin with the students viewing the American Antitrust Institute's excellent educational film titled *Fair Fight in the Marketplace*.¹ The film shows actual tapes of top lysine-company executives in hotel rooms in the 1990s, planning and implementing the massive price fixing and output limitation conspiracy that led to their successful prosecution under Section 1 of the Sherman Act.² Included in the dialogue is a statement by former Archer Daniel Midland's ("ADM") CEO Michael Andreas: "Our competitors are our friends. Our customers are the enemy."³ As described by one leading antitrust textbook in its analysis of *United States v. Andreas*:

Captured in grainy, black and white images were hours of discussions in which the world's lysine producers set output levels, argued over their individual quotas, and devised ways to audit compliance with their pact. In one memorable session in a hotel room in Atlanta, the competitors joked openly about the possibility that the FBI or the United States antitrust agencies might detect their behavior.⁴

As the students watch the film and read the Seventh Circuit's 2000 decision, they are inevitably shocked and dismayed by the antitrust violators' brazen lack of business ethics and morality. Nearly universally, they believe that such conduct violates and offends fundamental moral and ethical norms.

As the semester continues, students read additional cases in which businesspersons deliberately set out to destroy competition and subvert the competitive process. For example, in studying invitations to collaborate, students read the following exchange from February, 1982, between Robert Crandall, American Airlines' President, and Howard Putnam, Braniff Airlines' President:

[Putnam]: Do you have a suggestion for me?

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^{1.} FAIR FIGHT IN THE MARKETPLACE (Am. Antitrust Inst. 2010).

^{2.} Id.; 15 U.S.C. § 1 (1890).

^{3.} FAIR FIGHT IN THE MARKETPLACE, supra note 1.

^{4.} ANDREW I. GAVIL ET AL., ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 12 (2d ed. 2008) (citing United States v. Andreas, 216 F.3d 645 (7th Cir. 2000)).

[Crandall]: Yes. I have a suggestion for you. Raise your goddamn fares twenty percent. I'll raise mine the next morning.
[Putnam]: Robert, we—
[Crandall]: You'll make more money and I will too.
[Putnam]: We can't talk about pricing.
[Crandall]: Oh bullshit, Howard. We can talk about any goddamn thing

we want to talk about.⁵

Turning to dominant firm behavior and conduct having exclusionary effects, the students read case after case in which a dominant firm or group of firms successfully drives an aggressive competitor out of business by using predatory conduct. Students learn that unethical business tactics routinely have been applauded and blessed by reactionary, interventionist appellate courts determined to protect dominant firms from the wrath of antitrust juries.⁶ They also learn that "most antitrust commentators today think that juries are anathema to antitrust."⁷ Even though citizen jurors may be "morally outraged" by unethical and immoral business conduct, the courts consistently rule that antitrust liability is inappropriate because no damage to economic competition supposedly has been proven.⁸

As students read the courts' economic justifications for such decisions, they are introduced to the current American economic thinking that antitrust should be amoral, with no moral content.⁹ Some commentators have even gone further and

7. Harry First & Spencer Weber Waller, Antitrust's Democracy Deficit, 81 FORDHAM L. REV. 2543, 2552 (2013). See also DANIEL A. CRANE, THE INSTITUTIONAL STRUCTURE OF ANTITRUST ENFORCEMENT 109 (2011); Rebecca Haw, Adversarial Economics in Antitrust Litigation: Losing Academic Consensus in the Battle of Experts, 106 NW. U. L. REV. 1261, 1293 (2012) (arguing that the problems with jury decision-making in antitrust "have been well documented," with complex economic issues being "beyond the ken" of lay jurors); Thomas J. Horton, Unraveling the Chicago/Harvard Antitrust Double Helix: Applying Evolutionary Theory to Guard Competitors and Revive Antitrust Jury Trials, 41 U. BALT. L. REV. 615, 647-51 (2012) [hereinafter Horton II] (discussing the "all-out attack against jury trials in [Sherman Act] Section 2 monopolization and attempted monopolization cases"); Donald F. Turner, The Durability, Relevance, and Future of American Antitrust Policy, 75 CALIF. L. REV. 797, 812 (1987) ("[The] elimination of [antitrust] juries would increase the probability of accurate results.").

8. See Horton I, supra note 6, at 857 ("[I]t is not hard to imagine that an American jury would have been 'morally outraged' by defendants' [conduct in *Matsushita*]."). See also Brooke Grp., 509 U.S. at 227 ("[T]he evidence [could not] support a finding that Brown & Williamson's alleged scheme was likely to result in oligopolistic price coordination and sustained supracompetitive pricing in the generic segment of the national cigarette market. Without this, Brown & Williamson had no reasonable prospect of recouping its predatory losses and could not inflict the injury to competition the antitrust laws prohibit.").

9. See, e.g., Daniel A. Mil, Rules Versus Standards in Antitrust Adjudication, 64 WASH. & LEE L. REV. 49, 105 (2007) ("It has been a long time since anyone has thought about antitrust in explicitly moral terms"); D. Daniel Sokol, Tensions Between Antitrust and Industrial Policy, 22 GEO. MASON L. REV. 1247, 1250 (2015) [hereinafter Sokol I] ("The good news is that most jurisdictions have adopted an antitrust-economics-driven goal (most often consumer welfare) as the sole criterion for antitrust analysis, with other goals falling by the wayside."); Maurice E. Stucke, Morality and Antitrust, 2006 COLUM. BUS. L. REV. 443, 444 (2006) [hereinafter Stucke I] (discussing opinions that antitrust offenses are amoral);

^{5.} Id. at 339-40 (quoting United States v. Am. Airlines, Inc., 743 F.2d 1114, 1116 (5th Cir. 1984)).

^{6.} See, e.g., Weyerhaeuser Co. v. Ross-Simmons Hardwood Co., 549 U.S. 312 (2007); Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574 (1986). See Thomas J. Horton, Fairness and Antitrust Reconsidered: An Evolutionary Perspective, 44 MCGEORGE L. REV. 823, 854-60 (2013) [hereinafter Horton I] for a fuller discussion of these cases.

posited that "business competition simply may be amoral."¹⁰ As a corollary, students learn that moral norms of fairness are also considered anathema to many antitrust scholars and judges today.¹¹ As the semester moves along, students must decide for themselves whether America's antitrust laws should include norms of morality and fairness, or continue their current pretense of being amoral and solely driven by economics-based notions of consumer welfare and allocative efficiency.¹²

HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION 10, 54 (2005) (arguing that antitrust is not concerned with the moral implications of conduct—only the economic implications); Herbert Hovenkamp, Antitrust Violations in Securities Markets, 28 J. CORP. L. 607, 609 (2003) ("[A]ntitrust has no moral content"); GAVIL ET AL., supra note 4, at 39 ("[I]t is important to realize at the outset of our study of antitrust law that contemporary U.S. antitrust analysis focuses almost solely on economic goals Non-economic goals frequently conflict with decision makers, and arguably are ill-suited to decision making processes that rely on adjudication and the adversary system"); LYNN STOUT, CULTIVATING CONSCIENCE: HOW GOOD LAWS MAKE GOOD PEOPLE 32 (2011) (discussing the economic viewpoint that homo economicus is fundamentally amoral) [hereinafter STOUT I]; Kenneth G. Dau-Schmidt, Sentencing Antitrust Offenders: Reconciling Economic Theory with Legal Theory, 9 WM. MITCHELL L. REV. 75, 85 (1983) (addressing assertion that "no moral violation occurs in antitrust crimes"); Caron Beaton-Wells, Capturing the Criminality of Hard Core Cartels: The Australian Proposal, 31 MELB. U. L. REV. 675, 677 (2007) ("Generally speaking, in the US, antitrust enforcers, policy-makers and scholars have circumvented the morality of antitrust crimes."); MICHAEL J. SANDEL, WHAT MONEY CAN'T BUY: THE MORAL LIMITS OF MARKETS 47 (2012) [hereinafter SANDEL I] ("Most economists prefer not to deal with moral questions, at least not in their role as economists."). Interestingly, several commentators have gone so far as to argue that the antitrust laws are actually immoral. See, e.g., Jeffrey Tucker, Controversy: Are Antitrust Laws Immoral?: A Response to Kenneth G. Elzinga, 1 J. MKTS. & MORALITY 90 (1998).

10. James H. Michelman, Some Ethical Consequences of Economic Competition, in BUSINESS ETHICS: A PHILOSOPHICAL READER 30, 32 (Thomas I. White, ed., 1993). See also Richard McCarty, Business and Benevolence, in BUSINESS ETHICS: A PHILOSOPHICAL READER 41, 41 (Thomas I. White ed., 1993) ("Business ethics is a contradiction in terms, according to a familiar jest; and perhaps a subtle truth underlying that quip is just that the selfish profit motive successful business requires is intrinsically at odds with part of the requirements of morality.") (emphasis omitted); Robert J. Rafalko, Corporate Punishment: A Proposal, in BUSINESS ETHICS: A PHILOSOPHICAL READER 307, 308 (Thomas I. White ed., 1993) ("Regarding corporations as analogous to moral persons has one overriding drawback. Corporations are designed to limit liability, whereas no moral persons is so exempted."); FRANCIS FUKUYAMA, THE GREAT DISRUPTION: HUMAN NATURE AND THE RECONSTITUTION OF SOCIAL ORDER 259 (1999) [hereinafter FUKUYAMA I] (questioning whether "an abstract, collective entity [can] be the sort of thing that assumes moral identity?").

11. See, e.g., Sokol I, supra note 9, at 1249 ("[T]he incorporation of fairness-related concerns may lead to results that hurt consumers."); Horton I, supra note 6, at 823-24 ("For many American jurists and scholars, the notion that antitrust and competition law should incorporate moral norms of fairness is anathema."); 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶651h, at 125 (3d ed. 2008) ("The concern of [Sherman Act] § 2 is with monopoly, not unfairness or deception."); ELEANOR M. FOX & LAWRENCE A. SULLIVAN, CASES AND MATERIALS ON ANTITRUST 145-46 (1989) (discussing efforts of "some jurists and scholars... to excise fairness from the antitrust lexicon"); McCarty, supra note 10, at 46-47 (noting Andrew Carnegie's belief: "[T]he most ruthless and unfair business practices seem[ed] to be justified as the means to future benevolence."); Fishman v. Estate of Wirtz, 807 F.2d 520, 577 (7th Cir. 1986) (Easterbrook, J., concurring in part and dissenting in part) ("Who says that competition is supposed to be fair ...?").

12. See, e.g., Sokol I, supra note 9, at 1252 ("In the United States, antitrust liability has narrowed due to a better understanding of economics, and antitrust analysis is now driven by economic analysis."); Roger D. Blair & D. Daniel Sokol, *The Rule of Reason and the Goals of Antitrust: An Economic Approach*, 78 ANTITRUST L. J. 471, 473 (2012) (arguing that the goals of antitrust must be "understood by economic analysis"); Darren Bush, *Too Big to Bail: The Role of Antitrust in Distressed Industries*, 77 ANTITRUST L. J. 277, 279 (2010) (describing efficiency as the "King" of antitrust).

The current rationale for amorality in antitrust is simple and straightforward. Proponents of amorality believe that "[b]asic microeconomic theory is of course a science."¹³ Seventh Circuit Judge Richard Posner characterizes economics as "the science of rational choice in a world—our world—in which resources are limited in relation to human wants."¹⁴ As a science, competition economics should only be concerned with allocative-efficiency and an economics-based notion of consumer welfare.¹⁵ Judge Posner, for example, believes that the promotion of economic efficiency is "positive, not normative; scientific, not ideological."¹⁶

The popularity and widespread acceptance of such views in current American antitrust thinking cannot be overstated. Professor Steven Teles, for example, observes that "law and economics is the most successful intellectual movement in the law in the past [thirty-eight] years, having rapidly moved from insurgency to hegemony."¹⁷ As cogently observed by Professor Lynn Stout of Cornell University, we are living in the midst of a "generation of legal experts instructed in the ways of *homo economicus*"¹⁸

Classifying economics as a rigorous science allows economists to take "detached, amoral stance[s]" toward aggressive and unethical economic strategies that harm competitive rivals.¹⁹ In such a supposedly scientific world, antitrust should not rely "on moral considerations, but on solely economic

15. See, e.g., Chesapeake & Ohio Ry. Co. v. United States, 704 F.2d 373, 376 (7th Cir. 1983) ("The allocative-efficiency or consumer-welfare concept of competition dominates current thinking, judicial and academic, in the antitrust field."). See also RICHARD POSNER, ANTITRUST LAW, at ix (2d ed. 2001).

16. RUDOLPH J.R. PERITZ, COMPETITION POLICY IN AMERICA, 1888-1992: HISTORY, RHETORIC, LAW 238 (1996) (discussing POSNER I, *supra* note 14); RICHARD POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE (1976). *But see* SAM HARRIS, THE MORAL LANDSCAPE: HOW SCIENCE CAN DETERMINE HUMAN VALUES 190 (2010) ("Is economics a true science yet? Judging from recent events, it wouldn't appear so."); JEFF MADRICK, SEVEN BAD IDEAS: HOW MAINSTREAM ECONOMISTS HAVE DAMAGED AMERICA AND THE WORLD 189 (2014) ("The pretense that economics is a science is harmful in that it gives economic ideas more credibility than they often deserve. Policymakers—and U.S. citizens—are unaware of the questionable underpinning of much of the advice offered by economists, which has time and again led to gravely incorrect policy decisions.").

17. STEVEN M. TELES, THE RISE OF THE CONSERVATIVE LEGAL MOVEMENT: THE BATTLE FOR CONTROL OF THE LAW 216 (2008). See also STOUT I, supra note 9, at 29 ("Hundreds of full-length books have been published, including dozens that incorporate the phrase 'law and economics."").

18. STOUT I, *supra* note 9, at 29. Professor Stout notes that "[I]aw review articles employing the law and economics approach numbers in the uncountable thousands." *Id. See also* Lynn A. Stout, *Taking Conscience Seriously, in* MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY 157, 158 (Paul J. Zak ed., 2008) [hereinafter Stout II] ("[M]odern professors teach their students in economics, law, and business courses . . . to assume that people are 'rational maximizers' who behave like members of the mythical species *Homo Economicus.*").

19. STEVEN PINKER, THE BETTER ANGELS OF OUR NATURE: WHY VIOLENCE HAS DECLINED 495 (2011) [hereinafter PINKER I] (discussing how scientists and economists tend to take the viewpoint of the perpetrator, rather than the victim, in evaluating harmful conduct).

^{13.} ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 8 (1978).

^{14.} RICHARD POSNER, ECONOMIC ANALYSIS OF LAW 3-4 (6th ed. 2003) [hereinafter POSNER I]. See also Richard Posner, Some Uses and Abuses of Economics in Law, 46 U. CHI. L. REV. 281, 295 (1979) (likening economic efficiency to scientific theories such as physics).

considerations."²⁰ As Michael Sandel noted, "[m]ost economists prefer not to deal with moral questions, at least not in their role as economists. They say their job is to explain people's behavior, not judge it."²¹ Consequently, deceased Judge Robert Bork concluded, "[c]onsumer welfare, as the term is used in antitrust, has no sumptuary or ethical component"²²

Professor Maurice E. Stucke has observed that "[r]educing antitrust to normative morality judgments would represent, for [Judge] Richard Posner and others, antitrust's descent into 'a weak field, a field in disarray, a field in which consensus is impossible to achieve in our society."²³ The apostles of neoconservative economics see morality as a subjective and non-scientific concept that lacks any meaningful economic guidance, and one which "could lead to the application of widely divergent standards and result in markedly inconsistent and unpredictable outcomes."²⁴ In the words of Milton Friedman: "Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible."²⁵ In such a world, antitrust cannot be permitted to have any moral content.

In recent years, a number of antitrust scholars, including this author, have sought to catalyze a new dialogue and debate as to whether antitrust analyses and decisions should recognize and pay homage to moral norms of fairness and ethics.²⁶ This article attempts to further spur this debate by reconsidering the issue

22. BORK, supra note 13, at 90.

23. Stucke I, *supra* note 9, at 446 (quoting Richard A. Posner, *Law and Economics is Moral*, 24 VAL. U. L. REV. 163, 166 (1990)) [hereinafter Posner II].

24. Horton I, supra note 6, at 833.

25. MILTON FRIEDMAN, CAPITALISM AND FREEDOM 133 (2002). See also Michelman, supra note 10, at 32 (arguing that "business competition simply may be amoral"); LYNN STOUT, THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HARMS INVESTORS, CORPORATIONS, AND THE PUBLIC 18 (2012) [hereinafter STOUT III] (quoting Milton Friedman, *The Social Responsibility of Business is to Increase Its Profits*, N.Y. TIMES, Sept. 13, 1970, at 32) ("[B]ecause shareholders 'own' the corporation[s], the only 'social responsibility of business is to increase its profits"); Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECONS. 305 (1976) (arguing that corporate managers who pursue any goals other than maximizing shareholder wealth are wayward agents who reduce social wealth by imposing "agency costs").

26. See, e.g., Jeffrey L. Harrison, A Socio-Economic Approach to Antitrust: Unpacking Competition, Consumer Surplus, and Allocative Efficiency, 49 AKRON L. REV. 409, 413 n.25 (2016) ("Fairness is important in legitimizing—making acceptable—any process in which there are winners and losers."); *Id.* at 410 (observing that "much of the current discussion about revising antitrust is framed in terms of fairness or morality"); Tihamér Tóth, *Is There a Vatican School for Competition Policy*?, 46 LOY. U. CHI. L. J. 583, 586 (2015) ("[A]lthough economics and morality are different sciences with different rules, it is nevertheless important for business activities to be conscientious of moral rules. Conduct that is economically rational but also immoral will not benefit mankind in the long run."); Marina Lao, *Ideology Matters in the Antitrust Debate*, 79 ANTITR. L. J. 649, 685 (2014) (contending that it would be useful in the antitrust "discourse to bring to the fore the ideological underpinnings of the conservative and liberal divide, and to have a normative conversation based on these value differences rather than rely on economic theories as a proxy for discussion"); ADI AYAL, FAIRNESS IN ANTITRUST: PROTECTING THE STRONG FROM THE WEAK 207 (2014) ("Fairness entails the protection of all involved, or at least the consideration

^{20.} United States v. United Shoe Mach. Corp., 110 F. Supp. 295, 345 (D. Mass. 1953) ("The violation with which United is now charged depends not on moral considerations, but on solely economic considerations."), *aff'd per curiam*, 347 U.S. 521 (1954).

^{21.} SANDEL I, supra note 9, at 47-8. Sandel adds that "despite their protestations, economists increasingly find themselves entangled in moral questions." *Id.* at 48.

of morality and antitrust from an interdisciplinary perspective that includes scholarship and learning from such diverse fields as evolutionary biology, economics, philosophy, history, and behavioral and socioeconomics.²⁷ Such a "consilience" of interdisciplinary approaches can shed new light and bring new perspectives to an area of law that "may be particularly representative of intellectual inertia."²⁸

II. APPLYING EVOLUTIONARY THEORIES TO OUR CURRENT ANTITRUST LAWS: THE NEED FOR A NEW COMPETITION PARADIGM

Our antitrust laws exist to protect the competitive process and to prevent and control large aggregations of economic power and their abuse.²⁹ As recognized by Henry Simons, who has been called the "Crown Prince" of the Chicago School of Economics, "[p]olitical insight reveals that concentration of power is inherently

See, e.g., EDWARD O. WILSON, CONSILIENCE: THE UNITY OF KNOWLEDGE 8-14 (First Vintage 27. Books ed., Vintage Books 1999) [hereinafter WILSON I] (describing consilience-the "unity of knowledge" derived from a synthesis of different sciences-as an interdisciplinary tool that can increase diversity and depth of knowledge through an underlying cohesion); ERIC D. BEINHOCKER, THE ORIGIN OF WEALTH: EVOLUTION, COMPLEXITY, AND THE RADICAL REMAKING OF ECONOMICS 187 (2006) ("[O]rganizations, markets, and economies are not just like evolutionary systems; they truly, literally, are evolutionary systems."); Thomas Earl Geu, Policy and Science: A Review Essay of Wilson's Consilience: The Unity of Knowledge, 44 S.D. L. REV. 612, 624 (1999) ("The importation and uses of sciences, social sciences and philosophies from outside law should not surprise us."); Thomas J. Horton, The Coming Extinction of Homo Economicus and the Eclipse of the Chicago School of Antitrust: Applying Evolutionary Biology to Structural and Behavioral Antitrust Analyses, 42 LOY. U. CHI. L. J. 469, 477-78 (2011) [hereinafter Horton IV] (arguing for the need for more interdisciplinary approaches to antitrust analyses and regulation); Chris Hughes, Afterward: Mind Without Silos-The Next Hundred Years, in INSURRECTIONS OF THE MIND: 100 YEARS OF POLITICS AND CULTURE IN AMERICA 563, 564 (Franklin Foer, ed. 2014) ("[P]utting politics, culture, and ideas side by side and on an equal plane improves the consideration of each topic in its own right.").

28. Harrison, *supra* note 26, at 409. "Some have characterized scholarship in the area as comparable to refining a Model T automobile." *Id.*

29. See, e.g., JAMES W. BROCK, THE STRUCTURE OF AMERICAN INDUSTRY 336 (13th ed. 2016) [hereinafter BROCK I] ("The purpose of American antitrust policy is to maintain the structural prerequisites for effective competition. The goal is to protect the decentralized decision-making system of the competitive marketplace from subversion by central planning and control, whether by the state, or by monopolists, oligopolists, and cartels."); Maurice E. Stucke, *Reconsidering Antitrust's Goals*, 53 B.C. L. REV. 551, 560-62 (2012) [hereinafter Stucke II] (listing a series of goals designed to limit "concerns about the concentration of wealth and power in the hands of a few"); Corwin D. Edwards, *An Appraisal of the Antitrust Laws*, 36 AM. ECON. REV. 172, 172 (1946) ("The grounds for the laws against collusion and monopoly include not only a dislike of restriction of output and of one-sided bargaining power, but also a desire to prevent excessive concentration of wealth and power and a desire to keep open the channels of opportunity.").

of their rights and ensuring that public policy does not trample them unnecessarily. Efficiency is a societal goal (among others), but it too is limited by morality."); Maurice E. Stucke, *Should Competition Policy Promote Happiness*?, 81 FORDHAM L. REV. 2575, 2645 (2013) ("Political, social, and moral values play as large a role, if not larger, in promoting a sustainable, inclusive economy that increases the well-being of the many, rather than the few."); Thomas J. Horton, *Confucianism and Antitrust: China's Emerging Evolutionary Approach to Anti-Monopoly Law*, 47 INT'L LAW. 193, 216-23 (2013) [hereinafter Horton III] (discussing China's efforts to incorporate Confucian norms of morality and fairness into its antimonopoly laws); Horton I, *supra* note 6, at 863 ("The time is therefore ripe to reasses issues of fairness in antitrust from an evolutionary perspective."); D. Daniel Sokol, *Cartels, Corporate Compliance, and What Practitioners Really Think About Enforcement*, 78 ANTITRUST L. J. 201, 216-19 (2012) [hereinafter Sokol II] (urging an increase in our shared moral outrage over antitrust violations).

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dangerous and degrading ... while economic insight reveals that it is quite unnecessary."30 At their best, America's antitrust laws are consequently "rooted in a preference for pluralism, freedom of trade, access to markets, and freedom of All of these values contribute to the law's summarizing choice. norm-commitment to the maintenance of the competitive process."31

Unfortunately, "seduced by siren calls of theoretical purity," American antitrust has lost its way, and is in a state of crisis.³² Captured by the lure of neoclassical economics and economists' purported technocratic expertise, antitrust has slid today into a state of virtual "political irrelevance."³³ "During the 1980s, we witnessed the most lenient antitrust enforcement program in fifty years."34 Thirty years later, neoclassical economics still largely rules antitrust, as jurists and scholars favoring economic consumer welfare and allocative efficiency considerations remain ascendant.³⁵ All of this "has led to an antitrust system captured by lawyers and economists advancing their own self-referential goals, free of political control and economic accountability."36

Worse yet, blind adherence to neoclassical economic theories has resulted in the protection and encouragement of dominant firms and monopolies by "doing nothing, even when enforcement of the antitrust laws would achieve the goals of more consumer surplus (as traditionally defined) and allocative efficiency."³⁷ In

32. Id. at 2-3.

33. First & Waller, supra note 7, at 2543.

Robert Pitofsky, Does Antitrust Have a Future?, in REVITALIZING ANTITRUST IN ITS SECOND 34. CENTURY 530 (Harry First et al. eds., 1991). See also JOSEPH E. STIGLITZ, REWRITING THE RULES OF THE AMERICAN ECONOMY: AN AGENDA FOR GROWTH AND SHARED PROSPERITY 51 (2016) [hereinafter STIGLITZ I] ("The Reagan administration also relaxed antitrust regulations, facilitating the ability of one firm to take over its rivals and reducing competition in the market."); BARRY C. LYNN, CORNERED: THE NEW MONOPOLY CAPITALISM AND THE ECONOMICS OF DESTRUCTION 6 (2010) (arguing that "in 1981 we stopped enforcing [the antitrust] law[s]").

See, e.g., Horton I, supra note 6, at 825-26 (quoting Blair & Sokol, supra note 12, at 4) 35. ("Economics rules antitrust today. Jurists and scholars favoring economic 'consumer welfare' considerations and disfavoring fairness considerations in antitrust analyses are ascendant."); Stucke II, supra note 29, at 563-66 (discussing ascendance of Chicago School's neoclassical economic theories since the late 1970s); Jesse W. Markham, Jr., Lessons for Competition Law from the Economic Crisis: The Prospect for Antitrust Reponses to the "Too-Big-to-Fail" Phenomenon, 16 FORDHAM J. CORP. & FIN. L. 261, 278-81 (2011) (discussing the continued Post-Chicago "adhere[nce] to the limited objective of economic efficiency").

36. First & Waller, supra note 7, at 2544.

37. Harrison, supra note 26, at 422. Harrison argues that this approach ultimately "reflects a deepseated distrust of government involvement in economic affairs." Id. See also First & Waller, supra note 7, at 2543 ("[S]ome might go even further today, arguing that we lack an antitrust movement and antitrust prosecutions, as cartel investigations have sidetracked antitrust from its core mission of preventing concentrations of economic and political power.") (emphasis added).

[A]ntitrust law has relied almost entirely on analyzing error costs alone The danger of this particular form of error cost analysis is that it systematically undervalues all forms of

James W. Brock, Economic Power, Henry Simons, and a Lost Antitrust Vision of Economic 30. Conservatism, 58 S.D. L. REV. 443, 447 (2013). As noted by Professor Brock, "Simon's conservative economic credentials were impeccable ... Simons considered private economic power to be as great a threat as government power to a free society and a free economy, both in narrow, conventional microeconomic ways, as well as in more fundamental, more far-ranging 'macro' ways." Id. at 444.

Eleanor M. Fox & Lawrence A. Sullivan, Retrospective and Perspective: Where are We Coming 31. From? Where are We Going?, in REVITALIZING ANTITRUST IN ITS SECOND CENTURY 2 (Harry First et al. eds., 1991).

the words of Nobel Prize winning economist, Joseph Stiglitz: "We have altered not only our institutions—encouraging ever increased concentration in finance but the very rules of capitalism. We have announced that for favored institutions there is to be little, or no, market discipline."³⁸

United States Senator Elizabeth Warren goes even further: "[T]oday, in America, competition is dying. Consolidation and concentration are on the rise in sector after sector. Concentration threatens our markets, threatens our economy, and threatens our democracy."³⁹ Professors First and Waller explain that "[c]ombining today's error cost approach with today's rule of reason approach ends up reducing antitrust enforcement to a near null set."⁴⁰ To reinvigorate our competitive processes, Senator Warren calls for "a revival of the movement that created the antitrust laws in the first place."⁴¹

Recognizing the need for transformative changes in our thinking about economic competition and antitrust, a diverse array of scholars have started calling for new theoretical and practical approaches that will reinvigorate American antitrust enforcement and bring fair competition and ethical discipline to our economic marketplace.⁴² Professors Maurice Stucke, Avishalom Tor, and a multitude of others have persuasively argued that behavioral economics must be incorporated into current economic competition analyses along with important political, social, and moral values.⁴³ Professors Jeffrey Harrison, arguing that

Id. at 2571.

38. JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY 296 (2010) [hereinafter STIGLITZ II]. See also BOB HERBERT, LOSING OUR WAY: AN INTIMATE PORTRAIT OF A TROUBLED AMERICA 245 (2014) ("The great promise of America, which had always viewed itself as a vibrant, upwardly mobile, fair, and just society, has been undermined by the self-inflicted wounds of ... irresponsible and grotesquely exploitive economic behavior, and political dysfunction.").

39. Senator Elizabeth Warren, Keynote Remarks at New America's Open Markets Program Event: Reigniting Competition in the American Economy (June 29, 2016) (transcript available at http://washingtonmonthly.com/2016/06/30/elizabeth-warrens-consolidation-speech-could-change-the-election/).

40. First & Waller, *supra* note 7, at 2572.

41. Warren, *supra* note 39. "Strong Executive leadership could revive antitrust enforcement in this country and begin, once again, to fight back against dominant market power and overwhelming political power." *Id.*

42. Alan Devlin, Antitrust in an Era of Market Failure, 33 HARV. J. L. & PUB. POL'Y 557, 604 (2010). "The fundamental tenets of microeconomics that underlie modern U.S. antitrust jurisprudence remain unscathed." *Id.* Nevertheless, hope reigns supreme. *See, e.g.*, Thomas J. Horton, *The New United States Horizontal Merger Guidelines: Devolution, Evolution, or Counterrevolution*, 2 J. EUR. COMP. L. & PRACT. 158, 164 (2011) (arguing that the August 11, 2010, New Horizontal Merger Guidelines, released by the United States Department of Justice, through its Antitrust Division and the Federal Trade Commission, may "signal a brewing American counterrevolution against many of the currently ascendant Chicago School of Antitrust theories").

43. Stucke II, *supra* note 29, at 624 ("[N]ow is the time to reconsider antitrust's political, social, and moral concerns. In reconsidering the goals of competition as a means to secure political, economic, and individual freedoms, antitrust can be more responsive to citizens' concerns about promoting well-being."). *See, e.g.*, Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L. J. 1527, 1585-86 (2011) (arguing that behavioral economics will advance competition policy in understanding and effectively regulating anticompetitive economic behavior and conduct); Maurice E. Stucke, *Money, Is That What I Want?: Competition Policy & The Role of Behavioral Economics*, 50 SANTA CLARA L. REV. 893,

enforcement and can appear to provide seemingly neutral technocratic justifications for what is merely a normative preference for laissez-faire outcomes.

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"[t]he core notion of examining all policies, laws, and values from any relevant perspective is something that is too often lacking in legal scholarship," has urged a socio-economic approach to address American antitrust law's current "intellectual inertia."⁴⁴ Meanwhile, Professors First and Waller have advocated "for a rebalancing of antitrust's institutional approach, away from technocracy and toward democracy."⁴⁵

Other scholars and commentators have argued for a review of the values that underlie antitrust. For example, former Federal Trade Commission Office of Policy Planning Director and Professor Marina Lao has called for "an honest conversation on what values should matter and why they should matter in [antitrust] enforcement, and whose interests are important and how those interests should be reconciled if they conflict."⁴⁶ Paralleling this idea, Professors Thomas Wells and Johan Graafland have recommended the incorporation of "virtue ethics" into competition analyses.⁴⁷ Others believe that American antitrust regulators should push for "an antitrust system that protects consumers and small suppliers from exploitative behavior—behavior that takes their wealth without providing them with offsetting benefits."⁴⁸

In terms of recognizing the importance of morality and ethics to sound competition policy, a number of scholars have called for the application of Catholic moral rules to market competition analyses. For example, Professor Tihamér Tóth has argued that "[m]oral rules, according to the Vatican School of Thought, in the form of laws or other mandatory obligations, should also have a decisive influence on ... market players."⁴⁹ Professor Tóth believes that following the Vatican's moral rules will result in a "virtuous competition

^{895 (2010) (}arguing that "behavioral economics can assist competition authorities in recalibrating their economic and legal theories"). See generally Maurice E. Stucke, Behavioral Antitrust and Monopolization, 8 J. COMPETITION L. & ECON. 545 (2012); THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW (Eyal Zamir & Doron Teichman eds., 2014); Avishalom Tor, Understanding Behavioral Antitrust, 92 TEX. L. REV. 573 (2014); Max Huffman, Marrying Neo-Chicago with Behavioral Antitrust, 78 ANTITRUST L. J. 105 (2012); James C. Cooper & William E. Kovacic, Behavioral Economics and Its Meaning for Antitrust Decision Making, 8 J. L. ECON. & POL'Y 779 (2012).

^{44.} Harrison, *supra* note 26, at 409. Professor Harrison "uses socio-economics to both deconstruct the current economic foundation of antitrust policy and to suggest ways to improve that policy." *Id.* at 413.

^{45.} First & Waller, supra note 9, at 2572.

^{46.} Marina Lao, Ideology Matters in the Antitrust Debate, 79 ANTITRUST L. J. 649, 685 (2014).

^{47.} Thomas Wells & Johan Graafland, *Adam Smith's Bourgeois Virtues in Competition*, 22 BUS. ETHICS Q. 319, 319 (2012). "Virtue ethics operates at the ground level of human individuals' actions and motivations, analyzed in terms familiar to our ordinary intuitions about moral phenomena, which makes it particularly apt for the ethical analysis of how people think and act in business contexts." *Id.*

^{48.} John B. Kirkwood, *The Essence of Antitrust: Protecting Consumers and Small Suppliers from Anticompetitive Conduct*, 81 FORDHAM L. REV. 2425, 2469 (2013). *See also* Sandeep Vaheesan, *The Evolving Populisms of Antitrust*, 93 NEB. L. REV. 370, 374 (2014) ("Given the political power of large businesses and their general opposition to the antitrust laws, the antitrust community should establish consumers as a core constituency if the antitrust mission is to remain viable and thrive in the long run.").

^{49.} Tóth, *supra* note 26, at 585. "As Pope Benedict XVI observed: 'The economy needs ethics in order to function correctly—not any ethics whatsoever, but an ethics which is people-centered." *Id.* at 614 (citing POPE BENEDICT XVI, CARITAS IN VERITATE (CHARITY IN TRUTH) 93 (2009)) (emphasis omitted).

respecting the dignity of all market players, including competitors and consumers."50

In a similar vein, Professors Leo Clarke, Bruce Frohnen, and Edward C. Lyons have argued that in economic analyses of business competition, "Catholic Social Teaching provides workable principles that will guide the exercise of prudential judgment toward the furthering of the common good."⁵¹ In making their arguments, the professors aptly observe that "[t]he Church's social doctrine avails itself of contributions from all branches of knowledge, whatever their source, and has an important interdisciplinary dimension."⁵²

A. APPLYING EVOLUTIONARY BIOLOGY TO ANTITRUST ANALYSES

Following the calls for paradigmatic changes in our thinking about antitrust and the need to apply interdisciplinary learning, this author previously has argued that we need to join together the teachings and lessons from evolutionary biology and competition economics in a "consilience."⁵³ As "ideologies across the board are hardening," we need to pursue a consilience of the various branches of the biological and social sciences and economics to keep ourselves from being hardened to the corrosive injustices that exist in our world.⁵⁴ In the words of Harvard sociobiologist Edward O. Wilson: "Given that human action comprises events of physical causation, why should the social sciences and humanities be impervious to consilience with the natural sciences? And how can they fail to benefit from that alliance?"⁵⁵

^{50.} Tóth, *supra* note 26, at 616. "Fierce competition that endangers or ruins virtues should be declared unlawful. A kind of Machiavellian rivalry that ignores the impact of business action on others and pays no attention at all to solidarity will cause man to lead a miserable existence." *Id.*

^{51.} Leo L. Clarke et al., *The Practical Soul of Business Ethics: The Corporate Manager's Dilemma* and the Social Teaching of the Catholic Church, 29 SEATTLE U. L. REV. 139, 203-04 (2005). The professors buttress their argument by pointing to Section 2.01 of the American Law Institute's Principles of Corporate Governance, which states "[c]orporate officials are not less morally obliged than any other citizens to take ethical considerations into account and it would be unwise social policy to preclude them from doing so." *Id.* at 161 (quoting PRINCIPLES OF CORPORATE GOVERNANCE § 2:01 cmt (h) (AM. LAW INST. 1994)). Interestingly, China's 2008 Anti-Monopoly Law reveals a similar "commitment to honoring and following its traditional Confucian ethics and morals." Horton III, *supra* note 26, at 228.

^{52.} Clark et al., *supra* note 51, at 199 n.170. "In order better to incarnate the one truth about man in different and constantly changing social, economic, and political contexts, this teaching enters into dialogue with the various disciplines concerned with man. It assimilates what these disciplines have to offer." *Id.* (quoting COMPENDIUM OF THE SOCIAL DOCTRINE OF THE CHURCH ¶ 76 (2004)).

^{53.} Horton IV, *supra* note 27, at 477-84 (citing WILSON I, *supra* note 27, at 8-14) (describing consilience—the unity of knowledge derived from a synthesis of difference sciences—as an interdisciplinary tool that can increase diversity and depth of knowledge through an underlying cohesion).

^{54.} Hughes, *supra* note 27, at 564. *See also* Lewis Mumford, *The Corruption of Liberalism, in* INSURRECTIONS OF THE MIND: 100 YEARS OF POLITICS AND CULTURE IN AMERICA 95, 112 (Franklin Foer, ed. 2014) ("The world of political action must transcend that of the Economic Man: it must be as large as the fully developed human personality itself.").

^{55.} WILSON I, *supra* note 27, at 11. See also EDWARD O. WILSON, MEANING OF HUMAN EXISTENCE 53 (2014) [hereinafter WILSON II] (arguing that man's one most "vital possession" is not our science and technology, but the humanities).

Throughout history, "the translation of biological ideas to societal affairs has been met with distrust or resistance."⁵⁶ Evolutionary biologist Geerat Vermeij observes that "a substantial gulf remains between the social and the natural sciences, not necessarily because scholars don't wish to sail across it, but because they don't know quite how to do it."⁵⁷ This is especially the case in antitrust, a field in which economists have stubbornly defended their exalted positions while teetering for the last forty years "between strict reliance on neoclassical economics and a deeply conservative political philosophy characterized, at its most benign, by a distrust of government." ⁵⁸

On the other hand, "economists have by no means ignored biology. From Darwin's time onward, they have been drawn to evolutionary ideas, and have often emphasized parallels between capitalism and the evolutionary struggle for life."⁵⁹ Recently, the parallels between evolutionary biology and competition economics have drawn substantial scholarly attention. Over the last two decades, we have witnessed a number of impressive efforts to begin tying economics to the teachings and lessons of evolutionary biology.⁶⁰ "Today there is much enthusiasm for approaches that try to link morality to our evolutionary biology[.]"⁶¹ As a result, "more and more economists and lawyers have begun recognizing and understanding how important it is to integrate and incorporate the various sciences into antitrust analyses, and started working to develop meaningful analogies

57. GEERAT J. VERMEIJ, NATURE: AN ECONOMIC HISTORY 43 (2004).

58. THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION AND POLICY 5 (John E. Kwoka, Jr. & Lawrence J. White eds., 6th ed. 2014). Professors John Kwoka and Lawrence White aptly observe:

[M]odern antitrust is grounded in economics . . . the paramount importance of economics in the antitrust process is firmly established. Economics helps determine what cases the Justice Department and the Federal Trade Commission pursue. Economics frame the central issues for investigation and, based on data analysis and theory, evaluates the likely competitive effects of various practices by companies or structural changes in industries. Supporters and critics of policy all now debate them in terms of competition and efficiency, clearly acknowledging the central role that economics plays. And the courts themselves have embraced economic reasoning in their own analyses. It is safe to say that enforcement policy and court decisions will continue to be firmly grounded in economic analysis.

Id.

59. VERMEIJ, supra note 57, at 43.

60. See generally MICHAEL SHERMER, THE MORAL ARC: HOW SCIENCE AND REASON LEAD HUMANITY TOWARD TRUTH, JUSTICE, AND FREEDOM (2015) [hereinafter SHERMER I]; WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS (Douglas P. Fry ed., 2013); JOSHUA GREENE, MORAL TRIBES: EMOTION, REASON, AND THE GAP BETWEEN US AND THEM (2013); MARTIN A. NOWAK & ROGER HIGHFIELD, SUPER COOPERATORS: ALTRUISM, EVOLUTION, AND WHY WE NEED EACH OTHER TO SUCCEED (2011); MATT RIDLEY, THE RATIONAL OPTIMIST: HOW PROSPERITY EVOLVES (2010); Owen D. JONES et al., *Economics, Behavioral Biology, and Law*, 19 SUP. CT. ECON. REV. 103 (2011); LAW, ECONOMICS AND EVOLUTIONARY THEORY (Peer Zumbansen & Gralf-Peter Calliess eds., 2011); MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY (Paul J. Zak ed., 2008); MICHAEL SHERMER, THE MIND OF THE MARKET: COMPASSIONATE APES, COMPETITIVE HUMANS, AND OTHER TALES FROM EVOLUTIONARY ECONOMICS (2008).

61. Ruse, supra note 56, at 27.

^{56.} RAFE SAGARIN, LEARNING FROM THE OCTOPUS: HOW SECRETS FROM NATURE CAN HELP US FIGHT TERRORIST ATTACKS, NATURAL DISASTERS, AND DISEASE 29 (2012). Biologist Michael Ruse, for example, has observed that fifty years ago, "evolutionary ethics was the philosophical equivalent of a bad smell." *Id. See also* Michael Ruse, *Evolutionary Ethics Past and Present, in* EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 27, 27 (Philip Clayton & Jeffrey Schloss eds., 2004).

between biological and economic systems."⁶² Such laudable efforts should be encouraged and nourished.

III. THE BIOLOGICAL BASES OF COOPERATION AND RECIPROCITY

Much current research "in fields such as economics and evolutionary psychology attempts to explain all of human experience in terms of reproductive fitness and individual competition."⁶³ Following in this vein, neoclassical economics is based on the Hobbesian idea that human actions are primarily driven by rational, self-seeking profit-maximizing greed.⁶⁴ "Hobbes's most famous assertion, for example, is that the state of nature is characterized by a war of 'every one against every one,' and that consequently life is 'nasty, poor, brutish, and short."⁶⁵ Economists Paul Milgrom and John Roberts go so far as to argue that

Theories of the market that arose in the mercantile period have become the dominant paradigm for thinking about all human behavior. Research on human evolution now looks quite similar to research done in microeconomics, and there is exceptional synergy in fields like evolutionary psychology, where the underlying assumptions about rational choice, decision making, and sociality come from classical and neoclassical economics.

Id. at 196. *See also*, Stucke II, *supra* note 29, at 556 (discussing "the Chicago School's simplifying assumptions of self-correcting markets, composed of rational, self-interested market participants ").

64. See, e.g., Dale T. Miller, *The Norm of Self-Interest*, 54 AM. PSYCH. 1053, 1053 (1999) ("With the publication of *Leviathan*, Thomas Hobbes enthroned self-interest as the cardinal motive, a status it enjoys to this day.") (citations omitted); Jones, *supra* note 62, at 1145 ("As is commonly known, economists modeling choice under conditions of scarcity assume that people are rational maximizers.").

[E]conomics is the science of rational choice in a world—our world—in which resources are limited in relation to human wants. The task of economics, so defined, is to explore the implications of assuming that man is a rational maximizer of his ends in life, his satisfactions—what we shall call his 'self-interest'... The concept of man as a rational maximizer of his self-interest implies that people respond to incentives....

POSNER I, supra note 14, at 3-4.

In the history of philosophy many thinkers have been *psychological egoists*, that is, they have thought that the only thing we care for its own sake is *our own* well-being or welfare, and that we care about the well-being of any other being only instrumentally, as a means to promoting our own well-being.

INGMAR PERSSON & JULIAN SAVULESCU, UNFIT FOR THE FUTURE: THE NEED FOR MORAL ENHANCEMENT 30-31 (2014). See also Gary S. Becker, Nobel Lecture: The Economic Way of Looking at Human Behavior, 101 J. POL. ECON. 385, 385-86 (June 1993).

65. FUKUYAMA I, supra note 10, at 165.

Modern neoclassical economics is ... based on a model of rational utility-maximizing human behavior in which human choice is placed front and center. Human beings choose to do things, in other words, because they have a rational self-interest in doing so. In some versions of neoclassical thought, economists talk as if human action consisted of a series

^{62.} Horton I, *supra* note 6, at 839. "Economists have begun working towards a 'consilience' with evolutionary biology, and are absorbing the learnings from a diverse array of fields, including psychology, neuroscience, and sociology. Many economists increasingly are realizing that evolutionary biology has a great deal to offer in understanding the complexity of human institutions and economics." *Id. See also* Owen D. Jones, *Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology*, 95 NW. U. L. REV. 1141, 1143 (2001) (arguing that "the extraordinary growth of behavioral biology renders obsolete any law-relevant model of human behavior that fails to integrate life science perspectives with social science ones").

^{63.} Peter Benson, Altruism and Cooperation Among Humans: The Ethnographic Evidence, in ORIGINS OF ALTRUISM AND COOPERATION 195, 195 (Robert W. Sussman & C. Robert Cloninger, eds. 2011). Professor Benson adds:

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people are "fundamentally amoral, ignoring rules, breaking agreements, and employing guile, manipulation, and deception if they see personal gain in doing so." 66

Initially, neoclassical economics' assumptions of rationality and self-interest as the primary drivers of human action seem to make sense, as within reproductive groups, "selfish individuals beat altruistic individuals" in head-to-head competition.⁶⁷ Indeed, it is beyond dispute that "most people are . . . competitive, aggressive, and self-interested and they want to do the right thing for themselves and their family."⁶⁸ As Professor Stout notes, "[e]ven a moment's thought quickly reveals that the notion that people respond to incentives is neither novel nor controversial."⁶⁹

The neoclassical model of self-interested greed, however, quickly breaks down in nature because evolution consistently has favored groups of reciprocal cooperators over groups of selfish individuals.⁷⁰ As noted by sociobiologist Edward O. Wilson, "colonies of cheaters lose to colonies of cooperators."⁷¹ As a group, therefore, humans survived and thrived because they learned to cooperate by suppressing their own selfish interests and greed for the betterment of their groups.⁷² "Practices that suppressed the stress of direct conflicts inside the group

Id. at 149.

67. WILSON II, *supra* note 55, at 33. See also EDWARD O. WILSON, THE SOCIAL CONQUEST OF EARTH 162 (2012) [hereinafter WILSON III] ("In colonies composed of authentically cooperating individuals, as in human societies, and not just robotic extensions of the mother's genome, as in eusocial insects, selection among genetically diverse individual members promotes selfish behavior."); Walter Goldschmidt, *Notes Toward a Human Nature for the Third Millenium, in* ORIGINS OF ALTRUISM AND COOPERATION 271, 279 (Robert W. Sussman & C. Robert Cloninger eds., 2011) ("[W]e find that the dualism between good and evil, which forms part of the philosophy of most religions and the subject of much debate in Western philosophy, lies deep in our brains, the consequences of being human.").

68. SHERMER I, supra note 60, at 144.

69. STOUT I, *supra* note 9, at 31. Professor Stout adds "[o]f course most people react to punishments and rewards. If they didn't, no one would bother to use them." *Id.* Professor Stout further observes, however, that "[t]aken alone, the claim that 'people respond to incentives' borders on the banal." *Id.* She further attacks the neoconservative economic idea "that material incentives are the *only* things that matter—or, at least, the only things worth discussing." *Id.*

70. See WILSON II, supra note 55, at 33 ("Within groups selfish individuals beat altruistic individuals, but groups of altruists beat groups of selfish individuals. Or, risking oversimplification, individual selection promoted sin, while group selection promoted virtue.").

71. WILSON III, *supra* note 67, at 163. *See also* NOWAK & HIGHFIELD, *supra* note 60, at 94 (arguing that "while selection within groups favors selfishness, those groups with many altruists do better"); PERSSON & SAVULESCU, *supra* note 64, at 33 (explaining how a population group with reciprocal altruists "tends to do better than populations in which these motivational traits are rare or non-existent").

72. See, e.g., VERMEIJ, supra note 57, at 56 (observing that "the seeds of human morality were sown in primates living in a highly dangerous world in which cooperation paid huge dividends"); Daniel I. Rubenstein, Social Behavior and Sociobiology, in EVOLUTION: THE FIRST FOUR BILLION YEARS 237, 246 (Michael Ruse & Joseph Travis eds., 2009) (discussing how reciprocity played a major role in shaping our societies and arguing that "cooperation does best"); FUKUYAMA I, supra note 10, at 174 ("Cooperation and reciprocal altruism emerged initially because they conferred benefits on the individuals who possessed

of sequential rational choices in response to changing environmental conditions, in which internalized social rules of behavior play very little role.

^{66.} PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATION AND MANAGEMENT 42 (1992). See also STOUT I, supra note 9, at 32; Lawrence E. Mitchell, Understanding Norms, 49 U. TORONTO L. J. 177, 189 (1999) (arguing that "[t]he new norms jurisprudes' seem unanimous in accepting the basic economic premise that people act exclusively (or pretty much so) to maximize self-interest....").

(avoidance, toleration, negotiation, and so on) evolved, while individuals shared growing levels of reproductive (and cultural) success with other members of the same group."⁷³

Studies of our hunter-gatherer ancestors have uncovered social norms that included "a preference for individuals who were cooperative, generous, and inclined to share."⁷⁴ As explained by Professor Benson, "Solidarity is not the result of accumulated individual maximizing decisions. Rather, the very ability of individuals to flourish depends on social and environmental influences and nourishment from communities. This is a very different portrait of human nature than what the methodological individualism of classical liberal thought provides."⁷⁵

Multilevel evolutionary natural selection at both the individual and group levels has required us to balance our competitive and cooperative sides for maximum long-term fitness and adaptability.⁷⁶ Throughout our evolutionary history, "[a] premium was placed on personal relationships geared to both

75. Benson, *supra* note 63, at 197. *See* Ernst Mayr, *What Evolution Is*, *in* LIFE: THE LEADING EDGE OF EVOLUTIONARY BIOLOGY, GENETICS, ANTHROPOLOGY AND ENVIRONMENTAL SCIENCE 44, 56 (John Brockman ed., 2016).

[S]mall social groups that compete with each other, such as the groups of hunter-gatherers in our human ancestry, were, as groups, also targets of selection. Groups whose members actively cooperated with each other and showed much reciprocal helpfulness had a higher chance for survival than groups that did not benefit from such cooperation and altruism.

Id. See also ALBERT BORGMANN, REAL AMERICAN ETHICS: TAKING RESPONSIBILITY FOR OUR COUNTRY 73 (2006) (discussing how "a group of cooperative animals or humans does better than its selfish or merely kin-altruistic competitors," and how our "spirit of cooperation is not simply the product of a social contract, and that the circumstances of human flourishing cannot be left entirely to radical innovation and rational design"); Oliver R. Goodenough, *Values, Mechanism Design, and Fairness, in* MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY 228, 229, 251 (Paul J. Zak ed., 2008).

Focusing on selfishness and ignoring values may make life easier for economic theorists of a particular viewpoint, but it is highly unsatisfactory to most other people. We have been raised, at least most of us, to consider values of prime importance ... At both the transactional and systemic levels of analysis, a psychology of values is central to a free economic system. Free enterprise can indeed be viewed as values in action.

Id.

76. See, e.g., GREENE, supra note 60, at 20. Professor Greene asks:

Why should any creature be social? Why not just go it alone? The reason is that individuals can sometimes accomplish things together that they can't accomplish by themselves. This principle has guided the evolution of life on earth from the start [W]e humans, by cooperating with one another, have become the earth's dominant species.

them. The ability to work together in groups—social capital—constituted a competitive advantage for early humans and their ape progenitors, and so those qualities that sustained group cooperation spread.").

^{73.} Telmo Pievani, Born to Cooperate? Altruism as Exaptation and the Evolution of Human Sociality, in ORIGINS OF ALTRUISM AND COOPERATION 41, 55 (Robert W. Sussman & C. Robert Cloninger eds., 2011). "With social protections against exploitation by egotist free-riders, altruism became not only a possible social strategy but also an advantageous one, both inside the group and against other groups." *Id.*

^{74.} DALE PETERSON, THE MORAL LIVES OF ANIMALS 74 (2011). See also CHRISTOPHER BOEHM, MORAL ORIGINS: THE EVOLUTION OF VIRTUE, ALTRUISM, AND SHAME 17 (2012) ("[P]rehistorically humans began to make use of social control so intensively that individuals who were better at inhibiting their own antisocial tendencies, either through fear of punishment or through absorbing and identifying with their group's rules, gained superior fitness.").

competition and cooperation among the [group] members. The process was ceaselessly dynamic and demanding."⁷⁷ Consequently, as noted by Edward O. Wilson, "[e]ach of us is inherently conflicted."⁷⁸ Most of us try to be honest, fair, and cooperative, but we also can be competitive and self-interested.⁷⁹ Ultimately, therefore, nearly all human cooperation involves "at least some tension between self-interest and collective interest, between Me and Us."⁸⁰ As explained by Michael Shermer,

[T]here will be selection for those who are inclined to be altruistic to a point. With limited resources, a survival machine can't afford to help all other survival machines, so it must assess whom to help, whom to exploit, and whom to leave alone. . . . If you're too selfish, other survival machines will punish you; if you're too selfless, other survival machines will exploit you. Thus, developing positive

78. Id. at 27. Professor Wilson adds:

Id. Similarly, Michael Shermer observes:

Humans have a host of moral and immoral passions, including being selfless and selfish, cooperative and competitive, nice and nasty. It is natural and normal to try to increase our own happiness by whatever means available, even if it means being selfish, competitive, and nasty. Fortunately, evolution created both sets of passions, such that by nature we also seek to increase our own happiness by being selfless, cooperative, and nice.

79. See, e.g., SHERMER I, supra note 60, at 144. See also STEVEN PINKER, HOW THE MIND WORKS 51 (2009) [hereinafter PINKER II].

[T]he theory of a module-packed mind allows both for innate motives that lead to evil acts and for innate motives that can avert them. Not that this is a unique discovery of evolutionary psychology; all the major religions observe that mental life is often a struggle between desire and conscience.

Id.

80. GREENE, supra note 60, at 21. See Benson, supra note 63, at 199.

[O]ther motivations beside economic self-interest must be considered part of human nature, and human nature itself must be understood as dynamic and entwined with the developmental contexts of the social world. We should not forget that Adam Smith argued that just as important as self-interest is the human passion of sympathy, what he called 'fellow-feeling.'"

Id. See also WILSON II, *supra* note 55, at 33 ("So it came to pass that humans are forever conflicted by their prehistory of multilevel selection. They are suspended in unstable and constantly changing positions between the two extreme forces that created us.") Indeed, Adam Smith recognized a "nuanced view of human nature, portraying it as capable of both selfishness and generosity." BEINHOCKER, *supra* note 27, at 121. *See also* ROBERT C. SOLOMON, ETHICS AND EXCELLENCE: COOPERATION AND INTEGRITY IN BUSINESS 87 (1992) (discussing Adam Smith and observing that for Smith, "self-interest must always be kept in balance with benevolence and other moral sentiments"); Larry Arnhart, *Darwinian Conservatism, in* PHILOSOPHY AFTER DARWIN: CLASSIC AND CONTEMPORARY READINGS 349, 349-50 (Michael Ruse ed., 2009) ("In 1759, Smith began his book *The Theory of Moral Sentiments* by pointing to the natural human capacity for sympathy as the root of all morality. No matter how selfish human beings may be, Smith declared, there is a natural sentiment of sympathy").

^{77.} WILSON II, supra note 55, at 21.

Are human beings intrinsically good but corruptible by the forces of evil, or the reverse, innately sinful yet redeemable by the forces of good? Are we built to pledge our lives to a group, even to the risk of death, or the opposite, built to place ourselves and our families above all else? Scientific evidence, a good part of it accumulated during the past twenty years, suggests that we are both of these things simultaneously.

SHERMER I, supra note 60, at 181.

relationships—social bonds—with other survival machines is an adaptive strategy.⁸¹

The inherent tensions and conflicts we must deal with on a daily basis in a complex and ever-changing world have pushed human intelligence to its current high levels.⁸² Our evolutionary history "has bequeathed to us the capacity to transcend the limits of practical rationality laid down by natural selection, but it has also exposed us to conflicts of value."⁸³ Consequently, "[t]he same infant has the potential for being a pre-industrial hunter-gatherer or an astronaut, for being a genocidal slaughterer or a pacifist monk."⁸⁴

Our complex evolutionary heritage "in many ways undermine[s] many of the behavioral premises of economics."⁸⁵ Quite simply, neoclassical economics' attempts to establish purely mechanistic approaches to our lives and decision-making are doomed to failure, as they cannot account for the complexities of our environments or our lives.⁸⁶ We are not oracles or founts of knowledge freed from millions of years of evolutionary history relentlessly and rationally calculating what is in our self-interest while ignoring the interests or actions of those around us.⁸⁷

81. SHERMER I, supra note 60, at 40.

83. RONALD DE SOUSA, WHY THINK? 153 (2007). Professor de Sousa observes that our evolutionary history also "brings an extensive range of potential irrationalities, in both thought and behavior, and at both group and individual levels." *Id. See also* Goldschmidt, *supra* note 67, at 271, 276.

Human nature can only be understood if we recognize that this duality is *human nature* and that the struggle to be human always involves finding the balance between the selfish and the compassionate. It is no accident that most religions have focused on this duality, because ambivalence lies deep in the minds and hearts of people everywhere.

Id.

84. R. Brian Ferguson, *Born to Live: Challenging Killer Myths*, in ORIGINS OF ALTRUISM AND COOPERATION 249, 257 (Robert W. Sussman & C. Robert Cloninger, eds. 2011).

85. FUKUYAMA I, supra note 10, at 161-62.

86. See, e.g., KENNETH L. MOSSMAN, THE COMPLEXITY PARADOX: THE MORE ANSWERS WE FIND, THE MORE QUESTIONS WE HAVE 14 (2014) ("Attempts to establish a purely mechanistic interpretation of life have uniformly failed. A mechanistic approach is reductionist and cannot account for the complexity and emergent properties of living systems . . . [s]uch reductionism fails to account for the hierarchy of complexity in biological systems."). See also BEINHOCKER, supra note 27, at 52.

[M]odels that incorporate all these effects simultaneously and thus portray realistic people in a realistic environment have remained elusive. Equilibrium is a strict master, and while economists are able to relax one or two assumptions at a time, the limits of equilibrium mathematics mean that truly realistic models require a more radical break from the Traditional framework.

Id.

87. DE SOUSA, *supra* note 83, at 54 ("As for the presumption of rational calculation . . . there is much evidence against it."). *See also* Goldschmidt, *supra* note 67, at 272. Professor Goldschmidt argues the notions that humans are rational actors seeking only material rewards "are not merely wrong, they are harmful to the preservation of social order, for they sponsor social antagonism and are thus divisive." *Id.* Professor Goldschmidt believes "[i]t is time for anthropologists to take back the understanding of human nature. . . ." *Id.*

^{82.} WILSON II, *supra* note 55, at 34-35 ("The eternal conflict is not God's test of humanity. It is not a machination of Satan. It is just the way things worked out. The conflict might be the only way in the entire Universe that human-level intelligence and social organization can evolve."). Francis Fukuyama adds that "the capacity to create social capital through elaborate forms of social cooperation is perhaps the chief advantage that the human species possesses and explains why the current global human population . . . today so completely dominates the earthly natural environment." FUKUYAMA I, *supra* note 10, at 162.

To the contrary, "evolutionary biology's substantive conclusions are more supportive of *homo sociologus* than *homo economicus*."⁸⁸ As a result, rational economic markets' rhetoric cannot be allowed to serve as the sole or primary "rhetoric of human affairs, excluding other kinds of understanding."⁸⁹

A. MORALITY AS OUR EVOLUTIONARY SOCIAL GLUE

One of the most challenging interdisciplinary questions we face is understanding the social mechanisms underlying cooperation, altruism, and ethics.⁹⁰ The reciprocity, sociality, and cooperation we witness and participate in every day could not occur without reciprocal trust and our abilities to (mostly) constrain and keep our darker vicious, aggressive, and irrational sides in check.⁹¹ Recent interdisciplinary research confirms that most economic exchange hinges upon "character values such as honesty, trust, reliability, and fairness."⁹² If that

90. See, e.g., Darren P. Croft et al., Assortment in Social Networks and the Evolution of Cooperation, in ANIMAL SOCIAL NETWORKS 13, 13 (Jens Krause et al. eds., 2015) ("One of the longest standing interdisciplinary challenges lies in unravelling the mechanisms underpinning the evolution of cooperation.").

91. See, e.g., Paul Roscoe, Social Signaling, Conflict Management, and the Construction of Peace, in WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 475, 477 (Douglas P. Fry ed., 2013) (discussing how "morality and 'legal' codes of behavior enjoin nonviolence, the former bolstered by conscience and both sanctioned by gossip, moots, and ostracism"); Joseph Heinrich et al., Markets, Religion, Community Size, and the Evolution of Fairness and Punishment, 327 SCI. 1480, 1480 (2010) ("Much research suggests that norms arise because humans use evolved learning mechanisms to calibrate their behavior, motivations, and beliefs to variable circumstances."); WILSON I, supra note 27, at 325.

Human social existence, unlike animal sociality, is based on the genetic propensity to form long-term contracts that evolve by culture into moral precepts and law . . . [that] evolved over tens or hundreds of millennia because they conferred upon the genes prescribing them survival and the opportunity to be represented in future generations.

WILSON I, *supra* note 27, at 325. *See also* Horton IV, *supra* note 27, at 509 ("Given humans' innate biological propensities for potential viciousness, aggression, and irrationality, we must abide by rules that help keep our darker sides in check.") (citations omitted).

92. Paul J. Zak, *Introduction, in* MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY xvii (Paul J. Zak ed., 2008). Ironically, Judge Frank Easterbrook, one of the primary drivers in the amoralization of aggressive predatory conduct, has appropriately observed:

Cooperation is the basis of productivity. It is necessary for people to cooperate in some respects before they may compete in others, and cooperation facilitates efficient production . . . The war of all against all is not a good model for any economy. Antitrust law is designed to ensure an appropriate blend of cooperation and competition, not to require all economic actors to compete full tilt at every moment.

Polk Bros. v. Forest City Entes., Inc., 776 F.2d 185, 188 (7th Cir. 1985) (citing Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762 (1984)).

^{88.} FUKUYAMA I, *supra* note 10, at 160. *See also* FRANCIS FUKUYAMA, POLITICAL ORDER AND POLITICAL DECAY: FROM THE INDUSTRIAL REVOLUTION TO THE GLOBALIZATION OF DEMOCRACY 463 (2014) [hereinafter FUKUYAMA II] (discussing the "cognitive rigidity" of contemporary neoclassical economics "in the face of contradictory evidence").

^{89.} MARGARET JANE RADIN, CONTESTED COMMODITIES 122 (1996). See also Augustín Fuentes, Cooperation, Conflict, and Niche Construction in the Genus Homo, in WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 78, 86 (Douglas P. Fry ed., 2013) (discussing studies that "demonstrate that the central axiom of *Homo Economicus* is refuted; they found more variation in behavior across societies than had previously been reported. In fact, selfishness as a primary pattern was not found in any of the societies studied. Rather, patterns of cooperation and social reciprocity were dominant").

is the case, how do we develop and exercise such laudable complex social skills while constraining our darker impulses? Nature's answer is through human morality and ethics.⁹³

At their simplest, morality includes those "principles concerning the distinction between right and wrong or good and bad behavior,"⁹⁴ while ethics are the "moral principles that govern a person's or group's behavior."⁹⁵ Morality and ethics have evolved as the social glue that help us to participate in society while controlling our violent and dangerous sides.⁹⁶ Indeed, "[m]oralistic 'social control' serves primarily as a means by which human groups try to protect themselves from social deviants."⁹⁷

"Morality is a real, biologically-based phenomenon, and the desire for moral justice is as concrete an emotion as love."⁹⁸ Our brains include "a moral toolkit" that helps us cooperate and reciprocate while controlling our aggressive impulses.⁹⁹ As noted by psychologist Joshua Greene: "Cooperation is why we're

97. Christopher Boehm, *The Biocultural Evolution of Conflict Resolution Between Groups, in* WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 315, 315 (Douglas P. Fry ed., 2013). Dale Peterson observes that "[t]he potential for conflict is always there, and virtually every single law of moral rule deals directly with the problems and potential problems of self versus others." PETERSON, *supra* note 74, at 48. *See also* Horton IV, *supra* note 27, at 511 (arguing that "morality provides the communal glue that holds our societies together"). Anthropologists Donna Hart and Robert W. Sussman argue that "noncooperation appear[s] to be a function of psychopathy." Donna Hart & Robert W. Sussman, *The Influence of Predation on Primate and Early Human Evolution: Impetus for Cooperation, in* ORIGINS OF ALTRUISM AND COOPERATION 19, 31 (Robert W. Sussman & C. Robert Cloninger eds., 2011).

98. SHERMER I, *supra* note 60, at 362. *See also* PERSSON & SAVULESCU, *supra* note 64, at 110-11 (discussing studies showing "that the sense of justice has a biological basis" and that "the human sense of fairness has a genetic basis").

99. Hart & Sussman, *supra* note 97, at 30 (discussing studies showing "ample evidence of a moral toolkit in the human brain, a biological mechanism for acquisition of moral rules"). See also MARC

^{93.} See, e.g., VERMEIJ, supra note 57, at 55-57 ("Besides the capacity for intelligent design, humans have culturally evolved an elaborate system of ethics and morality, a code of individual and collective conduct"); STEVEN PINKER, THE BLANK SLATE: THE MODERN DENIAL OF HUMAN NATURE 193 (2002) ("Whatever its ontological status may be, a moral sense is part of the standard equipment of the human mind.").

^{94.} NEW OXFORD AMER. DICT. 1101 (2d ed. 2005). The Dictionary additionally defines "morals" as "a person's standards of behavior or beliefs concerning what is and is not acceptable for them to do" *Id. See also* STOUT I, *supra* note 9, at 15 ("[Morality means,] in an ecumenical sense[,] to refer to acts that reflect concern for the rights and welfare of those around us. Used this way, the word 'morality' embodies notions of honesty and consideration, of 'doing the right thing' rather than simply pursuing one's own material interests[.]").

^{95.} NEW OXFORD AMER. DICT., supra note 94, at 578.

^{96.} See, e.g., EDWARD O. WILSON, THE FUTURE OF LIFE 151 (2002) ("Moral reasoning is not a cultural artifact invented for convenience. It is and always has been the vital glue of society, the means by which transactions are made and honored to ensure survival."); FUKUYAMA I, *supra* note 10, at 6 ("[H]uman beings are *by nature* social creatures, whose most basic drives and instincts lead them to create moral rules that bind themselves together into communities."); Joám Evans Pim, *Man the Singer: Song Duels as an Aggression Restraint Mechanism for Nonkilling Conflict Management, in* WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 514, 531 (Douglas P. Fry ed., 2013) ("To sum up, the evidence brought forward suggests the possibility that evolutionary selection has favored mechanisms for rule-based ritualized restraint that allows competition to openly take place without the threat of lethal physical aggression."); GREENE, *supra* note 60, at 195 (arguing that "our moral machinery evolved to strike a biologically advantageous balance between selfishness (Me) and within-group cooperation (Us)").

here, and yet, at the same time, maintaining cooperation is our greatest challenge. Morality is the human brain's answer to this challenge."¹⁰⁰

Critics will argue that morality is an amorphous concept, especially when one considers humans' deep capacities for truly immoral and evil behavior.¹⁰¹ Granted, "[a]s it is with most human action, moral behavior is incredibly complex and includes an array of causal factors"¹⁰² Morality is universal throughout the human world,¹⁰³ and ingrained in us through an evolutionary heritage.¹⁰⁴ Professor Lynn Stout observes that,

> Universal 'moral' rules do exist, and these rules have two interesting things in common: First, they are shared in some form by every orderly society. In his book Human Universals, anthropologist Donald Brown describes hundreds of 'universals' of human behavior and thought that have been identified by ethnographers in every culture Second, universal moral rules generally have to do with helping, or at least not harming, other people in one's 'in-group.'¹⁰⁵

Morals are no exception to the functional character of biological behavior of which they are a part. To know this fact is more important ... than to know law. What judges need is not so much a knowledge of law as a knowledge of philosophy, and by philosophy in this connection, I mean a knowledge of the principles, logical and ethical, upon which morals are based, an awareness of the proper sort of methodology in practical reasoning.

Homer Blosser Reed, The Morals of Monopoly and Competition, 26 INT'L J. ETHICS 258, 280 (1916). More recently New York Times columnist David Brooks wrote that "[m]any scientists believe that the ability to unconsciously share another's pain is a building block of empathy, and through that emotion, morality." DAVID BROOKS, THE SOCIAL ANIMAL: HIDDEN SOURCES OF LOVE, CHARACTER, AND ACHIEVEMENT 41 (2011).

See, e.g., Posner II, supra note 23, at 166. But see WILLIAM D. CASEBEER, NATURAL ETHICAL 101. FACTS: EVOLUTION, CONNECTIONISM, AND MORAL COGNITION 155 (2003) (observing that "demands for absolute and timeless moral dictates can mislead us about the nature of moral inquiry").

SHERMER I, supra note 60, at 302. 102.

103. See, e.g., SHERMER I, supra note 60, at 14. Shermer argues,

> Morality is universal. We are all born with a moral sense, with moral emotions that guide us in our interactions with other people and that are influenced by local culture, customs, and upbringing. Nature endowed us with the capacity to feel guilt for the violation of promises and social obligations, for example, but nurture can tweak the guilt dial up or down. Thus morality is real, discoverable, 'out there' in nature, and 'in here' as part of our human nature.

Id. See also HARRIS, supra note 16, at 60 ("The moment one begins thinking about morality in terms of well-being, it becomes remarkably easy to discern a moral hierarchy across human societies.").

104. See, e.g., PETERSON, supra note 74, at 74 (discussing anthropological studies comparing different bands of hunter-gatherers).

[T]he social norms in all ten societies include a preference for individuals who were cooperative, generous, and inclined to share. All ten societies express[ed] a normative disapproval for murder, theft, adultery, sorcery, and disregard of taboos, while most of them disapprove[d] of bullying, violence, incest, cheating, lying, or dishonoring a female.

Id.

STOUT I, supra note 9, at 56-57, (citing DONALD E. BROWN, HUMAN UNIVERSALS 130-41 105. (1991)). See also PERSSON & SAVULESCU, supra note 64, at 102 ("[S]ocieties have always taken advantage of [the] fact of human malleability by imprinting upon their subjects moral norms conducive to the survival and prosperity of these societies[.]").

BEKOFF & JESSICA PIERCE, WILD JUSTICE: THE MORAL LIVES OF ANIMALS 145 (2009) (observing that "research suggests that a good deal of human morality is conditioned and instinctive").

GREENE, supra note 60, at 59. Interestingly, more than one hundred years ago, Homer Blosser 100. Reed argued:

Dale Peterson adds, "[o]nce we begin looking at morality in behavior, we discover universality. Beneath a relatively minor patina of cultural variation, we see that the morality of humans is fundamentally the same in every culture."¹⁰⁶ Indeed, Charles Darwin posited a universal sympathy for humanity, as an extension of the social emotions developed in group living.¹⁰⁷

Human evolutionary success has gone hand-in-hand with morality and ethics.¹⁰⁸ According to biologist Michael Ruse, "[g]iven a shared evolution, we humans have a shared insight—or rather, sense of insight—into the norms of right and wrong."¹⁰⁹ In the words of Edward O. Wilson: "[W]e are learning the fundamental principle that ethics is everything."¹¹⁰

Religion around the world, in its diverse forms, has provided critical social glue both generating and enhancing social cohesion and reciprocity.¹¹¹ "All

107. See, e.g., Larry Arnhart, *The Darwinian Moral Sense and Biblical Religion, in* EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 204, 217 (Philip Clayton & Jeffrey Schloss eds., 2004). "[T]his extension of sympathy to embrace all of humanity is strong enough to support the Golden Rule as the foundation of morality...." *Id. See also* Craig A. Boyd, *Thomistic Natural Law and the Limits of Evolutionary Psychology, in* EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 221, 235 (Philip Clayton & Jeffrey Schloss eds., 2004) ("We may say that sociobiology is compatible with some version of natural law morality.").

108. See, e.g. Philip Clayton, Biology and Purpose: Altruism, Morality, and Human Nature in Evolutionary Perspective, in EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 318, 335-36 (Philip Clayton & Jeffrey Schloss eds., 2004) ("Developments in biological theory such as evolutionary psychology have shown that evolution and ethics are not unrelated. . . . [T]he evolution-ethics axis does not exclude religious belief and religious explanations. In the end, the religious level nicely supplements the biological contribution in comprehending human morality."); René van Woudenberg, Darwinian and Teleological Explanations: Are They Incompatible?, in EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 185 (Philip Clayton & Jeffrey Schloss eds., 2004) (concluding that actions can be both morally good and fitness enhancing); Michael J. Chapman, Hominid Failings: An Evolutionary Basis for Sin in Individuals and Corporations, in EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 101, 112 (Philip Clayton & Jeffrey Schloss eds., 2004). Chapman observes:

Multilevel selection has driven corporations—and each of us, at one time or another—into greed, gluttony, or cheating. Multilevel selection is also the basis for primate groupishness... which by their nature breed vanity, envy, sloth, and wrath. Humility, clear-eyed reflection, and self-discipline are ways for each one of us to address our own human failings.... It will take multilevel and multidisciplinary consciousness-raising to release our hyperrational, increasingly global society from these ancient and terrible evolutionary traps.

Id. at 112.

109. Ruse, *supra* note 56, at 47. "Some people may disagree with these norms, but as children make mistakes in arithmetic, the disagreement is a function of inadequate training and does not point to an irresolvable subjectivity. Ethics works and that is no small thing." *Id.*

110. WILSON I, supra note 27, at 325.

111. See, e.g., DAVID P. BARASH, HOMO MYSTERIOUS: EVOLUTIONARY PUZZLES OF HUMAN NATURE 239-40 (2012) (discussing how religion provides "social glue, generating enhanced cohesion—

^{106.} PETERSON, *supra* note 74, at 76. See also Holmes Rolston III, *The Good Samaritan and His Genes, in* EVOLUTION AND ETHICS: HUMAN MORALITY IN BIOLOGICAL & RELIGIOUS PERSPECTIVE 238, 251-52 (Philip Clayton & Jeffrey Schloss eds., 2004) (discussing the "appearance of universalist religion," and arguing that "Do to others as you would have them do to you' helps us to cope because here is insight not just for the tribe, but for the world; indeed, if there are moral agents with values at stake in other worlds, this could be universal truth."); PINKER I, *supra* note 19, at 624 (discussing findings that "moral norms around the world cluster around a small number of themes"); NOWAK & HIGHFIELD, *supra* note 60, at 273 (observing that "diverse faiths are united by the reciprocity of the Golden Rule"); ATRAN, SCOTT, IN GODS WE TRUST: THE EVOLUTIONARY LANDSCAPE OF RELIGION 279-80 (2002) (arguing that moral sentiments constitute—by virtue of evolution—ineluctable elements of the human condition).

religions require their members to sacrifice immediate self-interest in displays of moral commitment to a community way of life whose rightness and truth is Godgiven."¹¹² Some proponents of humans as rational utility-maximizers have argued that religion is consistent with neoclassical economic theories.¹¹³ These proponents are correct in part, as "adding divine force to injunctions against . . . antisocial behavior, such as murder, adultery, and theft, is . . . a way to solve some of the game-theoretic problems of living in a social group."¹¹⁴ They miss the key point, however, that religion is first and foremost a way that humans bind themselves to one another through adherence to religious ethical and moral precepts.¹¹⁵ Ethical and moral values that help bind us together become "core values that drive everyday behavior."¹¹⁶

112. ATRAN, supra note 106 at 268.

To ensure moral authority transcends convenient self-interest, everyone concerned whether King or beggar—must truly believe that the Gods are ever vigilant, even when one knows that no other person could possibly know what is going on. This is another way the conceptual ridge of our evolutionary landscape connects with the ridge of social interaction, in particular with the evolutionary imperative to cooperate in order to compete."

Id.

113. See generally RODNEY STARK & ROGER FINKE, ACTS OF FAITH: EXPLAINING THE HUMAN SIDE OF RELIGION (2000); ROBERT WRIGHT, THE EVOLUTION OF GOD (2009). But see GREENE, supra note 60, at 301 ("Rationalization is the great enemy of moral progress, and thus of deep pragmatism.").

114. BRIAN CHRISTIAN & TOM GRIFFITHS, ALGORITHMS TO LIVE BY: THE COMPUTER SCIENCE OF HUMAN DECISIONS 242 (2016). The authors further observe: "God happens to be even better than government in this respect, since omniscience and omnipotence provide a particularly strong guarantee that taking bad actions will have dire consequences. It turns out there's no Godfather quite like God the Father." *Id.*

115. See, e.g., JAMES Q. WILSON, ON CHARACTER: ESSAYS BY JAMES Q. WILSON 192-93 (expanded ed., The AEI Press 1995) (1991) (arguing that "people everywhere have a natural moral sense that is not entirely the product of utility or convention," and that our moral sentiments "constitute the fundamental glue of society, a glue with adhesive power that is imperfect but sufficient to explain social order to some degree"); ATRAN, *supra* note 106, at 278-79 (quoting EMILE DURKHEIM, THE DIVISION OF LABOR IN SOCIETY 200 (2d prtg., The Free Press 1965) (1933)).

Religion passionately rouses hearts and minds to break out of [the] viciously rational cycle of self-interest and to adopt group interests that may benefit individuals in the long run ... More generally religion underpins the 'organic solidarity' that makes social life more than simply a contract among calculating individuals.

Id.

116. ELIZABETH A. MINTON & LYNN R. KAHLE, BELIEF SYSTEMS, RELIGION, AND BEHAVIORAL ECONOMICS: MARKETING IN MULTICULTURAL ENVIRONMENTS 9 (2014). "Because many religious scriptures dictate ethical behavior (e.g. do not steal, do unto others as you want them to do unto you), much of ethics is rooted in religion." *Id.* at 60. See also C. Robert Cloninger & Sita Kedia, *The Phylogenesis of Human Personality: Identifying the Precursors of Cooperation, Altruism, and Well-Being, in ORIGINS* OF ALTRUISM AND COOPERATION 63, 83 (Robert W. Sussman & C. Robert Cloninger eds., 2011) (citing C. Robert Cloninger & Dragan M. Svrakic, *Integrative Psychobiological Approach to Psychiatric Assessment and Treatment*, 60 PSYCHIATRY 120-41 (1997)) (arguing that "cultural norm-favoring is a strong component of social cooperation in modern humans").

which includes greater staying power for the group as a whole—simply because of its more densely structured rules and social patterning, which typically include songs, chants, ceremonial events, prohibitions and requirements, and so forth").

B. FAIRNESS AND RECIPROCITY AS VITAL INGREDIENTS OF MORALITY AND ETHICS' SOCIAL GLUE

More and more in recent years, we have seen that the long-term sustainability of our economic system "depends on the moral underpinnings of the people and institutions" driving our markets.¹¹⁷ Fairness and reciprocity are vital components of the ethics and morality that keep our competitive and aggressive sides in check.¹¹⁸ Zoologist Matt Ridley cogently observes that "[f]airness matters."¹¹⁹

Biological, psychological, and economic research consistently has shown how important fundamental fairness is to successful long-term economic exchange.¹²⁰ Unlike poorly defined and understood economic ideas such as "consumer welfare" and "allocative efficiency,"¹²¹ the idea of fundamental

^{117.} MICHAEL A. SANTORO & RONALD J. STRAUSS, WALL STREET VALUES: BUSINESS ETHICS AND THE GLOBAL FINANCIAL CRISIS 19 (2013). See also ALAN S. BLINDER, AFTER THE MUSIC STOPPED: THE FINANCIAL CRISIS, THE RESPONSE, AND THE WORK AHEAD 431 (2013) (arguing that "moral hazard is now an undesirable feature of the financial landscape"); HERBERT, supra note 38, at 249 (arguing that "[a] greed-based philosophy has driven America into a monumental ditch"); DONALD L. BARTLETT & JAMES B. STEELE, THE BETRAYAL OF THE AMERICAN DREAM 245 (2012) ("The [American] economic system that once attempted to help the majority of its citizens has become one that favors the few."); STIGLITZ II, supra note 38, at 289 (arguing that "[i]n a world of rugged individualism, there is little need for community and no need for trust"); JOSEPH E. STIGLITZ, THE PRICE OF INEQUALITY: HOW TODAY'S DIVIDED SOCIETY ENDANGERS OUR FUTURE xvii (2012) (describing recent market failures as a result of "moral deprivation").

^{118.} See, e.g., Horton I, supra note 6, at 841 ("Our innate senses of justice and fairness evolved as part of our ability to thrive and succeed in social groups."); Horton IV, supra note 27, at 514-15 (quoting MICHAEL S. GAZZANIGA, THE ETHICAL BRAIN 171 (2005)) ("If ethics and morality provide 'the glue that keeps our species, over the long haul, from destroying itself,' then fairness and reciprocity are the vital ingredients of that evolutionary glue.").

^{119.} MATT RIDLEY, THE ORIGINS OF VIRTUE: HUMAN INSTINCTS AND THE EVOLUTION OF COOPERATION 136 (1996). Ridley adds that "[p]eople care about fairness as well as self-interest.... The more you behave in selfless and generous ways the more you can reap the benefits of cooperative endeavour from society." *Id.* at 140-41. *See also* STEPHEN S. HALL, WISDOM: FROM PHILOSOPHY TO NEUROSCIENCE 154 (2010) ("[A] sense of fairness is central to many of the decisions we make, including (but not limited to) economic behavior.").

Indeed, a strong sense of fairness is part of our evolutionary heritage. *See, e.g.*, Sarah F. Brosnan, *Fairness and Other-Regarding Preferences in Nonhuman Primates, in* MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY 77, 99 (Paul J. Zak ed., 2008) ("[F]airness counts. Both human and nonhuman primates dislike being treated inequitably, whether as a result of unequal distribution or an unfair partner.").

^{120.} See Zak, supra note 92, at xi, xvii (discussing interdisciplinary research "reveal[ing] that most economic exchange, whether with strangers or known individuals, relies on character values such as honesty, trust, reliability, and fairness"); Brosnan, supra note 119, at 79 (citations omitted) ("Few would disagree that humans have a sense of fairness. We respond badly when treated unfairly; we give more than the minimum required in experimental games . . . and we frequently punish in situations in which another individual behaves non-cooperatively."); GEORGE A. AKERLOFF & ROBERT J. SHILLER, ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM 20-23 (2009) (discussing studies that "demonstrate that considerations of fairness can override rational economic motivation").

^{121.} See, e.g., Thomas J. Horton, Efficiencies and Antitrust Reconsidered: An Evolutionary Perspective, 60 ANTITRUST BULL. 168, 170-71 (2015) [hereinafter Horton V] (discussing the "uncertainty and confusion" surrounding various economic terms such as "allocative efficiencies"); Stucke II, supra note 29, at 571 ("No [c]onsensus [e]xists on [w]hat [c]onsumer [w]elfare [a]ctually [m]eans[.]"); HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE 85 (4th ed. 2011) (discussing the ambiguity of the term "consumer welfare"); Joseph F. Brodley, The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress, 62 N.Y. U. L. REV. 1020, 1032

fairness is ingrained in each of us through our evolutionary heritage, and it is "a felt experience."¹²²

Our sense of fairness includes both the desire for level competitive playing fields and a strong connection between efforts and rewards.¹²³ Indeed, libertarian economist Milton Friedman recognized that corporations should "stay[] within the rules of the game."¹²⁴ This is not surprising, as the idea of competitive fairness is central to our democratic values.¹²⁵ Since fairness is so critical, "it should be an obsession with policymakers," including our antitrust regulators and enforcers.¹²⁶

123. See, e.g., FRANS DE WAAL, THE AGE OF EMPATHY: NATURE'S LESSONS FOR A KINDER SOCIETY 196-200 (2009); Thomas Wells & Johan Graafland, Adam Smith's Bourgeois Virtues in Competition, 22 BUS. ETHICS Q. 319, 323-24 (2012) (discussing Adam Smith's conditions for fair competition, including a level playing field for the competitors and that the rules of the game are fairly enforced to prevent or at least reduce cheating by competitors); Elbert L. Robertson, A Corrective Justice Theory of Antitrust Regulation, 49 CATH. U. L. REV. 741, 751 (2000) ("The narrow and hegemonic focus on 'efficiency' as touted in conventional 'Chicago School' doctrine, while paradigmatically dominant, fails to value or secure necessary conditions of social morality and procedural fairness required for any competitive market to function.").

124. MILTON FRIEDMAN, CAPITALISM AND FREEDOM 133 (1962). See also Clarke et al., supra note 51, at 150 (discussing Friedman's belief "that corporations must conform to commonly accepted ethical practices and 'rules of the game' beyond mere profit maximization").

125. See, e.g., 21 CONG. REC. 3151-52 (1890) (quoting statements of Senator Hoar recognizing the importance of "fair competition"); Stucke II, *supra* note 29, at 608 (discussing the importance of ethics, morals, and fairness to the functioning of our market economy); GEORGE LAKOFF, MORAL POLITICS: HOW LIBERALS AND CONSERVATIVES THINK 323 (2d ed. 2002) ("American democratic institutions are based on certain moral schemes, in particular, Moral Fairness. . . ."); Daniel Yankelovich, *How Changes in the Economy are Reshaping American Values, in* VALUES AND PUBLIC POLICY 16, 23 (Henry J. Aaron et al. eds., 1994) (discussing fairness and equality of opportunity as unchanged American values); MICHAEL J. SANDEL, JUSTICE: WHAT'S THE RIGHT THING TO DO? 7 (2009) [hereinafter SANDEL II] (discussing the outrage and anger people feel when they believe "that people are getting things they don't deserve. . . is anger at injustice").

126. ALAN S. BLINDER, AFTER THE MUSIC STOPPED: THE FINANCIAL CRISIS, THE RESPONSE, AND THE WORK AHEAD 442 (2013). "Because fairness normally matters more than anything else, it should be an obsession with policymakers." *Id. See also* Horton I, *supra* note 6, at 863 ("For antitrust to ultimately be meaningful and effective, we must return to a system grounded in moral norms of fairness, and stop trying to make decisions in a moral vacuum.").

^{(1987) (}observing that consumer welfare "is the most abused term in modern antitrust analysis"); Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 J. COMPETITION L. & ECON. 133, 134 (2010) (observing that "academic confusion and thoughtless judicial borrowing led to the rise of a label [consumer welfare] that 30 years later has no clear meaning").

^{122.} HARRIS, *supra* note 16, at 79 ("Fairness is not merely an abstract principle—it is a felt experience. We all know this from inside, of course, but neuroimaging has also shown that fairness drives reward-related activity in the brain, while accepting unfair proposals requires the regulation of negative emotion."). See also SAGARIN, supra note 56, at 183-84 ("There is experimental evidence that centers of the brain associated with rewards get active when humans enforce behavior that increases group cohesion, and studies on twins reveal that at least some of our altruistic disposition toward promoting fairness is genetically inherited."); SHERMER I, supra note 60, at 44 (discussing how "our natural endowments" include both "a moral sense" and "a rudimentary sense of fairness—a tendency to favor equal divisions of resources"); PETER CORNING, THE FAIR SOCIETY: THE SCIENCE OF HUMAN NATURE AND THE PURSUIT OF SOCIAL JUSTICE 196 (2011) ("[M]ost of us do have a bias toward cooperation and a readiness to reciprocate—a sense of fairness[.]").

IV. SHOULD WE CONTINUE TREATING EXPLOITATIVE AND EXCLUSIONARY CONDUCT BY MONOPOLISTS AND DOMINANT FIRMS AS AMORAL PROCOMPETITIVE BEHAVIOR?

By classifying economic competition as amoral, neoclassical economists and their many regulatory judicial disciples have, in the overwhelming majority of cases, essentially neutralized Section 2 of the Sherman Act.¹²⁷ As a result, procuring a Section 2 plaintiff's jury verdict and "seeing it successfully through the appeals process is akin to getting 'a camel to go through the eye of a needle."¹²⁸ For example, under a line of three key Supreme Court cases, "it has become virtually impossible for a plaintiff to win a [Section 2] predatory pricing case."¹²⁹

One of the major problems supporters of more robust Section 2 enforcement face is that rapacious, exploitative, and exclusionary dominant firm conduct against economic competitors has been successfully characterized as alleged "predatory" conduct. The term predatory, however, in connection with horizontal economic competitors, is a gross misapplication and distortion of the term as used in biology and ecology. In nature, predator-prey relationships are natural amoral parts of every vertical food chain. As explained by Edward O. Wilson,

If you track who eats whom in different parts of the web, you will usually find the number of links in the chain to be five or fewer. For example: in a marshy glade of the north central states, reedgrass is eaten by short-horned grasshoppers, the grasshoppers are eaten by orb-weaver spiders, the spiders are eaten by palm warblers, and the warblers are eaten by marsh hawks. Because the grass eats no one and the hawks are eaten *by* no one (except by bacteria and other decomposers when they die), these two species form the ends of the chain.¹³⁰

A biological ecosystem is essentially a deterministic food web, "a connection of species that prey on other species [vertical interspecies predation]."¹³¹ Thus, a

130. EDWARD O. WILSON, THE DIVERSITY OF LIFE 180 (1992).

131. Id. at 180. "Known affectionately as 'the circle of life,' the system is a limited chain of deterministic [amoral] consumption where the very top predators return back to the soil and water in the

^{127. 15} U.S.C. § 2 (1890).

^{128.} Horton II, supra note 7, at 648, (quoting Mark 10:25 (King James)). See also William E. Kovacic, The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix, 2007 COLUM. BUS. L. REV. 1, 73-80.

^{129.} Matsushita Elec. Indus. Co., Ltd. V. Zenith Radio Corp., 475 U.S. 574, 589 (1986). See also Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 225 (1993); Weyerhaeuser Co. v. Ross-Simmons Hardwood Co., 549 U.S. 312, 318-20 (2007); Horton I, *supra* note 6, at 853; GAVIL, ET AL, *supra* note 4, at 672 ("Together *Matsushita* and *Brooke Group* have proven to be formidable hurdles to the successful prosecution of predatory pricing cases. Since *Matsushita* was decided in 1986, no plaintiff, including the Department of Justice, has succeeded in satisfying the two prong 'below cost + recoupment' standard."); *id.* at 678 (arguing that "after *Brooke Group*, it is easier to make the case that the legal standard for proof of monopolization through price predation has chilled predatory complaints than to make the case that the law chills aggressive price-cutting."); Andrew I. Gavil, *Exclusionary Distribution Strategies by Dominant Firms: Striking a Better Balance*, 72 ANTITRUST L. J. 3 (2004); Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253 (2003).

"predator" in natural ecosystems is an animal that survives by eating other species in a vertical chain—it is not an animal that eliminates intra-group or intra-species competition by preying horizontally on members of its own species.¹³² As observed by Douglas Fry and Anna Szala, "predation and intraspecific aggression are distinct behavioral systems and involve different neurophysiology."¹³³ An animal (including humans) that murders and feeds on the flesh of members of its own species is better characterized as a murderer and a "cannibal."¹³⁴

Surely, no rational economist would characterize modern human murder and cannibalism as amoral.¹³⁵ Yet, evaluating rapacious, exploitative, and exclusionary conduct by dominant firms as potentially predatory rather than unethical and immoral has allowed neoclassical economists and their regulatory judicial disciples to amoralize what is essentially immoral and unethical hyperaggressive economic behavior.¹³⁶ Evolutionary psychologist Nicholas Humphrey notes that "language stripped of feeling blocks understanding, and reins in empathy"—exactly what neoclassical economics have hoped to achieve in antitrust.¹³⁷ By further characterizing economic victims of dominant firm aggression as "prey," neoclassical economics plays into the misguided Social Darwinist theories that "nature is red in tooth and claw," and the destruction of the weaker by the stronger is nature's natural order.¹³⁸ In this way, neoclassical antitrust economics cleverly converts moral evils into supposedly necessary natural actions.¹³⁹

form of constituent molecules." Thomas J. Horton, *Competition or monopoly? The implications of complexity science, chaos theory, and evolutionary biology for antitrust and competition policy,* 51 ANTITRUST BULL. 195, 195-96 (2006) (citing WILSON I, *supra* note 27, at 92).

132. NEW OXFORD AMER. DICT., *supra* note 94, at 1335 (defining a predator as "an animal that naturally preys on others: wolves are major predators of rodents").

133. Douglas P. Fry & Anna Szala, *The Evolution of Agonism: The Triumph of Restraint in Nonhuman and Human Primates, in* WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 451, 453 (Douglas P. Fry ed., 2013). "A cross-species perspective shows that intraspecific aggression among mammals in general and in nonhuman primates in particular is *not* characterized by lethal mayhem." *Id.* at 451. *See also* Hart & Sussman, *supra* note 97, at 35.

134. NEW OXFORD AMER. DICT., *supra* note 94, at 250 (defining a "cannibal" as "an animal that feeds on flesh of its own species").

135. See, e.g., GUNTER STAMPF, INTERVIEW WITH A CANNIBAL: THE SECRET LIFE OF THE MONSTER OF ROTENBURG 131-34 (Phx. Books, Inc. 2008) (2007).

136. CHRISTIAN B. MILLER, MORAL CHARACTER: AN EMPIRICAL THEORY 241 (2013) (quoting B. Bushman & C. Anderson, *Is It Time to Pull the Plug on the Hostile Versus Instrumental Aggression Dichotomy*?, 108 PSYCH. REV. 273, 274 (2001)). Christian B. Miller, for example, uses "aggressive behavior as 'any behavior directed toward another individual that is carried out with the proximate (immediate) intent to cause harm... the perpetrator must believe that the behavior will harm the target and that the target is motivated to avoid the behavior'." *Id.* Miller adds that "[i]t is a striking fact that acts of proactive aggression have been widespread throughout history, and yet at the same time most people have also considered them to be, at least in general terms, morally wrong." *Id.* at 256.

137. NICHOLAS HUMPHREY, THE INNER EYE: SOCIAL INTELLIGENCE IN EVOLUTION 157 (reprt. 2008).

138. MICHAEL J. MURRAY, NATURE RED IN TOOTH AND CLAW: THEISM AND THE PROBLEM OF ANIMAL SUFFERING 7 (2008) ("Philosophers and theologians commonly make a distinction between moral evil, evil that is culpably caused by free creatures, and natural evil, evil that results from natural causes for which no creature is culpable.").

139. Id.

In effect, American antitrust scholars, regulators, and jurists have enabled and encouraged a serious antitrust moral deficit and moralization gap through their "moral disengagement."¹⁴⁰ Just as it was with the misuse of "Social Darwinism" in the late nineteenth and early twentieth centuries to justify laissez-faire economics and corporate wrongdoing, this moral deficit has been justified through the misapplication and distortion of natural biological competitive models in neoclassical economic scholarship.¹⁴¹ As Plato recognized long ago: "We soon reap the fruits of literature in life, and prolonged indulgence in any form of literature leaves its mark on the moral nature of man."¹⁴²

The neoclassical economic belief that irrational exploitative conduct is not to be feared because it allegedly rarely occurs and allegedly is even less likely to be successful is both naïve and dangerously misguided.¹⁴³ As Steven Pinker observes: "When an opportunity does arise to eliminate a hated opponent with little danger of reprisal, a Darwinian creature [like man] will seize on it."¹⁴⁴ Pinker further explains how a human "predator's state of mind may shift from dispassionate means-ends analysis to disgust, hatred, and anger."¹⁴⁵ Indeed, human "perpetrators commonly analogize their victims to vermin and treat them with moralized disgust."¹⁴⁶ Modern economic rationalizations consequently

141. See, e.g., Richard Lewontin, It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions 306 (2000).

Darwinism, born in ideological struggle, has never escaped from an intimate reciprocal relationship with worldviews exported from and imported into science. No one challenges the claim that evolutionary theory has had a wide effect on social theory. It is a cliché of cultural history that the explanation of evolution by natural selection served as an ideological justification for laissez-faire competitive capitalism and the colonial domination of the lesser breeds without the law.

Id. See also BROCK I, supra note 29, at 332-36 (criticizing the misuse of Darwin's theories to justify laissez-faire economics).

142. PLATO, THE REPUBLIC 335 (trans. H.D. Lee, 1955).

143. See, e.g., KENNETH M. DAVIDSON, REALITY IGNORED: HOW MILTON FRIEDMAN AND CHICAGO ECONOMICS UNDERMINED AMERICAN INSTITUTIONS AND ENDANGERED THE GLOBAL ECONOMY 85 (2011) (attacking the economic idea that "[p]redation is not plausible theory because [rational economics] has shown that it is unlikely to occur"); Matsushita Elec. Indus. Co., Ltd. V. Zenith Radio Corp., 475 U.S. 574, 589 (1986) ("The success of any predatory scheme depends on *maintaining* monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain."); A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1402 (7th Cir. 1989) (stating that a potential economic predator "is highly sensitive to its costs of doing business; it calculates how much sacrifice it needs to make (and could bear), and uses that as the basis of its prices").

144. PINKER I, *supra* note 19, at 487. See also HARRIS, *supra* note 16, at 98-99 (noting that hypersensitivity of certain brain circuitries "is especially linked to the impulsive-antisocial dimension of psychopathy, which leads to risky and predatory behavior" and that "we are beginning to understand the kinds of brain pathologies that lead to the most extreme forms of human evil."); FUKUYAMA II, *supra* note 88, at 537 ("Human beings compete to cooperate, and cooperate to compete; cooperation and competition are not alternatives but two sides of the same coin. And competition frequently takes a violent form.").

145. PINKER I, supra note 19 at 511.

146. *Id.* Pinker further adds that the perpetrator's disgust with an adversary can quickly turn from a desire to punish an adversary to an intention "to end its existence." *Id.*

^{140.} MILLER, supra note 136, at 257 (quoting A. Bandura, Moral Disengagement in the Perpetration of Inhumanities, 3 PERSONALITY & PSYCH. REV. 193-209 (1999)) ("Various proposals have been made in the psychology literature to account for this phenomenon of 'moral disengagement' whereby there are 'many social and psychological maneuvers by which moral self-sanctions can be disengaged from inhumane conduct.").

enable, encourage, and justify immoral and unethical proactive competitive aggression through displacement of responsibility and dehumanization.¹⁴⁷

Neoclassical American antitrust economics has additionally employed a second particularly powerful and effective rhetorical trick to dehumanize the victims of unethical dominant firm aggression and to make it appear that the economic harm they have suffered is merely natural and efficiency-enhancing. Some neoclassical economists have seized upon, exploited, and misapplied the normative cliché that "the antitrust laws protect competition, not competitors," to summarily characterize the victims of monopoly power as inefficient competitors whose destruction is good for the economy.¹⁴⁸ They further leverage their crafty rhetorical device by characterizing ethics and morals as "non-economic factors" whose consideration would threaten the "allocative efficiencies" and "consumer welfare" generated by pure neoclassical economic competition analyses. Their "pious uncoupling of moral concern" from the realities of our economic marketplace threaten the long-term health and stability of our economy.¹⁴⁹

Unfortunately, in buying into neoclassical economics' rhetoric, we are missing a key point that guarding competitors against unfair and unethical competition by dominant firms and monopolies is both morally justified, and crucial to protecting the competitive diversity, variety, and choice necessary for a stable, thriving and innovation-oriented economic ecosystem.¹⁵⁰ Economists

The predators may respond to the defensive reprisals of their prey as if *they* were the ones under attack, and experience a moralized wrath and a thirst for revenge. Thanks to the Moralization Gap, they will minimize their own first strike as necessary and trivial while magnifying the reprisal as unprovoked and devastating.

Id.

147. See, e.g., MILLER, supra note 136, at 256 (describing "displacement of responsibility and dehumanization" as "two important variables which are closely related to proactive aggression"); HARRIS, supra note 16, at 85.

[Social psychologist Jonathon Haidt] is pessimistic about our ever making realistic claims about right and wrong, or good and evil, because he has observed that human beings tend to make moral decisions on the basis of emotion, justify these decisions with post hoc reasoning, and stick to their guns even when their reasoning demonstrably fails."

Id. The rational competitor post hoc justifications of neoclassical competition economics allow businesses to justify post hoc their emotionally-charged unethical anticompetitive conduct as aggressive procompetitive competition. *Id.*

148. Horton II, *supra* note 7, at 623-634. See also Horton I, *supra* note 6, at 852 (discussing how the normative cliché that the antitrust laws protect competition, not competitors is "unsupported by history, judicial precedent and evolutionary theory"); Louis B. Schwartz, "Justice" and Other Non-Economic Goals of Antitrust, 127 U. PA. L. REV. 1076, 1076 (1979) ("I would not yield... to the dogma that the antitrust laws protect 'competition not competitors,' because the goals of justice and the antitrust laws sometimes demand protection of competitors."). Schwartz further argued that we should amend the phrase to include "unless individual competitors must be protected in the interests of preserving competition." Id. at 1078. See also John J. Flynn & James F. Ponsoldt, Legal Reasoning and the Jurisprudence of Vertical Restraints: The Limitations of Neoclassical Economic Analysis in the Resolution of Antitrust Disputes, 62 N.Y. U. L. REV. 1125, 1126 n.4 (1987) ("The cliché implicitly asserts that one can have competition without competitors, contains no definition of 'competition,' and is frequently used to deny the congressionally defined goals of antitrust policy in favor of the narrow goals assumed by the neoclassical model.").

149. HARRIS, *supra* note 16, at 63 (discussing how the "pious uncoupling of moral concern from the reality of human and animal suffering has caused tremendous harm").

150. See, e.g., BROCK I, supra note 29, at 335-36 (discussing the need to protect the regulatory discipline of the competitively structured market while "defending it from the depredations of private

have no meaningful way of predicting which competitors will come up with the next innovation or new niche product, or create selection pressures that drive dominant firms to adapt, innovate, or improve their existing ways of doing business. Indeed, "the [computerized] Game of Life illustrates the power of evolutionary mechanisms" and randomized competition, as "a programmer can create something and be totally aware of the laws that are obeyed by the program, and yet be almost totally unaware of the consequences of those laws."¹⁵¹ In short, no matter how much rationality we seek to inject into our economic system, we will never be able to eliminate uncertainty or randomness, and we would be fools to even try, as a diversity of competitors creates long-term stability, innovation, and adaptability. ¹⁵² Consequently, failing to protect economic competitive

Neo-Schumpeterians, for their part, stop short in reading their master's bible. If they read further, they would find that Schumpeter projected the trajectory of modern capitalism as ineluctably trending toward bureaucratized routine as "economic progress tends to become depersonalized and automatized," as "bureau [sic] and committee work tends to replace individual action," and as this process will eventually "blot out personality, the calculable result, the 'vision'," while the "bureaucratized giant industrial unit ... ousts the entrepreneur." The trend overall, Schumpeter projected, is toward "a huge and all-embracing bureaucratic apparatus"—an outcome hardly congruent with the free enterprise utopia portrayed by his modern-day disciples.

Id. (quoting JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 133-34, 206 (Harper Torchbooks ed., 1962)). Genomic research biologist J. Craig Venter adds that nature does not favor dominant species, but rather lots of closely related organisms, which helps increase diversity and survivability. Life: A Gene-Centric View, A Conversation in Munich Richard Dawkins, J. Craig Venter, John Brockman, EDGE (Jan. 23, 2008), https://www.edge.org/conversation/richard_dawkinsj_craig_venter-john_brockman-life-a-gene-centric-view. George Church additionally observes that [o]ne of the things we've learned from the past is that diversity and dispersion are good[,]" and can lead to "big consequences and unintended consequences." George Church, in Life: What a Concept! An Edge Event Eastover Farm, Edge 61, Special at 62 (John Brockman ed., 2008), https://www.edge.org/documents/life/Life.pdf.

152. MIT quantum mechanical engineering professor Seth Lloyd observes,

I would say that computers and chemical reactions share with human beings the feature of inscrutability of their behavior, and there's nothing to do about it. There are things you can try: you can get more familiar with them, you can try to model the[m] better, but you're never going to eliminate the uncertainty and essential inscrutability

Seth Lloyd, in Life: What a Concept! An Edge Special Event at Eastover Farm, EDGE 142, 160 (John Brockman ed., 2008), https://www.edge.org/documents/life/Life.pdf. "Gödel's incompleteness theorem says that no self-consistent logical theory of beyond a certain complexity, basically complexity which allows it to compute, is complete. The theory can always be extended in a whole variety of different ways." *Id.* at 161-62.

[C]hance offers 'many advantages which it is difficult to envisage being obtained in any other way,' for example in genetic evolution. Indeed, computer scientists have proved that certain important computational tasks can be done much more efficiently with random numbers than they could possibly be done by deterministic procedure. Many of today's best computational algorithms, like methods for searching the Internet, are based on randomization.

KNUTH, *supra* note 151, at 184. *See also* CHRISTIAN & GRIFFITHS, *supra* note 114, at 182 ("Recent work in computer science has shown that there are cases where randomized algorithms can produce good approximate answers to difficult questions faster than all known deterministic algorithms."); RIDLEY, *supra* note 60, at 172 (arguing that "monopolies always grow complacent, stagnant, and self-serving").

economic power"); Horton V, *supra* note 121, at 174-78 (discussing the importance of competitive variety, multiplicity, and diversity at every level of biological and economic ecosystems).

^{151.} DONALD E. KNUTH, THINGS A COMPUTER SCIENTIST RARELY TALKS ABOUT 178 (2001). See also BROCK I, supra note 29, at 335.

diversity by protecting competitors against unfair and unethical dominant firm competition is "courting disaster."¹⁵³

Neoclassical economics also seems to have it backwards in finding potential future economic payoffs to be unlikely in evaluating aggressive exclusionary conduct by dominant firms. Dominant firms, it seems, launch unethical and aggressive attacks when they feel they have an excellent chance of destroying their competition. Biological studies show that "rather than following a simple strategy of always behaving aggressively, animals instead appear designed to employ aggression selectively, escalating to damaging fights only when the stakes are high, and/or assessment indicates they have a reasonable chance of winning."¹⁵⁴ In other words, the aggressive predator already has calculated that it has a strong chance of eliminating its competition before attacking. Indeed, "behavioral ecologists view aggression as a strategic option to be used in circumstances under which, over evolutionary time, such aggression has tended to pay off."¹⁵⁵ As observed by Matt Ridley, "[E]ntrepreneurs are rational and if they find that wealth can more easily be stolen than created, then they will steal it."¹⁵⁶

In American today, homage to misguided neoclassical economic suppositions has created an environment where unethical competitive aggression is likely to pay off, thereby reinforcing and encouraging such conduct.¹⁵⁷ "Belief systems represent the core values that drive everyday behavior."¹⁵⁸ "Selfishness has come to be seen not merely as acceptable but as a necessary expedient in the search for economic and political stability."¹⁵⁹ In effect, we have made ethics and morality subservient to the perceived neoclassical economics need to allow monopolies and dominant firms to reap substantial economic rewards to incentivize aggressive competition and economic efficiency.¹⁶⁰

155. Id. at 364.

156. RIDLEY, *supra* note 60, at 172 (citing T. KEALEY, SEX, SCIENCE AND PROFITS (2008)). "Humanity's great battle over the last 10,000 years has been the battle against monopoly." *Id.*

157. See, e.g., STIGLITZ I, supra note 34, at 51 (discussing how "relaxed antitrust regulations [have] facilitat[ed] the ability of one firm to take over its rivals and reduc[e] competition in the market"); *Id.* at 4 (observing that "few markets are perfectly competitive; therefore outcomes depend in part on market power, and rules affect this power").

160. See, e.g., Verizon Comm., Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004) (defending monopoly pricing as "an important element of the free-market system"); BORK, *supra* note 13, at 178 ("Antitrust should not interfere with any firm size created by internal growth, and this is true whether the result is monopoly or oligopoly.").

^{153.} CHRISTIAN & GRIFFITHS, supra note 114, at 237.

^{154.} Michael L. Wilson, *Chimpanzees, Warfare, and the Invention of Peace, in* WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 361, 363 (Douglas P. Fry ed., 2013).

^{158.} MINTON & KAHLE, supra note 116, at 9.

^{159.} David Hay, Altruism as an Aspect of Relational Consciousness and How Culture Inhibits It, in ORIGINS OF ALTRUISM AND COOPERATION 349, 367 (Robert W. Sussman & C. Robert Cloninger, eds. 2011). "Individualism encourages the complete suppression of relational consciousness and a consequent leeching away of ethical relationships between the members of our moderncommercial society." *Id.* at 370. See also FRANK PARTNOY, INFECTIOUS GREED: HOW DECEIT AND RISK CORRUPTED THE FINANCIAL MARKETS 188 (rev. paperback ed., PublicAffairs 2009) (2003) (describing how Alan Greenspan testified before the Senate Banking Committee that ""[a]n infectious greed seemed to grip much of our business community"); Wendell Berry, *Faustian Economics, in* THE BEST AMERICAN SCIENCE AND NATURE WRITING 1, 3 (Elizabeth Kolbert et al. eds., 2009).

Fortunately, there seems to be an increasing hunger to address our "moral malnutrition" by injecting morality and ethics back into our economic values.¹⁶¹ We are slowly recognizing the wisdom of President Franklin Delano Roosevelt's assertion that "[w]e have always known that heedless self-interest was bad morals; we know now that it is bad economics."¹⁶² We are therefore understanding that we need our government to make our corporations and businesses conform to ethical and moral norms.¹⁶³ Quite simply, we must end the current race to the bottom that is being pushed forward by unethical, immoral, and reckless economic competition and dominant firm misconduct.¹⁶⁴

V. ENDING AMERICAN ANTITRUST'S MORAL DEFICIT

America was founded and built upon the ideal of "moralized democracy."¹⁶⁵ In their original guise and at their best, our antitrust laws are one of the brightest beacons of our moralized democratic ideals of controlling excessive

"Misuse of the powers of capital or selfish suspension of the employment of capital must be ended, or the capitalistic system will destroy itself through its own abuses".... Most of the [dangerous] practices resulted from excessive concentration of corporate power in the hands of a very few firms, whose directors belligerently asserted their right to employ their property as they saw fit. Roosevelt didn't deny the right, but he linked it to responsibility.

Id.

163. See, e.g., FUKUYAMA II, supra note 88, at 555.

164. See, e.g., CHRISTIAN & GRIFFITHS, supra note 114, at 238-39; HARRIS, supra note 16, at 70 (discussing the need to "create cultural mechanisms that protect us from the moment-to-moment failures of our ethical intuitions").

165. Herbert Croly, The Eclipse of Progressivism, in INSURRECTIONS OF THE MIND: 100 YEARS OF POLITICS AND CULTURE IN AMERICA 35, 41 (Franklin Foer ed., 2014). See also PERRY MILLER, ERRAND INTO THE WILDERNESS 143 (1956) (discussing how America's earliest citizens "thought of society as a unit, bound together by inviolable ties"); id. at 74 (discussing the early triumph in America of "the establishment of a code of ethics and of moral obligation"); ANDREW DELBANCO, THE PURITAN ORDEAL 74 (1989) (discussing John Winthrop's Arabella Sermon as "the first great communitarian statement in American literature"); GORDON WOOD, THE RISING GLORY OF AMERICA 1760-1820 5 (rev. ed. 1990) (1971) (tracing the ideology of the American revolution back to the Puritans' ideals and describing it as "an updated, reactionary effort to bring under control the selfish and individualist impulses of an emergent capitalistic society"); TED NACE, GANGS OF AMERICA: THE RISE OF CORPORATE POWER AND THE DISABLING OF DEMOCRACY 224 (2003) (discussing the American values that protect individuals against corporate power); DORIS KEARNS GOODWIN, THE BULLY PULPIT: THEODORE ROOSEVELT, WILLIAM HOWARD TAFT, AND THE GOLDEN AGE OF JOURNALISM 253 (2013) (quoting letter from Elihu Root to President Theodore Roosevelt (Dec. 13, 1899), reprinted in PHILLIP JESSUP, ELIHU ROOT (Vol. 1) 209 (1938) (describing Teddy Roosevelt's attacks on the amassing of riches "by means which are utterly inconsistent with the highest rules of morality").

^{161.} BORGMANN, *supra* note 75, at 191 (discussing our "moral malnutrition" and "hunger for ethics, or 'values' as we say these days"). *See also* Eleanor M. Fox, *The Battle for the Soul of Antitrust*, 75 CALIF. L. REV. 917, 919 (1987) ("The members of the New Coalition take account of the real history of antitrust: concern for consumers; concern for the 'little man'; interest in access, diversity, and pluralism; and condemnation of coercion and exploitation.").

^{162.} H.W. BRANDS, TRAITOR TO HIS CLASS: THE PRIVILEGED LIFE AND RADICAL PRESIDENCY OF FRANKLIN DELANO ROOSEVELT 457 (2008) (quoting President Franklin Delano Roosevelt, Inaugural Address (Jan. 20, 1937), http://www.presidency.ucsb.edu/ws/index.php?pid=15349. *See also id.* at 411 ("Conservatives complained that the New Deal eroded individual liberty. Liberty was indeed the issue, [FDR] said, but liberty meant more than letting the rich and powerful do whatever they would."); *Id.* at 490 (quoting President Franklin Delano Roosevelt, State of the Union Message to Congress (Jan. 3, 1938), http://www.presidency.ucsb.edu/ws/index.php?pid=15517).

concentrations of power—both economic and political.¹⁶⁶ Antitrust Professor Robert H. Lande has cogently noted, for example, that the framers of the Sherman Act "condemned monopolistic overcharges in strong moral terms, rather than because of their efficiency effects."¹⁶⁷ Similarly, the framers of Section 5 of the Federal Trade Commission Act desired to eliminate immoral and unfair competitive practices, based in part on their "belief that monopolies often resulted from immoral business behavior."¹⁶⁸

Unfortunately, we have been sacrificing our moral and ethical guiding values to follow the siren call of rational neoclassical economics, which have proven to be both biologically and evolutionarily misguided, and dangerous to our long-term economic and democratic health.¹⁶⁹ Antitrust today perfectly embodies the idea that "[w]estern culture has extirpated the evolved grounding of moral rationality and moral development^{"170}

It is time to bring moral and ethical considerations back into our antitrust analyses.¹⁷¹ As a starting point, we should put an end once and for all to the

167. Robert H. Lande, Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged, 34 HASTINGS L. J. 65, 95 (1982).

168. Id. at 115 (citing 51 CONG. REC. 12,030 (1914)).

169. See, e.g., FUKUYAMA I, supra note 10, at 91 (describing the rise in American of "moral individualism and the consequent [moral] miniaturization of community"); Croly, supra note 165, at 43 (describing our "sacrifice of moral order"); STOUT I, supra note 9, at 242 (discussing how "evidence is piling up that unselfish prosocial behavior is declining in the United States"); STOUT III, supra note 25, at 113-14 (describing our obeisance to "defunct economi[cs] idea[s]"); RICHARD A. POSNER, A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION xiv (2009) (arguing that ideology driven by self-interested decisions from the business community can distort economic policy and give rise to economic depressions).

170. Darcia Narvaez, *The 99 Percent—Development and Socialization Within an Evolutionary Context, in* WAR, PEACE, AND HUMAN NATURE: THE CONVERGENCE OF EVOLUTIONARY AND CULTURAL VIEWS 341, 349 (Douglas P. Fry ed., 2013) (citing Darcia Narvaez, *Moral Rationality*, 38 Tradition & Discovery: The Polanyi Soc'y Periodical 25 (2012)).

171. See, e.g., Stucke II, supra note 29, at 624 ("Any antitrust policy, which seeks to promote wellbeing, must balance multiple political, social, moral, and economic objectives."); Horton IV, supra note 27, at 514 ("[I]t is time to return to a morals-based understanding and enforcement of our antitrust laws."); Stucke I, supra note 9, at 546-47 ("Although antitrust scholars, policymakers, enforcers, and courts have divorced morality from antitrust... it is time to bring morality into the debate."); Richard Austin Smith, The Incredible Electrical Conspiracy (Part II), FORTUNE MAG., May 1961, at 161, 224 ("[T]he

See, e.g., First & Waller, supra note 7, at 2573 ("Public and private antitrust enforcement were 166. set up to enforce the law in a way that would advance democratic goals-to deal with concentrations of economic power and to police business behavior that exploited consumers and excluded competitors."); Fox & Sullivan, supra note 31, at 2, 27-28 nn.25-46 (citations omitted) (describing the democratic roots of America's antitrust laws); Louis B. Schwartz, The Schwartz Dissent, 1 ANTITRUST BULL, 37, 38 (1955-1956) ("The purpose of the antitrust laws is to preserve liberty, *i.e.*, freedom of choice and action, first in the economic sphere but ultimately in the political sphere as well."); PERITZ, supra note 16, at 24 (discussing the Sherman Act's origins and observing that "[1]iberty-both industrial and politicalseemed to need government intervention to reestablish competitive markets overrun by powerful trusts and cartels"); R. Hewitt Pate, Acting Assistant Attorney General, Antitrust Division, U.S. Department of Justice, Speech Before the British Institute of International and Comparative Law: Anti-Cartel Enforcement: The Core Mission (May 16, 2003), https://www.justice.gov/atr/speech/anti-cartelenforcement-core-antitrust-mission (quoting THURMAN ARNOLD, FAIR AND FOUL: A DISSENTING LAWYER'S LIFE 121 (1951)) ("Since 1890, the Sherman Act has reflected the United States' 'abiding faith that the elimination of competition in business [is] morally and economically wrong,""); Richard Hofstadter, What Happened to the Antitrust Movement? Notes on the Evolution of an American Creed, in THE BUSINESS ESTABLISHMENT 113, 149 (Earl Frank Cheit ed., 1964) (observing that American antitrust enforcement is based on "political and moral judgment" and not an "outcome of economic measurement").

misguided idea that our antitrust laws should or can be amoral. There is no reason to continue this supposedly scientific economic "cognitive rigidity" in the face of the overwhelming contradictory evidence from evolutionary biology and behavioral economics.¹⁷² Antitrust must cast aside the wrong-headed theoretical models of *Homo Economicus* and return to dealing with humans as we are—evolutionary creatures capable of irrational evil—who have survived and thrived by developing and following cultural norms and codes of morality and ethics.¹⁷³ By closing our eyes to the immorality of dominant firm exclusionary conduct, we have reduced much of our "antitrust enforcement to a near null set."¹⁷⁴

Substantial excellent scholarship today laments how antitrust penalties have not been sufficient to deter ongoing antitrust violations.¹⁷⁵ Surely a primary and material cause for the ongoing wave of cartel activities and dominant firm exclusionary conduct is that shame and the public acknowledgement of moral and ethical failures in business competition has become virtually extinct in the United States today.¹⁷⁶ It is time therefore to reinvigorate our shared moral outrage towards immoral and unethical cartel and dominant firm conduct, and to send a signal that we are prepared to respond vigorously and zealously to such behavior.¹⁷⁷ Returning to our moral and ethical heritage in judging business

disjointment of morals [leading to antitrust violations], is something for American executives to think about in all aspects of their relationships with their companies, each other, and the community.").

173. See, e.g., Stout II, supra note 18, at 158-59 (arguing that "Homo economicus is a sociopath"); Horton IV, supra note 27 (arguing that Homo Economicus' "selfishness and greed are rationalized and encouraged by Chicagoans"); Narvaez, supra note 170, at 346 (arguing that Homo Economicus would have been viewed by our ancestors as "immoral or mad").

174. First & Waller, *supra* note 7, at 2572. *See also* Horton I, *supra* note 6, at 863 ("Unfortunately, in eschewing [moral] norms of fairness in our antitrust analyses and theories, we have moved away from our evolutionary heritage and are in danger of becoming 'moral zombies' and economic sociopaths. For antitrust to ultimately be meaningful and effective, we must return to a system grounded in moral norms of fairness, and stop trying to make decisions in a moral vacuum.").

175. See John M. Connor & Robert H. Lande, Cartels as Rational Business Strategy: Crime Pays, 34 CARDOZO L. REV. 427, 428 (2012) ("[T]he combined level of U.S. cartel sanctions has been only 9% to 21% as large as it should be to protect potential victims of cartelization optimally"). See generally Maurice E. Stucke, Am I a Price-Fixer? A Behavioral Economics Analysis of Cartels, in CRIMINALIZING CARTELS: CRITICAL STUDIES OF AN INTERNATIONAL REGULATORY MOVEMENT (Caron Beaton-Wells & Ariel Ezrachi eds., (2011) (finding that American antitrust enforcement has not reached optimal deterrence).

176. See, e.g., Hans J. Morgenthau, Power and Powerlessness: Decline of Democratic Government, in INSURRECTIONS OF THE MIND: 100 YEARS OF POLITICS AND CULTURE IN AMERICA 243, 249 (Franklin Foer ed., 2014) (arguing that in America today, "[s]hame, the public acknowledgment of a moral or political failing, is virtually extinct"); Sokol II, *supra* note 26, at 216-19 ("Moral outrage and shame have a place in cartel enforcement as it creates its own form of deterrence. The greater society's moral outrage at cartel behavior, the costlier undertaking such actions will be for individuals.").

177. See CHRISTIAN & GRIFFITHS, supra note 114, at 245.

Revenge almost never works out in the favor of one who seeks it, and yet someone who will respond with 'irrational' vehemence to being taken advantage of is for that very reason more likely to get a fair deal. As Cornell economist Robert Frank puts it, "If people *expect* us to respond irrationally to the theft of our property, we will seldom *need* to, because it will not be in their interests to steal it. Being predisposed to respond irrationally serves much better here than being guided only by material self-interest."

Id. (quoting Robert H. Frank, *Rethinking Rational Choice, in* BEYOND THE MARKETPLACE: RETHINKING ECONOMY AND SOCIETY 53, 57 (Roger Friedland & A.F. Robertson eds., 1990)).

^{172.} FUKUYAMA II, supra note 88, at 463.

competition is likely to yield better long-term economic outcomes and a healthier and more stable economic environment.

We need to stop rationalizing, protecting, and encouraging dominant firm exclusionary and collusive conduct through the use of hollow economic clichés.¹⁷⁸ As discussed above, we should stop using the amoral biological terms "predators" and "predation" in analyzing immoral and unethical horizontal dominant firm conduct intended to exclude or eliminate competitors. The misuse of such terms plays into the Spencerian rhetoric characterizing economic victims as inefficient "losers" in a fair competitive arena-rhetoric which ultimately justifies all manner of rapacious, exploitative, and exclusionary competitive acts as amoral efficiency-enhancing procompetitive conduct.¹⁷⁹

We also should allow antitrust "juries to fully assess evidence of anticompetitive intent in judging predatory and anticompetitive behavior."¹⁸⁰ This will require the adherents of neoclassical antitrust economics to get over their "perverse inability to accept that people often believe exactly what they say they believe."¹⁸¹ As Columbia Law Professor Joseph Raz observes, "quite often when acting intentionally we are in control of the result."¹⁸²

This author and others previously have argued that "[a]s a function of our robust moral capacities, we are well-equipped, from an evolutionary and social perspective, to fairly evaluate the predatory intent of dominant firms and

See, First & Waller, supra note 7, at 2572 (discussing the need for courts in Sherman Act cases 178. to "pay more attention to the Act's statutory purposes, particularly with regard to protecting business from exclusionary conduct" to stop excusing predatory campaigns that exclude rivals "on the ground that such behavior made no economic sense to judges who could not figure out why such campaigns would be profitable"; and to stop dismissing claims of collusive behavior simply "because judges could think up a plausible explanation for why the defendants might not have colluded").

See, e.g., ERIC FONER, THE STORY OF AMERICAN FREEDOM 120-22 (1999) (describing British 179. social philosopher Herbert Spencer's misuse of such phrases as "natural selection," the "struggle for existence," and the "survival of the fittest" to justify laissez-faire economic and social policies); Dennis R. Balch & Robert W. Armstrong, Ethical Marginality: The Icarus Syndrome and Banality of Wrongdoing, 92 J. BUS. ETHICS 291, 294 (2010) ("Rationalizations serve to neutralize the stigma associated with unethical behavior, making it easier and more acceptable to perform the same transgression again."); Francesca Gino et al., Contagion and Differentiation in Unethical Behavior: The Effect of One Bad Apple on the Barrel, 20 PSYCHOL. SCI. 393, 393 (2009) (citations omitted) ("[W]hen the categorization of a particular behavior is not clear-cut, people can, and in fact often do, categorize their own actions in positive terms, avoiding negative updating to their moral self-image[.]").

Horton I, supra note 6, at 851. See also Maurice E. Stucke, Is Intent Relevant?, 8 J. L., ECONS. 180. & POL'Y 801, 857 (2012) [hereinafter Stucke III] (recommending the admission and consideration of "intent evidence in civil antitrust trials"); Alfred E. Kahn, Standards for Antitrust Policy, in MONOPOLY POWER AND ECONOMIC PERFORMANCE: THE PROBLEM OF INDUSTRIAL CONCENTRATION 169, 186 (Edwin Mansfield ed., rev. ed.1968) (citation omitted) (arguing that "the inescapable conclusion is that, from a practical standpoint" is that determining the intent of economic actors "alone 'fills the bill' for a sensible antitrust policy [in most cases]").

HARRIS, supra note 16, at 157. See also A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 181. F.2d 1396, 1398-99 (7th Cir. 1989) (arguing that jurors are "impressed" by evidence of malicious economic intent).

^{182.} JOSEPH RAZ, FROM NORMATIVITY TO RESPONSIBILITY 241 (2011). Professor Raz additionally notes that "[t]ypically, we control intentional acts, including their aspects that depend on factors beyond our control, through the embedded intentions, which guide our movements, adjust them to the circumstances in a way calculated to secure the intended result." Id. at 240.

monopolists."¹⁸³ Intent evidence "strikes deep evolutionary chords" within us.¹⁸⁴ "[A] state of intense, even obsessive concentration on others has always enhanced [the] survival of individuals and groups."¹⁸⁵ Therefore, citizen jurors are ideally positioned to discern and judge the real intentions and motivations of dominant firms and monopolists engaging in exclusionary conduct.¹⁸⁶ Discerning such intent can be useful both in predicting potential anticompetitive effects and in assessing the anticompetitive nature of the conduct in question.¹⁸⁷ Consequently, this author previously has recommended "that antitrust tribunals and regulators begin applying an evolutionarily based fairness/intent/competitive harm analysis, instead of the biased, outmoded, and dangerously ineffective economic consumer welfare norms currently in use."¹⁸⁸

Citizen jurors, unlike judges applying unrealistic neoclassical economic models, are also ideally suited to impose moral and ethical norms to punish anticompetitive conduct.¹⁸⁹ A part of our reciprocal altruism-survival mechanisms includes a willingness to "hit back" and punish excessive selfishness

Our greatest survival advantage lies in our incredible social networking, our ability to instantly intuit other people's mind states, our ability to construct rich and complex models of each other, to construct a web of communication that proceeds under the surface of language and that gives each word in spoken language a halo of extra meaning.

Id. at 213. *See also* DE SOUSA, *supra* note 83, at 79 (discussing the "evidence for the existence [in humans] of a specialized system for detecting others' states of mind"); HUMPHREY, *supra* note 137, at 76 (discussing the evolutionary biological advantages resulting from man's "ability to make realistic guesses about the inner life of his rivals").

186. Intent evidence also may be of great use in non-jury cases such as judicial review of proposed mergers under Section 7 of the Clayton Act. *See* Stucke III, *supra* note 180, at 849-50 ("[I]ntent evidence is especially probative in antitrust cases where the courts and enforcers must predict the conduct's likely competitive efforts[,]" such as potential merger reviews.).

187. See, e.g., Stucke III, supra note 180, at 851 ("Intent evidence helps jurors assess the conduct itself."); Horton II, supra note 7, at 654-55 ("[T]he so-called Chicago/Harvard economic models that eschew fairness and intent lack meaningful biological, evolutionary, or historical foundations. Consequently, we should welcome evidence and information about the motivations and intentions that lie behind the actions of dominant firms and monopolists."). See also Alfred E. Kahn, Standards for Antitrust Policy, 67 HARV. L. REV. 28, 50 (1953).

The function of antitrust legislation can be only to see that no one attempts to stifle or pervert the process of competition by collusion, by unreasonable financial agglomeration, or by exclusion. Illegality must inhere in the act, not in the result, and the test of intent is only a means of defining the act.

Id.

188. Horton I, supra note 6, at 864.

189. See, Stucke III, supra note 180, at 857 ("[P]eople are more willing to incur costs to punish greedy free-riders who intentionally violate norms of fairness. In punishing intentionally greedy behavior, people can avoid the tragedy of the commons and promote the cooperation and trust necessary for a healthy market economy.").

^{183.} Horton II, *supra* note 7, at 654. (arguing that "humans are evolutionarily hard-wired to quickly judge others' intentions"). *See also* Stucke III, *supra* note 180, at 857 ("Contrary to some jurists' arguments, premised on neo-classical economic theory, intent matters. People rely on intent in assessing the conduct's reasonableness.").

^{184.} Horton II, supra note 7, at 655.

^{185.} WILSON II, *supra* note 55, at 43. *See* MICHAEL S.A. GRAZIANO, CONSCIOUSNESS AND THE SOCIAL BRAIN 31 (2013) (arguing that our brains have developed rich, sophisticated mechanisms "essential to understanding and predicting another person's behavior"). Princeton Neuroscience Professor Graziano adds,

and aggressiveness in others.¹⁹⁰ "By punishing greedy behavior rather than rewarding it, society affirms the civic virtue of shared sacrifice for the common good."¹⁹¹ As a result, bringing citizen jurors back to antitrust seems to be the best way to restore the moral outrage missing in American antitrust today.¹⁹²

Returning antitrust cases to juries will also help end "antitrust's democracy deficit" and further "help restore and revitalize a valuable and necessary community-based investment in our antitrust laws and their enforcement."¹⁹³ Looking at American antitrust today, one would be hard pressed to believe that the Seventh Amendment of the Constitution of the United States protects our rights to jury trials.¹⁹⁴ In fighting for our Seventh Amendment, Thomas Jefferson wrote to Thomas Paine in 1789 stating: "I consider [a trial by jury] as the only anchor, ever yet imagined by man, by which a government can be held to the principles of it's [sic] constitution."¹⁹⁵ Since corporations are chartered by our governments, it would seem that they too should be anchored to our communal ethics and morals, as set forth in our antitrust laws, through trials by juries.

Perhaps most importantly, "[c]ompetition laws and their enforcement provide a probing lens into the fundamental values and norms that undergird a

190. See SHERMER I, supra note 60, at 39-40.

Survival machines could evolve to be completely selfish and self-centered [like *Homo Economicus*], but there is something that keeps their pure selfishness in check, and that is the fact that other survival machines are inclined to 'hit back' if attacked, [and] to retaliate if exploited If you're too selfish, other survival machines will punish you. . . .

Id. Evolutionary studies show consistent willingness to pressure and punish "deviants, free riders, and bullies." *Id.* at 364. *See also* PETERSON, *supra* note 74, at 49 (discussing how humans distinguish wrong from awkward or ill-mannered, and feel an "urge to punish the person or persons perceived as being *wrong*"); STOUT I, *supra* note 9, at 141 ("Altruistic punishment 'juices' group level selection, making it more effective."); Douglas P. Fry, *Human Nature: The Nomadic Forager Model, in* ORIGINS OF ALTRUISM AND COOPERATION 227, 241 (Robert W. Sussman & C. Robert Cloninger, eds., 2011) ("Humans express moral disapproval and apply sanctions against those who violate social rules Group members individually and in concert effectively express moral disapproval and apply social control measures."); James K. Rilling, *The Neurobiology of Cooperation and Altruism, in* ORIGINS OF ALTRUISM AND COOPERATION 295, 301 (Robert W. Sussman & C. Robert Cloninger eds., 2011) ("Behavioral economics experiments suggest that large-scale cooperation depends on the willingness of at least some individuals to endure the costs of punishing free riders...").

191. SANDEL II, supra note 125, at 8.

192. See, e.g., WILSON I, supra note 27, at 186-87 (discussing how the possibility of cheating by others "excites emotion and serves as the principal source of hostile gossip and moralistic aggression by which the integrity of the political economy is maintained"); PINKER II, supra note 79, 403-05 (discussing the evolution of moralistic aggression to battle exploitation and injustice); BARASH, supra note 111, at 285-86.

[Humans] are reciprocators par excellence, and it is at least possible—indeed, likely—that natural selection has favored a high level of intelligence in *Homo sapiens* as a way of countering the Machiavellian tendency to cheat, by endowing us with the ability to identify individuals and to hold them socially accountable.

Id.

193. First & Waller, *supra* note 7, at 2543, 2552-54 ("Juries help democraticize antitrust."). *See also* Horton II, *supra* note 7, at 650-51.

194. U.S. CONST. amend. VII. See also Horton II, supra note 7, at 648 (discussing how the success of neo-economics has "nearly eliminated the Seventh Amendment's protections in monopolization cases today"); First & Waller, supra note 7, at 2552 ("[M]ost antitrust commentators today think that juries are anathema to antitrust.").

195. Letter from Thomas Jefferson to Thomas Paine (July 11, 1789), http://founders.archives.gov/documents/Jefferson/01-15-02-0259.

modern society's economic and political systems."¹⁹⁶ Reimporting America's moral and ethical values and fairness norms to our antitrust regulation will help restore our international position in antitrust as a shining city upon a hill watched and admired throughout the world for our progressive leadership.

Much recent scholarship and activity has been directed to the potential for global international convergence.¹⁹⁷ Unfortunately, too often the rhetoric coming from the United States is directed towards trying to recruit other nations to follow our supposedly neutral and scientific neoeconomics approach to antitrust regulation. As an example, former U.S. Antitrust Assistant Attorney General Hewitt Pate observed that "U.S. and European officials have often approached China like a recruiting prospect—as a new player to be won over to U.S. or European styles of antitrust."¹⁹⁸ Frequent American criticisms are that China's aspirations to incorporate moral and ethical norms of fairness into its antimonopoly laws reflect a focus on supposedly non-economic and non-competition values that follow the "wrong turns by U.S. antitrust policy in the past"¹⁹⁹

As previously discussed, however, moral and ethical values and norms are fundamental scientific keys to sound economic and competition policy. Unlike poorly-defined normative economic clichés such as "consumer welfare," "allocative efficiency," and "protecting competition, not competitors," their importance to sound competition economics is based upon our long evolutionary history and heritage rather than normative theories that ultimately lack scientific and practical grounding, and are inconsistent with our basic humanity. Consequently, "China should be lauded for promulgating an aggressive antitrust policy that takes into account Confucian norms of ethics, morals, and fairness, and seeks to inspire increased corporate social responsibility."²⁰⁰

^{196.} Horton III, supra note 26, at 194 (citations omitted).

^{197.} The International Competition Network (ICN), for example, was founded by fifteen global competition agencies in 2001, with the objective of addressing global antitrust enforcement and policy issues of common interest, and formulating proposals for potential procedural and substantive convergence. *The ICN's Vision for its Second Decade: Presented at the 10th Annual Conference for the ICN* (May 17-20, 2011), http://www.internationalcompetitionnetwork.org/uploads/library/doc755.pdf. The ICN today has grown to well over one hundred competition agencies representing more than one hundred global jurisdictions. *Id.* In the words of Assistant Attorney General for Antitrust Renata Hesse, "[t]he ICN has become a crucial instrument for dialogue, cooperation, and convergence within the global antitrust community." Press Release, Dep't of Justice, Office of Pub. Affairs, International Competition Network Marks Its 15th Annual Conference Promoting International Convergence and Cooperation (Apr. 29, 2016), https://www.justice.gov/opa/pr/international-competition-network-marks-its-15th-annual-conference-promoting-international.

^{198.} R. Hewitt Pate, What I Heard in the Great Hall of the People-Realistic Expectations of Chinese Antitrust, 75 ANTITRUST L. J. 195, 195 (2008).

^{199.} Thomas R. Howell et al., *China's New Anti-Monopoly Law: A Perspective from the United States*, 18 PAC. RIM L. & POL'Y J. 53, 95 (2009). As a further recent example, on June 2-3, 2016, the ABA's Section of Antitrust Law sponsored a program in Hong Kong on Antitrust in Asia, with one panel titled "Non-Competition Factors in Asian Competition Analysis." *Agenda, Antitrust in Asia: Hong Kong* (June 2-3, 2016),

http://www.americanbar.org/content/dam/aba/events/antitrust_law/2016/06/agenda.authcheckdam.pdf. *See, e.g.*, Horton III, *supra* note 26, at 213 ("China's future AML enforcement will be based on social, moral, and ethical considerations.").

^{200.} International Antitrust Enforcement: China and Beyond: Hearing Before the Subcomm. on Regulatory Reform, Commercial and Antitrust of the H. Comm. On the Judiciary, 114th Cong. 60 (2016)

Rather than criticizing countries that reject our misguided neoclassical theoretical economic models, we should return to an antitrust policy that reflects our traditional moral and ethical values and norms of fair competition. ²⁰¹ Such a progressive stance will help us regain our position as the guiding beacon of global competition policy and help restore domestic confidence in our economic system.²⁰²

VI. CONCLUSION

Neoclassical economics has led American antitrust regulation and enforcement astray for nearly forty years. One of the biggest mistakes we have made during this period is to treat antitrust regulation and enforcement as amoral, with no moral context. Fortunately, evolutionary biology and evolutionary economics can help get us back on track.

Evolutionary biology and economics teach us that morality and ethics have evolved and developed as the social glue that helps us participate cooperatively in social and economic relationships while controlling our violent, dangerous, and selfish sides. Fairness and reciprocity are vital ingredients of our moral social glue. In order to address American antitrust's unmet moral deficit and our moral malnutrition, we need to reground antitrust to its moral and ethical roots.

We can start to reincorporate morality and ethics into antitrust by ending the use of normative neoclassical economic clichés that are inconsistent with our

201. See, e.g., Email from Albert E. Foer, to American Antitrust Institute Advisory Board (Dec.31, 2014) (on file with author) (arguing that "antitrust should not be an isolated island grounded in theoretical models, but must be firmly attached to the mainland of political and economic life in America and elsewhere"). See also MARTIN JACQUES, WHEN CHINA RULES THE WORLD: THE END OF THE WESTERN WORLD AND THE BIRTH OF A NEW GLOBAL ORDER 563 (2d ed. 2012).

The desire to measure China primarily, sometimes even exclusively, in terms of Western yardsticks, while understandable, is flawed. At best it expresses a relatively innocent narrow-mindedness; at worst it reflects an overweening Western hubris, a belief that the Western experience is universal in all matters of importance. This can easily become an excuse for not bothering to understand or respect the wisdom and specificities of other cultures, histories and traditions.

Id.

202. See, e.g., Horton VI, supra note 200, at 18 (discussing that in areas such as "monopoly leveraging, resale price maintenance," and unfair "predatory conduct by dominant firms," China "ironically, could end up being leaders in world antitrust enforcement if the United States," the founder and historical leader of antitrust, struggles to overcome 40 years of largely misguided neoclassical economics and regain its economic soul); Stucke II, supra note 29, at 624 ("[N]ow is the time to reconsider antitrust's political, social, and moral concerns. In reconsidering the goals of competition as a means to secure political, economic, and individual freedom, antitrust can be more responsive to citizens' concerns about promoting well-being.").

⁽statement of Thomas J. Horton, Professor of Law and Heidepriem Trial Advocacy Fellow, University of South Dakota School of Law) [hereinafter Horton VI]. It is important to note that this author has severely criticized China for not consistently following the Confucian norms set forth in its Anti-Monopoly Law. For example, this author previously has stated, "the Chinese and their antitrust enforcers are going to need to pay more attention going forward to their own Confucian traditions and values." *Id. See also* Thomas J. Horton, *Antitrust or Industrial Protectionism? Emerging International Issues in China's Anti-Monopoly Law Enforcement Efforts*, 14 SANTA CLARA J. INT'L L. 109, 142 (2016) ("The ultimate regulatory question must become what is best for economic competition in China, rather than what is best for the CCP's [Chinese Communist Party's] long-term interest in maintaining its tight grip on power.").

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evolutionary history and heritage. We should additionally return antitrust cases to jurors and allow them to consider the intent of antitrust defendants in reaching their decisions. All of this can best be done by applying an evolutionarily based fairness-intent-competitive harm analysis. Finally, we should stop criticizing countries and jurisdictions that are working to incorporate moral and ethical norms into their antitrust regulations and enforcement.

Progressively restoring morality, ethics, and fairness into our antitrust regulation and enforcement will help us regain our past global standing as the leading light of antitrust enforcement and help restore the diminishing domestic confidence in the integrity of our economic system. As a law professor, I look forward to the day when law students can learn that we have taken positive and progressive steps to re-moralize antitrust and put behind us the misguided regressive days when America's antitrust laws were treated as amoral.