INSIDER TRADING AND EVOLUTIONARY PSYCHOLOGY: STRONG RECIPROCITY, CHEATER DETECTION, AND THE EXPANDING BOUNDARIES OF THE LAW

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Insider trading law has expanded in recent years to cover instances of trading on nonpublic information that fall outside of the fiduciary duty framework set forth by the U.S. Supreme Court in the landmark cases of Chiarella and Dirks. The trend towards a broader insider trading law moves the law closer towards what evolutionary psychology insists humans desire when engaging in collective action: that individuals benefit in proportion to the effort or investment they make in a common enterprise. Insider trading law can therefore be understood as a societal response to cheating in group activities, and the recent expansion of the law can be regarded as reflecting a proclivity for fairness as proportionality. An evolutionary psychologybased account of insider trading law also provides a basis for understanding the observed correlation between insider trading enforcement and various measures of the health of the financial markets, as well as a unified jurisprudence of insider trading law encompassing both consequentialist and deontological aspects.

INTRODUCTION

VER the course of the past fifteen years, the sweep of insider trading law has expanded beyond the boundaries articulated by the U.S. Supreme Court in the landmark cases *Chiarella v. United States*¹ and *Dirks v. SEC.*² In particular, lower courts are dispensing with the requirement that a fiduciary duty be breached in order for an insider trading conviction to be sustained, thereby allowing the application of Rule 10b-5 and the voluminous body of "insider" trading law to those who steal corporate information without any fiduciary duty to its source.³

¹ 445 U.S. 222 (1980).

² 463 U.S. 646 (1983).

³ See generally Stephen Bainbridge, Regulating Insider Trading in the Post-Fiduciary Duty Era: Equal Access or Property Rights?, in RESEARCH HANDBOOK ON INSIDER TRADING 80 (S. Bainbridge ed., 2013); Joanna Apolinsky, Insider Trading as Malfeasance: The Yielding of the Fiduciary Requirement, 59 U. KAN. L. REV. 493 (2011); Thomas Lee Hazen, Identifying the Duty Prohibiting Outsider Trading on Nonmaterial Public Information, 61 HASTINGS L.J. 881 (2010); Donna M. Nagy, Insider Trading and the Gradual Demise of Fiduciary Principles, 94 IOWA L. REV. 1315 (2009); James J. Park, Rule 10b-5 and the Rise of the Unjust Enrichment Principle, 60 DUKE L.J. 345 (2010); Robert A. Prentice, Permanently Reviving the Temporary Insider, 36 IOWA J. CORP. L 343 (2011).

While there has been intense academic debate concerning the wisdom of the insider trading prohibition, the courts, regulators, and public opinion generally support broad laws⁴ and their vigorous enforcement⁵ in an effort to stamp out insider trading.

This Article turns aside from the conventional arguments offered for and against the insider trading prohibition posed by law and economics scholars to offer an analysis of insider trading law based on the discipline of evolutionary psychology. An evolutionary psychology-based explanation offers several advantages over the conventional explanations and provides a useful basis for further research into a number of key questions concerning the insider trading prohibition.

First, the treatment of social exchange in evolutionary psychology provides a convincing account of why incidents of insider trading generate the outrage they do, as well as the resulting demand for prosecution on the part of the public and the benefits regulators derive from being seen as responsive to these concerns. Conversely, arguments in favor of insider trading, such as those as famously put forward by Henry Manne, hold little public appeal. An evolutionary psychology account of why insider trading violates our moral sensibilities explains the overwhelming political support for the law as it has developed.

Second, evolutionary psychology provides a basis for understanding the current structure of insider trading law. The "core" insider trading offenses have always been instances of powerful corporate insiders trading on the basis of nonpublic information. Misappropriators, temporary insiders, tippees, computer hackers, family members, and those learning of confidential information through luck comprise a broad array of cases that lie on the periphery of "insider" trading. Some of these groups, such as tippees and temporary insiders, were reached fairly easily through expansion of existing law while others have posed more difficult challenges. I argue that the recent expansion of the law in this area corresponds closely to what evolutionary psychology insists individuals seek when they engage in group activities.

In the wake of *Chiarella* and *Dirks*, insider trading doctrine has again expanded in the lower courts to encompass the misappropriation of material, nonpublic information that violates the property rights of shareholders or the corporation generally, not just a fiduciary duty owed to these entities. As a result of these holdings, the current structure of insider trading law has moved much closer to the analysis of cheating in

⁴ See Part III.B, infra.

⁵ See Douglas Koff & Joshua Bennett, *Insider Trading Cases Likely to be Litigated in 2013 and Beyond*, N.Y. L.J., (April 8, 2013), http://www.newyorklawjournal.com/id=1202594807665/Insider-Trading-Cases-Likely-to-Be-Litigated-in-2013-and-Beyond?slreturn=20140926164637 (detailing recent government efforts to prosecute insider trading).

⁶ Of course, in the majority of these cases the individuals are not insiders at all.

social exchange behaviors offered by evolutionary psychology. Cheating is understood as the violation of principles of proportionality that occur when individuals derive benefits from group activities that are out of proportion to or in complete neglect of their contributions to communal endeavors. The old confines of the law, which tied violations to the breach of a fiduciary duty, are therefore underinclusive from the point of view of evolutionary psychology. The recent expansion of insider trading law is moving towards a closer fit with the content of human moral intuitions as described by evolutionary psychology. However, the law's previous focus on the malfeasance of an often powerful or wealthy insider who misappropriates or otherwise misuses information, as opposed to the welfare of traders and shareholders in general, corresponds to what evolutionary psychology tells us humans are primarily concerned with in social exchange. This naturally makes up the core of insider trading law.

Third, an evolutionary psychology perspective on insider trading highlights the gap between our moral intuitions and a complex modern system such as the contemporary financial marketplace. Since investment in a corporate enterprise is fundamentally an act of exchange, our minds naturally apply concepts, beliefs, and fears developed throughout human evolution to the transaction. Stock trading on an exchange is anonymous and involves no direct human contact between the seller and the purchaser. As a result, early cases such as Goodwin v. Agassiz⁷ often permitted trading on inside information because of the impersonal nature of the trading venue. Despite the fact that nothing like a modern stock exchange existed in the environment of evolutionary adaptedness⁸ (the "EEA"), we still bring our moral intuitions to the contemporary environment of complex technological and financial systems. A central jurisprudential aporia of insider trading highlights this gap between modern financial markets and the social world our moral intuitions evolved in: to what extent can insider trading really be conceived of as fraud? We intuitively feel that it is unfair, but as Professor Langevoort emphasizes, insider trading is not fraudulent in any straightforward sense. 9 One of the

⁷ 186 N.E. 659 (Mass. 1933).

⁸ See Leda Cosmides & John Tooby, Evolutionary Psychology: A Primer, CTR. FOR EVOLUTIONARY PSYCHOL. (Jan. 13, 1997), http://www.cep.ucsb.edu/primer.html ("[T]he environment of evolutionary adaptedness, or EEA, is not a place or time. It is the statistical composite of selection pressures that caused the design of an adaptation.").

⁹ See Donald Langevoort, What Were They Thinking? Insider Trading and the Scienter Requirement, in RESEARCH HANDBOOK ON INSIDER TRADING 52 (S. Bainbridge ed., 2013); see also Nagy, supra note 3, at 1323; Park, supra note 3, at 363–66 ("[T]he prohibition of insider trading by Rule 10b-5 fits uneasily with the view that Rule 10b-5 is directed primarily at fraud."); Michael P. Dooley, Enforcement of Insider Trading Restrictions, 66 Va. L. Rev. 1, 59 (1980) ("insider trading in no way resembles deceit."). But see Alan Strudler & Eric W. Orts, Moral Principle in the Law of Insider Trading, 78 Texas L. Rev. 375, 376 (1999) ("[I]nsider trading is wrong because it is a kind of fraud.").

outcomes of an evolutionary psychology account of insider trading law therefore is the realization that, from a moral standpoint, the regulation of contemporary financial markets presents great difficulties in part because of their incredible difference from anything we encountered during our evolutionary history. This does not mean that moral considerations should play no part in financial regulation—in democratic societies, political pressures will always force a moral input into financial regulation—but it does highlight the serious challenge of translating moral intuitions into law in this arena.

Finally, an evolutionary psychology perspective provides a fruitful basis for further research into some of the crucial questions raised by the recent insider trading literature. For example, research indicates a correlation between the enforcement of insider trading law and certain markers of health of the financial markets. Markets regulated by insider trading law exhibit more dispersed stock ownership, greater liquidity, and more informational stock prices than markets lacking insider trading law and enforcement. An insider trading jurisprudence based on evolutionary psychology supports such findings because it indicates that a primary reaction to cheating within social groups is to withdraw from group interaction. Thus, empirical research on the likely benefits of insider trading law, the literature on trust in markets, and evolutionary psychology may combine to support the idea that insider trading law offers tangible benefits to markets.

Evolutionary psychology is also important for the jurisprudential debates in the insider trading literature concerning the strongest moral justification for insider trading law. While most law and economics scholars argue in terms of a utilitarian framework, where the law is to be evaluated in terms of its efficiency benefits for markets, certain advocates press for a deontological basis to insider trading law. 12 I argue that while

¹⁰ See Laura Nyantung Beny, Insider Trading Laws and Stock Markets Around the World: An Empirical Contribution to the Theoretical Law and Economics Debate, 32 IOWA J. CORP. L. 237, 242 (2007). See also Part IV.A infra.

¹¹ See, e.g., HENRY G. MANNE, INSIDER TRADING AND THE STOCK MARKET (1966). The economic approach in insider trading scholarship has often taken the form of a property rights approach, advocating that inside information should be treated as the property of the shareholders, see, e.g., Dennis W. Carlton & Daniel R. Fischel, The Regulation of Insider Trading, 35 STAN. L. REV. 857 (1983); Jonathan Macey, From Fairness to Contract: The New Direction of the Rules Against Insider Trading, 13 HOFSTRA L. REV. 9 (1984); Stephen M. Bainbridge, The Law and Economics of Insider Trading: A Comprehensive Pri-(2001). RES. **NETWORK** 1, 78 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=261277 ("In short, the federal prohibition on insider trading is justifiable solely as a means of protecting property rights in information.").

¹² See Ian B. Lee, Fairness and Insider Trading, 2002 COLUM. BUS. L. REV. 119 (2002); Strudler & Orts, supra note 9. See also Victor Brudney, Insiders, Outsiders, and Informational Advantages under the Federal Securities Laws, 93

an evolutionary psychology account encompasses utilitarian considerations, it ultimately points towards a deontological and not a utilitarian basis for insider trading law. 13 There are two main reasons for this. First, evolutionary psychology's emphasis on detecting cheating is reflected in a moral philosophy grounded in intention. Second, the concept of "strong reciprocity" in evolutionary psychology indicates that humans are willing to act in a manner that is genuinely altruistic from an economic standpoint, not to mention a biological one: humans will expend resources to punish others with little or no prospect of benefit to themselves. This understanding of human moral intuition is at odds with the utilitarian cost-benefit analysis, where individuals should choose the action resulting in the greatest amount of good. For a jurisprudence of insider trading, this implies that laws against insider trading would be morally justifiable (or that we would believe such laws are morally justifiable) regardless of whether they actually resulted in any tangible or identifiable material benefits for an economy.

This Article proceeds in four parts. Part I examines the trajectory of American case law on insider trading and argues that while perhaps appealing from an administrative point of view, Justice Powell's fiduciary duty-based jurisprudence is seriously underinclusive from the viewpoint of evolutionary psychology. As a result, courts have allowed the law to stretch to encompass cases outside the confines of violations of a fiduciary duty but which offend moral sense. ¹⁴ Part II presents an overview of the treatment of social exchange in evolutionary psychology. Given the intense concern humans display over cheating in group activities, Part III looks at why insider trading would be of concern on a theoretical level, and given the available empirical evidence, to what extent it actually is. Part IV concludes by outlining further research that builds on an evolutionary psychology approach.

I. THE MORAL ARC OF U.S. INSIDER TRADING LAW

The development of American insider trading law presents a complex and at times confusing trajectory as a result of the many decisions falling under a very general catchall statute. 15 Although explicitly moral

HARV. L. REV. 322 (1979) (presenting a fairness argument); Kim Lane Scheppele, "It's Just Not Right": The Ethics of Insider Trading, 56 LAW & CONTEMP. PROBS. 123 (1993) (presenting a contractarian argument for fairness).

¹³ See infra Part IV.B.

¹⁴ For an alternative account of the expansion of insider trading law which moves away from a strict fiduciary duty approach and draws on the concept of path dependence, see Stephen M. Bainbridge, Insider Trading Regulation: The Path Dependent Choice Between Property Rights and Securities Fraud, 52 SMU L. REV. 1589 (1999).

¹⁵ The decisions under this statute have created a voluminous body of federal common law. *See* Bainbridge, *supra* note 11, at 39 ("The federal insider trading prohibition is thus best classified within the genus of federal common

concerns have mostly remained under the surface, these considerations have nonetheless influenced insider trading doctrine at key points, particularly, and paradoxically, in Justice Powell's landmark *Chiarella*¹⁶ and *Dirks*¹⁷ decisions. The development of insider trading law over the course of the past century constitutes an expansion of the law towards a maximalist conception of fraud in accordance with what evolutionary psychology contends humans desire from their trading partners.

Insider trading law is composed of a core and a periphery. ¹⁸ As Justice Powell recognized, ¹⁹ the core is found in paradigmatic cases where an insider uses information derived from his role in the corporate enterprise. The periphery involves less direct cases, such as misappropriation of information or the more recent computer hacker cases that involve stolen information. ²⁰ As the psychological studies of Stuart Green and Matthew Kugler demonstrate, however, the degree of condemnation people give to cases in the periphery is nearly as great as the degree of condemnation given in the core insider trading scenarios. ²¹ This makes sense in terms of evolutionary psychology. The slight edge we give to core cases probably stems from our suspicion and resentment of wealthy or otherwise powerful insiders ²² taking advantage of their positions. But the general condemnation of all use of inside information follows from our nature as "conditional cooperators" ²³ and the desire that individuals reap benefits from communal endeavors in proportion to their efforts.

law."); see also Nagy, supra note 3, at 1322 ("In the United States, the law of insider trading is essentially judge-made.").

¹⁶ Chiarella v. United States, 445 U.S. 222 (1980).

¹⁷ Dirks v. SEC, 463 U.S. 646 (1983).

¹⁸ See infra note 331 and accompanying text.

¹⁹ See A.C. Pritchard, Justice Lewis F. Powell, Jr., and the Counterrevolution in the Federal Securities Laws, 52 DUKE L.J. 841, 936 n.585 (2003) ("Powell viewed the principal problem of insider trading as the abuse of trust by the corporate insider.").

²⁰ See, e.g., SEC v. Dorozhko, 574 F.3d 42 (2d Cir. 2009) [hereinafter Dorozhko II]. See also Blue Bottle Ltd., Litigation Release No. 20018, 90 SEC Docket 268 (Feb. 26, 2007); Lohmus Haavel, Litigation Release No. 19450, 86 SEC Docket 1591 (Nov. 1, 2005).

²¹ See infra notes 328–330 and accompanying text.

²² See Sung Hui Kim, Insider Trading as Private Corruption, 64 UCLA L. REV. 928, 958–59 (2014) (focusing on the officers and directors in Texas Gulf Sulphur occupying "entrusted positions" as a "paradigmatic example of insider trading."); Donald C. Langevoort, "Fine Distinctions" in the Contemporary Law of Insider Trading, 2013 COLUM. BUS. L. REV. 429, 434 (insider trading law as serving an "expressive function" in combating "manifestations of greed and lack of self-restraint among the privileged" in order to preserve the "identity of the public markets as open and fair."). See also Jeanne L. Schroeder, Envy and Outsider Trading: The Case of Martha Stewart, 26 CARDOZO L. REV. 2023 (2005) (arguing that our reaction to cases of outsider trading is driven by envy).

²³ See infra note 269 and accompanying text.

A central administrative challenge of insider trading law is finding a way to reconcile our moral intuition about the use of nonpublic information with the economic technology of the essentially anonymous stock exchange. Because such anonymous environments are foreign to the EEA, modern financial markets fail to neatly map onto our moral psychology. While I follow commentators such as Prentice, 24 Park, 25 Langevoort, 26 Nagy, 27 and Strudler and Orts 28 in favoring the expansion of insider trading law beyond the fiduciary duty paradigm set forth by Justice Powell, his focus on the traditional core insider trading scenarios illuminates a key challenge to its expansion. Powell's reasoning emphasizes that a broad interpretation of Rule 10b-5 runs the risk of making law coextensive with morality, and may invite overreaching on the part of the U.S. Securities and Exchange Commission (the "SEC") and government prosecutors.²⁹ There are however countervailing considerations, such as public demand for strong prosecution of perceived abuses by financial market insiders, that weigh in favor of the current broad regime of insider trading law.

This Part surveys the development of American insider trading law in the twentieth century beginning with its roots in state corporate law and ending with the current trend towards a maximalist state of the law represented by *Rocklage*, *Evans*, and *Dorozhko*. As insider trading law oscillates between the refusal to prosecute trading on inside information by means of anonymous exchanges, to the broad standard of *Texas Gulf Sulphur*, to the retrenchment of *Dirks* and *Chiarella*, and then back to its presently broad interpretation, we see the push and pull of moral versus other considerations. This history highlights the tension between what our moral intuitions desire and what traditional legal doctrines of fraud as well as prudential rule of law considerations indicate the law ought to be.

²⁴ See Prentice, supra note 3, at 344–45 (advocating for more aggressive punishment of insider trading).

²⁵ See Park, supra note 3, at 350 (arguing that a focus on unjust enrichment is an essential though second-order concern of insider trading law).

²⁶ See Donald C. Langevoort, Words from on High About Rule 10b-5: Chiarella's History, Central Bank's Future, 20 Del. J. Corp. L. 865, 883 (1995) (favoring fraud-on-the-market approach).

 $^{^{27}}$ See Nagy, supra note 3, at 1373 (arguing that in the absence of statutory treatment, Burger's theory is a good starting point).

²⁸ See Strudler & Orts, supra note 9, at 386 ("[A] 'deontological equitable disclosure' rationale justifies a fraud-on-the-investor approach").

²⁹ See Pritchard, supra note 19, at 936 n.585 ("Powell's greater concern with insider trading law was the risk posed by overaggressive enforcement of the prohibition by the SEC.").

A. Common Law Prehistory: The Majority Rule, the "Special Facts" Doctrine, and the Minority Rule

State courts were confronted with insider trading cases long before the federal securities laws were passed in the 1930s.³⁰ These late nineteenth and early twentieth-century cases resulted in the diametrically opposed "majority" and "minority"31 rules, as well as the "special facts" (or "special circumstances") doctrine set forth by the U.S. Supreme Court in Strong v. Repide. 32 The common law thus offers no clear resolution of the problem insider trading represents, and there is good reason to think that the "majority rule" of Goodwin v. Agassiz³³ did not in fact predominate.³⁴ These cases differ from later federal cases, however, in that they restricted any prohibitions against insider trading to the realm of face-to-face transactions, or to what would otherwise be face-to-face transactions were it not for deception, as in Strong v. Repide. The coexistence of the majority and minority rules left unresolved the tension between incentivizing business by allowing commonly accepted, if unscrupulous, business practices and a broader conception of unfairness grounded in moral indignation that ultimately reflects fairness as proportionality.

Like *Texas Gulf Sulphur* thirty-five years later, *Goodwin v. Agassiz* concerns trading in the stock of a mining company by its directors. Agassiz was a director of the Cliff Mining Company, which owned property in the "mineral belt" of Northern Michigan. Agassiz was also an officer of another company in the area that had conducted extensive geological surveys that indicated there was a strong possibility of profitable copper deposits. Upon learning of these results, the Cliff Mining Company decided to pursue exploration of its property in 1925, but the survey was unsuccessful and was terminated in May 1926. Nonetheless, Agassiz and his codefendant MacNaughton discussed the results of the geological surveys for the other company that indicated copper deposits in the area. When Goodwin read a news report indicating that the Cliff Mining Company had terminated its explorations, he sold his shares on the Boston Stock Exchange. Agassiz and MacNaughton then purchased 700

³⁰ See generally Barbara Ash, State Regulation of Insider Trading—A Timely Resurgence, 49 Ohio St. L.J. 393 (1988); Thomas Lee Hazen, Corporate Insider Trading: Reawakening the Common Law, 39 WASH. & LEE L. REV. 845 (1982); Bainbridge, supra note 11, at 4–9.

³¹ See Ash, supra note 30, at 399–400.

³² Strong v. Repide, 213 U.S. 419, 430–32 (1909).

³³ 186 N.E. 659 (Mass. 1933).

³⁴ See Ash, supra note 30, at 399 ("Yet, long before even the promulgation of Rule 10b-5, the majority rule had been effectively rendered a minority position..."); Bainbridge, supra note 11, at 38.

³⁵ Goodwin, 186 N.E. at 659.

³⁶ Id. at 659–60.

³⁷ *Id.* at 660.

shares through an agent because they still believed that the property of the Cliff Mining Company might contain valuable deposits that would cause its stock value to rise. Goodwin sued the two for his loss, contending that their purchase of the shares without disclosure of the geological survey results was fraudulent.

The Massachusetts Supreme Judicial Council affirmed the trial court's dismissal of the suit on the grounds that there was no fiduciary relation between the directors and the shareholders that would have prohibited a transaction in the given circumstances. 38 The court acknowledged that directors stand in a fiduciary relationship to the corporation, but denied that a trustee or other fiduciary relationship obtained between the directors and the shareholders. Citing the English case Percival v. Wright, 39 the court stated that this "principle thus established is supported by an imposing weight of authority in other jurisdictions."40 The court also discussed unusual situations in which trades of stock between directors or officers and shareholders should be set aside, citing Strong v. Repide, among other authorities. 41 It determined however that "[p]urchases and sales of stock dealt in on the stock exchange are commonly impersonal affairs" and that "[b]usiness of that nature is to be governed by practical rules. Fiduciary obligations of directors ought not to be made so onerous that men of experience and ability will be deterred from accepting such office."42 The court therefore found that the Strong v. Repide exception would not apply to anonymous trading on an exchange.

Similar to Justice Powell's later observation in footnote twenty-one of *Dirks*, the Massachusetts court crystallized its position on this point by drawing a distinction between law and morality and reflecting on its application to business practice:

Law in its sanctions is not coextensive with morality. It cannot undertake to put all parties to every contract on an equality as to knowledge, experience, skill and shrewdness. It cannot undertake to relieve against hard bargains made between competent parties without fraud. On the other hand, directors cannot rightly be allowed to indulge with impunity in practices which do violence to prevailing standards of upright businessmen.⁴³

Because the defendants did not cross this line, their conduct was acceptable even though it may not have been admirable. As in the "classical" insider trading doctrine represented by *Chiarella* and *Dirks*, *Good-*

³⁸ *Id.* at 660.

³⁹ 2. Ch. D. 421 (U.K. 1902).

⁴⁰ Goodwin, 186 N.E. at 660.

⁴¹ *Id.* at 661.

⁴² Id

⁴³ *Id.* at 663.

win steers a course between the possible highest standards of morality and business conduct that is truly wrongful. The Massachusetts court did not believe that failing to disclose such information in an anonymous transaction violated accepted business conduct.

The "special facts" of Strong v. Repide weigh against an insider's purchase of stock, however. The case concerned an appeal from the Supreme Court of the Philippines to the U.S. Supreme Court. The Filipino Supreme Court had issued a ruling against the plaintiff, Eleanor Erica Strong, in her claim that Repide had purchased her shares in the Philippine Sugar Estates Development Company through deceit. The company held a parcel of land that the U.S. Government was trying to purchase, and Repide, as majority owner and general manager of the company, was in control of the negotiations.⁴⁴ In order to avoid disclosing his identity as the purchaser of the shares, which would have signaled his knowledge of their true value, Repide hired an agent to carry out the purchase.⁴⁵ Strong sold her shares, which then increased in value tenfold within three months as the land sale was consummated. She sued, alleging that Repide's concealment of his identity and his knowledge of the upcoming sale of the land constituted deceit and should have resulted in a declaration of a void sales contract.

The U.S. Supreme Court began by pointing out that Article 1265 of the Philippines Civil Code states that "[c]onsent given by error, under violence, by intimidation, or deceit, shall be void." Furthermore, deceit in this context does not necessarily require words but can occur through misrepresentation or concealing material facts. And although the general rule is that directors of a corporation do not owe a fiduciary duty to shareholders, "special facts" can exist which require directors to act as fiduciaries for shareholders. Given that Repide was a director and owner of seventy-two percent of the shares, was in sole control of the negotiations for the sale of the land, and employed an agent to conceal his identity from Strong, the Court determined that there was "a legal obligation on the part of the defendant" to disclose the material facts surrounding the transaction. As

While the Court did not explicitly focus on the morality of Repide's conduct, it seems likely that the level of deceit involved was determinative in pushing this case into the "special facts" exception to the general rule then prevailing that transactions with insiders in possession of con-

⁴⁴ Strong v. Repide, 213 U.S. 419, 431–32 (1909).

⁴⁵ *Id.* at 432–33.

⁴⁶ *Id.* at 430.

⁴⁷ *Id.* ("Thus the deceit which avoids the contract need not be by means of misrepresentations in words. It exists where the party who intends to obtain the consent does so by means of concealing or admitting to state material facts, with intent to deceive, by reason of which omission or concealment the other party was induced to give a consent which he would not otherwise have given.").

⁴⁸ *Id.* at 434.

fidential information were permissible.⁴⁹ Unlike *Goodwin*, the transaction in *Repide* was not conducted over the impersonal mechanism of an exchange, but instead involved Repide approaching Strong through an agent. While intent was not an explicit focus of the case, it is clear from the facts that Repide intended to conceal his identity and the facts surrounding the transaction in order to purchase Strong's shares at a small fraction of their true value.⁵⁰

Finally, in the common law prehistory to the federal securities laws, a number of states held to the "minority rule" that, in addition to their duty to the corporation, directors owed a fiduciary duty to shareholders. In these cases, the state courts held that it was improper for a director to profit at the expense of the shareholders regardless of the circumstances of the transaction. The language in *Dawson v. National Life Insurance Company of America* serves as a typical example. Dawson owned a mere three shares in the Des Moines Life Insurance Company. He was induced to sell in a transaction where the insider shareholders received \$550,000 for their 552 shares while holders of the remaining 448 shares received less than \$99,600.53

The Iowa Supreme Court used strong moral language to reject a defense based upon the "majority rule" that directors owed no independent fiduciary duty to shareholders. Expressing an understanding of fairness as proportionality, the court declared that "[t]here is something wrong in any rule which will enable a director legally by his own position to obtain for himself alone profits all have won."⁵⁴ Pointing out that no stockholder would want a director who would take advantage of his own office in this way, the court stated that:

The debate as to whether technically a fiduciary relation exists may and doubtless will go on, but a knowledge of the law is not required to enable one to appreciate the moral wrong perpetrated by a corporate officer in profiting by the ignorance of a stockholder by means of knowledge acquired by virtue of his position. ⁵⁵

⁴⁹ See id. at 432–33.

⁵⁰ See id. ("Concealing his identity when procuring the purchase of stock, by his agent, was in itself strong evidence of fraud on the part of the defendant.").

⁵¹ In addition to Dawson v. National Life Ins. Co. of America, 157 N.W. 929, 933 (Iowa 1916), see, e.g., Hotchkiss v. Fischer, 16 P.2d 531, 535 (Kan. 1930); Stewart v. Harris, 77 P. 277, 280 (Kan. 1904); Oliver v. Oliver, 45 S.E. 232, 234 (Ga. 1903). See also Harold R. Smith, Purchase of Shares of a Corporation by a Director from a Shareholder, 19 MICH. L. REV. 698 (1921).

^{52 157} N.W. 929.

⁵³ *Id.* at 931.

⁵⁴ Id. at 933.

⁵⁵ Id.

The minority rule cases, such as *Dawson*, imposed a fiduciary duty that prohibited transactions by insiders in circumstances considered to be unfair, and where knowledge only available to a select few enabled insiders to benefit out of proportion to their ownership interests in the enterprise. This principle sits in tension with the more liberal majority rule, which allowed insiders to profit from their knowledge. The coexistence of these rules illustrated that the common law was undecided as to whether sharp dealing constituted a necessary inducement to encourage entrepreneurs to participate in corporate activities, or whether it instead amounted to an impermissible violation of investors' expectations. ⁵⁶ Despite this unresolved debate, *Goodwin* demonstrates that no early state court extended the prohibition on inside transactions based upon confidential information to the anonymous realm of the stock exchange, even though investors such as Goodwin obviously felt they had been taken advantage of.

B. Federal Beginnings: In re Cady, Roberts & Co.

Although a number of cases were decided at the state level in the years after the Securities Exchange Act of 1934 (the "Exchange Act") was passed, ⁵⁷ and Rule 10b-5⁵⁸ was promulgated in 1942, ⁵⁹ the first federal insider trading action did not take place until *In re Cady, Roberts & Co.* was decided in 1961. ⁶⁰ *Cady, Roberts* represented an aggressive step into the insider trading arena. ⁶¹ While it is ultimately defensible on both moral and policy grounds, its breadth presaged some of the perennial problems of insider trading law: the potential for significant legal indeterminacy, as well as the court's reliance on fairness grounds as the basis for extending the minority rule from the face-to-face context to the anonymous stock exchange. *Cady, Roberts* is significant because it resolved the conflict that arose in the earlier state law cases between incentivizing entrepreneurial activity and protecting investors on fairness grounds. It was also the first decision to apply the minority rule to trading on an exchange.

Cady, Roberts concerned Robert Gintel, a broker at Cady, Roberts & Co. who sold Curtiss-Wright stock for clients as well as for his wife's account during the hour before information about a reduction in the ex-

⁵⁶ See Roberta S. Karmel, Outsider Trading on Confidential Information—A Breach in Search of a Duty, 20 CARDOZO L. REV. 83, 89–90 (1998).

⁵⁷ See, e.g., Taylor v. Wright, 159 P.2d 980 (Cal. Ct. App. 1945); Brophy v. Cities Serv. Co., 70 A.2d 5 (Del. Ch. 1949); Diamond v. Oreamuno, 248 N.E.2d 910 (N.Y. 1969); see generally Ash, supra note 30.

⁵⁸ 15 U.S.C. § 78(j).

⁵⁹ Securities Exchange Act Release No. 34-3230 (May 21, 1942).

⁶⁰ In re Cady, Roberts & Co., 40 S.E.C. 907 (1961).

⁶¹ See generally Donald C. Langevoort, Rereading Cady, Roberts: The Ideology and Practice of Insider Trading Regulation, 99 COLUM. L. REV. 1319 (1999).

pected dividend was made public.62 A representative of the brokerage firm, J. Cheever Cowdin, served as a director of Curtiss-Wright. 63 After 11:00 a.m. on November 25, 1959, Cowdin left a telephone message for Gintel and told him that the dividend had been reduced to \$.375 from the \$.625 paid in the previous three quarters. Due to a delay, the Dow Jones News Ticker Service did not receive this information until 11:45 a.m., and the New York Stock Exchange didn't receive the news until 12:29 p.m.⁶⁴ In the meantime, Gintel had sold 2000 shares for ten accounts at 401/4 at 11:15 a.m. and sold 5000 shares short at 403/8 for eleven accounts at 11:18 a.m. After the reduced dividend was announced, trading in Curtiss-Wright shares was suspended and then resumed at 1:59 p.m. at 36½.65 The share value ranged between 34½ and 37 throughout the rest of the day and closed at 34%.66 Gintel's conduct resulted in a fine of \$3000 from the New York Stock Exchange as well as a twenty-day suspension from the stock exchange levied by the SEC.⁶⁷ While on the surface this punishment appeared light, and one Commissioner dissented in part on these grounds, Commission Chair Cary pointed out that Gintel and Cowdin appeared to have no premeditated plan and that Gintel's actions were a "spontaneous reaction to the dividend news." 68

Chairman Cary's decision to sanction Gintel under Rule 10b-5 relied on two basic legal strategies. First, Cary's decision was rooted in an expansive reading of the applicable legal rule. Second, the decision extended the "minority rule" concerning the duties of corporate insiders to shareholders from the context of face-to-face interactions to the anonymous realm of the stock exchange. After reciting the provisions of Rule 10b-5 of the Exchange Act, Cary stated that "[t]hese anti-fraud provisions are not intended as a specification of particular acts or practices which constitute fraud, but rather are designed to encompass the infinite variety of devices by which undue advantage may be taken of investors and others." Furthermore, they were to extend beyond what was cov-

⁶² Cady, Roberts, 40 S.E.C. at 909.

⁶³ Id. at 909.

⁶⁴ *Id*.

⁶⁵ Id. at 909–10.

⁶⁶ *Id.* at 910.

⁶⁷ *Id.* at 917–18.

⁶⁸ Id. at 917. Because Gintel appeared to act spontaneously upon hearing this advantageous news, he may be seen as one who, like Coach Barry Switzer in SEC v. Switzer, 590 F. Supp. 756 (W.D. Okla. 1984), and Ryan Evans in United States v. Evans, 486 F.3d 315 (7th Cir. 2007), comes across inside information fortuitously and cannot resist taking advantage of it. While the Switzer and Evans cases come to opposite results on the question of whether a tipper must receive a benefit to in order to sustain an insider trading action against a tippee, Gintel's violation would presumably be sustained under the forthcoming Dirks framework because Cowdin was Gintel's business partner and would presumably have benefited from Gintel's actions.

⁶⁹ Id. at 911.

ered by the common law, as they were "broad remedial provisions aimed at reaching misleading or deceptive activities, whether or not they are precisely and technically sufficient to sustain a common law action for fraud and deceit."70 Cary went on to say that while other provisions may have also applied, clearly 10b-5(3), which prohibits "[elngaging in any act, practice or course of business which operates or would operate as a fraud or deceit upon any person" in connection with the sale of a security was implicated by the facts of the case. 71 Of course, as many commentators have noted, it is precisely the sale of a security on a stock exchange that does not appear to involve fraud or deceit, at least in any straightforward way. 72 While Chairman Cary supported his argument by citing legislative history that indicated that Congress intended to prohibit insider trading, 73 one of the hallmark problems of insider trading jurisprudence lies in interpreting the text of both a statute and a rule that are so broadly worded that they afford judges, prosecutors, and regulators incredible discretion in determining their boundaries.⁷⁴

After rejecting a close reading of the statute and dismissing "fine distinctions and rigid classifications,"75 Cary grounded the rule that insiders and others have a duty to either disclose or refrain from trading in "two principle elements":

> [F]irst, the existence of a relationship giving access, directly or indirectly, to information intended to be available only for a corporate purpose and not for the personal benefit of anyone, and second, the inherent unfairness involved where a person takes advantage of such infor-

⁷⁰ *Id.* at 910.

⁷¹ *Id.* at 913.

⁷² See Langevoort, supra note 9 and accompanying text.

⁷³ In re Cady, Roberts & Co., 40 S.E.C. 907, 912, n.15 (1961) (discussion of legislative history); see Securities Exchange Act of 1934, 15 U.S.C. § 78 (1934) (the preamble states that it is an "[a]ct to provide for the regulation of the exchanges and of over-the-counter markets . . . to prevent inequitable and unfair practices on such exchanges and markets"); Steve Thel, The Original Conception of Section 10(b) of the Securities Exchange Act, 42 STAN. L. REV. 385 (1990) (on the legislative history of Section 10(b) generally); see also Nagy, supra note 3, at 1335 n.117 (discussing Congressional intent behind Exchange Act § 20A); Prentice, supra note 3, at 345-46 ("Although Congress has not clearly defined insider trading, it has signaled its strong antipathy for the practice."). Cf. Bainbridge, supra note 11, at 9 ("Careful examination of the relevant legislative history . . . suggests that regulating insider trading was not one of the Exchange Act's original purposes.").

⁷⁴ See Samuel Buell, What Is Securities Fraud?, 61 DUKE L.J. 511, 561–64 (2011) ("Insider Trading"); Pritchard, supra note 19, at 930-45 ("Insider Trading").
⁷⁵ Cady, Roberts, 40 S.E.C. at 912.

mation knowing it is unavailable to those with whom he is dealing.⁷⁶

The first element based the duty to disclose or abstain on insider status or on a connection to an insider. Gintel was a partner in Cady, Roberts & Co. along with Cowdin, who also sat on Curtis-Wright's board. The second element was grounded in the principle of fairness. This element involved the straightforward claim that it was fundamentally unfair for one person to profit from the corporate venture on the basis of nonpublic information. As outlined in Part II of this Article, this reasoning follows from the deeply ingrained characteristic of human moral psychology that individuals feel outrage upon discovering that fellow partners in a group endeavor are receiving more than their rightful proceeds from the activity. 77 While various scholars have criticized the fairness rationale on the grounds that it is "artificial," "amorphous," "subjective," "puerile,"81 or otherwise indeterminate, 82 these criticisms miss the mark. The fairness rationale is grounded in the principle of proportionality, and it can ultimately be as determinate and objective as the pro rata returns that are due to any shareholder or holder of other equity interests in a corporate enterprise.

Cady, Roberts is also important because it is the first case to extend the principle of the minority rule to the realm of anonymous stock trading. In response to Gintel's argument that no express representations were made, Commissioner Cary rejected the proposition that "in a transaction on an exchange there is no further duty such as may be required in a 'face-to-face' transaction." He pointed out that "it would be anomalous indeed" if the prohibition on fraud did not extend to the stock exchanges, which constitute the primary markets for securities transactions. So As long as the investment decisions of purchasers on an

⁷⁶ Id.

⁷⁷ See infra notes 267–70 and accompanying text.

⁷⁸ Henry G. Manne, *Insider Trading and the Law Professors*, 23 VAND. L. REV. 547, 550 (1970).

⁷⁹ Kimberly D. Krawiec, Fairness, Efficiency, and Insider Trading: Deconstructing the Coin of the Realm in the Information Age, 95 Nw. U. L. Rev. 443, 448 (2001).

⁸⁰ Stephen Clark, Insider Trading and Financial Economics: Where Do We Go from Here?, 16 STAN. J.L. BUS. & FIN. 43, 57 (2010).

⁸¹ Henry G. Manne, *Insider Trading: Hayek, Virtual Markets and the Dog that Did Not Bark*, 31 J. CORP. L. 167, 182 n.60 (2005).

⁸² Frank H. Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. REV. 309, 324 (1982) ("I suspect that few people who invoke arguments based on fairness have in mind any particular content for the term.").

⁸³ See Bainbridge, supra note 11, at 12 (Cady, Roberts as a case of first impression).

⁸⁴ Cady, Roberts, 40 S.E.C. at 914.

⁸⁵ Id.

exchange could be affected by the material information known to the insider sellers, insiders were required to disclose or abstain. While the application of the minority rule to the anonymous realm of the stock exchange encountered the legal difficulty that the common law requirements of fraud were not really present, because a buyer or seller there makes no representation for a counterparty to rely on, it was still a logical extension of the fairness principle.

This extension does, however, reveal an important discrepancy in moral psychology. Because we most likely lived in bands of twenty to one hundred fifty individuals in the EEA, human moral intuition is geared towards face-to-face interactions with individuals with whom we have some measure of familiarity.⁸⁷ This means that ordinary conditions of exchange in the EEA were not anonymous, and humans judged the trustworthiness of their partners during social interactions on the basis of their reputations, facial expressions, body language, material interests, et cetera. These interactions and judgments were critical, as they constituted the foundation upon which our material sustenance as well as social standing in the group or tribe depended. Thus, the extension of the minority rule's principle of fairness to the realm of the anonymous exchange reflects both a legal claim and a moral one. Just as the traditional legal requirements for fraud are not technically satisfied in the case of trading on inside information by means of an exchange, our moral intuition finds itself operating out of its ordinary context of face-to-face interactions.

C. The "Equal Access" Rationale of Texas Gulf Sulphur

Building on Commissioner Cary's ruling in *Cady, Roberts* as well as its understanding of the policy basis behind the Exchange Act, the court in *SEC v. Texas Gulf Sulphur Co.* 88 set forth a broad prohibition against trading on any inside information. The court's reasoning was based on the principle of securing equal access to all material "basic facts" concerning the corporate enterprise. While the court expressed its disapproval of insider trading, its rationale was grounded in the principle of equality of access to information. As such, *Texas Gulf Sulphur* represented a turning away from the focus on the moral core of insider trading towards a broader principle of equality. In addition, Judge Waterman's

⁸⁶ Id.

⁸⁷ See Leda Cosmides & John Tooby, Knowing Thyself: The Evolutionary Psychology of Moral Reasoning and Moral Sentiments, in Business, Science, AND ETHICS 91, 104 (R.E. Freeman & P. Werhane eds., 2004); Elinor Ostrom, Collective Action and the Evolution of Social Norms, 14 J. Econ. Persp. 137, 140 (2000); Karthik Panchanathan & Robert Boyd, A Tale of Two Defectors: The Importance of Standing for Evolution of Indirect Reciprocity, 224 J. THEORETICAL BIOLOGY 115, 119 (2003).

^{88 401} F.2d 833 (2d Cir. 1968).

⁸⁹ *Id.* at 849.

majority opinion contained a revealing discussion of scienter in the context of Rule 10b-5 that reinforced the notion that culpable intent was not the focus of its understanding of insider trading.⁹⁰

Sitting en banc, the Second Circuit reversed a lower court decision⁹¹ that held that, with two exceptions, the stock purchases made by executives of the Texas Gulf Sulphur Company ("TGS") did not violate Rule 10b-5. TGS conducted a test drill in November 1963 that revealed very rich deposits of copper, zinc, and silver in land to which it possessed mineral rights. The results of the drilling were kept confidential, and not even the TGS board of directors had access to this information. During this period, a group of executives and their tippees increased their shareholdings from 1135 shares and no options to 8235 shares and 12,300 options.⁹² At the beginning of this period on November 8, TGS stock was trading at 173/8. By the time the results were announced on April 16, 1964, it closed at 363/8. By May 15, 1964 it was trading at 581/4.⁹³

Judge Waterman's majority opinion represents a high watermark of the crusade against insider trading. 94 While the decision can be seen as a mere application of the policy previously articulated in Cady, Roberts, the court took the further theoretical step of grounding its policy in equality of information (or parity of information), declaring that Rule 10b-5 "is based in policy on the justifiable expectation of the securities marketplace that all investors trading on impersonal exchanges have relatively equal access to material information."95 While the court clarifies that this policy does not mean that everyone trading in the markets must have the same information (i.e., it does not attempt to enforce complete equality of information, which would indeed be nonsensical), 96 the policy does mean that as a regulatory objective "access to material information" should "be enjoyed equally."97 Insiders had to disclose "basic facts so that outsiders may draw upon their own evaluative expertise in reaching their own investment decisions with knowledge equal to that of insiders."98

The court then looked to the conduct of the defendants and determined that by purchasing TGS stock and options while in possession of confidential information, the profits obtained by the defendants were a

⁹⁰ *Id.* at 854–55 ("[W]hether the case before us is treated solely as a SEC enforcement proceeding or as a private action, proof of a specific intent to defraud is unnecessary.").

⁹¹ SEC v. Texas Gulf Sulphur, 258 F. Supp. 262 (S.D.N.Y. 1966).

⁹² Texas Gulf Sulphur, 401 F.2d at 844.

⁹³ Id at 847

⁹⁴ See Bainbridge, supra note 11, at 12-15.

⁹⁵ Texas Gulf Sulphur, 401 F.2d at 848 (citing William L. Cary, Insider Trading in Stocks, 21 Bus. Law. 1009, 1010 (1966)).

⁹⁶ See infra note 101.

⁹⁷ Texas Gulf Sulphur, 401 F.2d at 849.

⁹⁸ *Id*.

form of "secret corporate compensation . . . derived at the expense of the uninformed investing public." Furthermore, the "insiders here were not trading on an equal footing with the outside investors" and "[s]uch inequities based upon unequal access to knowledge should not be shrugged off as inevitable in our way of life, or, in view of the congressional concern in the area, remain uncorrected." The court therefore held that "all transactions in TGS stock or calls by individuals apprised of the drilling results . . . were made in violation of Rule 10b-5." 101

The maximal stance of *Texas Gulf Sulphur* satisfies our desire for proportionality of results from participants in the corporate enterprise. The phrase "equality of access" should not be read as implying some sort of equality that transcends the type of "fairness" examined in the work of Jonathan Haidt and others, that is, fairness as proportionality. At the same time, "equality of access" does involve an important implicit claim, as did *Cady, Roberts*, that the expectations generated by our moral intuition in the context of the EEA properly apply to trading on anonymous exchanges. This claim is consistent with our assumptions about fairness in undertaking corporate enterprises that shareholders, as investors, will not be placed in an arbitrary and lesser position to those they trust with their capital. **Italiana** Italiana** Texas Gulf Sulphur** applies expectations of openness, honesty, and fair dealing to the economic environment of the stock exchange, a financial technology far removed from the EEA in which our moral intuitions developed.

Finally, in addition to broadening the focus of insider trading law from the individual who allegedly trades on inside information to equal

⁹⁹ *Id.* at 851 (citing William L. Cary, *Corporate Standards and Legal Rules*, 50 CALIF. L. REV. 408, 409–410 (1962)).

¹⁰⁰ Id. at 852.

¹⁰¹ Id. While Texas Gulf Sulphur represents a maximal statement of the prohibition against insider trading, it is nonetheless important to recognize the parameters of its doctrine. First, the "parity of information" standard only applies to disclosure of basic facts. It does not mandate that everyone trading in markets actually have the same understanding of the risks involved—such understandings are the result of the analysis individuals bring to bear on the primary information presented to them. Indeed, an extension of the parity of information standard to all knowledge held by market actors would be nonsensical. While the theoretical basis of the result in Texas Gulf Sulphur is maximal, practically speaking its holding follows from Cady, Roberts. See also United States v. O'Hagan, 521 U.S. 642, 658 (1997) ("[I]nformational disparity is inevitable in the securities markets "); SEC v. Dorozhko, 606 F. Supp. 2d 321, 331 (S.D.N.Y. 2008) ("Markets flourish on-and at the same time requireinformational disparities.") [hereinafter Dorozhko I]. See also Karmel, supra note 56, at 89 ("[Parity of information] did not mean that all investors should have the same information; rather, they should all enjoy access to the same information.")

¹⁰² See infra notes 262–76 and accompanying text.

¹⁰³ See infra notes 308–10 and accompanying text.

access to information, Texas Gulf Sulphur also set a low bar for the level of scienter required for a Rule 10b-5 violation. Three of the defendants in the case, Coates, Crawford, and Clayton, argued that they believed that information concerning the results of the geological findings would have become public by the time they made their purchase orders. 104 They argued that scattered rumors concerning the ore strike were circulating, that an announcement was to be made in The Northern Miner journal, and that TGS's official announcement would be made before their trades would be placed. 105 The court ruled that it would be unreasonable to believe that this would amount to a full dissemination of the information. 106 The court determined that the defendants' negligence concerning whether the information about the ore strikes would be properly disseminated was enough to qualify as scienter, and that "proof of specific intent to defraud is unnecessary."107 Citing SEC v. Capital Gains Research Bureau, 108 the court stated that "[a]bsent any clear indication of a legislative intention to require a showing of fraudulent intent . . . the securities laws should be interpreted as an expansion of the common law both to effectuate the broad remedial design of Congress . . . and to ensure uniformity of enforcement." ¹⁰⁹ By lowering the level of culpable intent required from the high standard of common law fraud to mere negligence, the decision of the Texas Gulf Sulphur court cast a wide net.

D. Chiarella and Dirks: Retrenchment Through the Fiduciary Duty Requirement

Chiarella and Dirks represent both the first Supreme Court cases in the modern era to tackle insider trading, as well as a significant retrenchment in insider trading law. Authored by Justice Lewis Powell, these decisions undercut the expansive sweep of the Texas Gulf Sulphur "disclose or abstain" rule by grounding insider trading violations not in a policy of equal access to information but in the common law roots of insider trading doctrine based on the fiduciary duty of corporate insiders to shareholders. In short, in the framework of Chiarella and Dirks, there cannot be an insider trading violation under Rule 10b-5 without the violation of a fiduciary duty by an insider. 110

Because Justice Powell's decisions radically restricted the sweep of the federal insider trading prohibition, they could perhaps be thought to neglect the full extent of the moral concerns that animate insider trading law. While there is a measure of truth to this, they must simultaneously

¹⁰⁴ Texas Gulf Sulphur, 401 F.2d at 855–56.

¹⁰⁵ Id. at 856.

¹⁰⁶ *Id*.

¹⁰⁷ Id. at 854.

¹⁰⁸ 375 U.S. 180, 195 (1963).

¹⁰⁹ Texas Gulf Sulphur, 401 F.2d at 855.

¹¹⁰ That is, until the Second Circuit's decision in SEC v. Dorozhko, 574 F.3d 42 (2d Cir. 2009) [hereinafter *Dorozhko II*].

be understood as furthering values which themselves have a strong public policy justification. He first, the rulings do cover what Green and Kugler's survey data indicate is the traditional "moral core" of insider trading, that is, the abuse of positions of trust by powerful corporate insiders. Many of the most important abuses will be captured under the fiduciary duty—based proscription of *Chiarella* and *Dirks*. Furthermore, the fiduciary duty framework leaves open the path to misappropriation, which will encompass other important abuses outside the purview of the classical theory. Finally, important higher-order principles that are themselves grounded in positions with a moral component animate Justice Powell's framework. Foremost among these is respect for the rule of law. There is also the need to strike a balance between zealous enforcement of the law, on the one hand, and trust in the moral culture of American businesspersons and respect for their autonomy on the other.

Chiarella involved the insider trading conviction of Vincent Chiarella, who worked as a "mark-up man" for the Pandick Press in New York City. Pandick printed financial documents for acquirors in takeover battles, and while the names of the would-be acquirors were redacted, Chiarella was able to deduce their identities through other information supplied. Chiarella used this information to purchase shares in the target companies in such transactions before the names of the companies were made public, and ultimately made "slightly more than \$30,000 in the course of 14 months." The SEC uncovered Chiarella's trading activity, and he agreed to return his profits to the sellers. The SEC also charged him with seventeen counts of violating Section 10(b) of the Exchange Act and Rule 10b-5. The Second Circuit affirmed his conviction and he appealed to the Supreme Court.

Justice Powell framed the question before the Court as whether "a person who learns from the confidential documents of one corporation that it is planning an attempt to secure control of a second corporation violates § 10(b) of the Exchange Act if he fails to disclose the impending takeover before trading in the target company's securities." The decision first looked to the text of the statute and then to its legislative history. Given the fact that neither Section 10(b) nor Rule 10b-5 explicitly mentioned insider trading, the statute was not of much help to the Court in conducting its analysis. Neither was the legislative history of the Exchange Act, which only mentioned insider trading once and in a context

¹¹¹ See generally A.C. Pritchard, United States v. O'Hagan: Agency Law and Justice Powell's Legacy for the Law of Insider Trading, 78 B.U. L. REV. 13 (1998).

¹¹² See infra note 331 and accompanying text.

¹¹³ See Pritchard, supra note 19, at 932–34.

¹¹⁴ See Pritchard, supra note 19, at 936 n.585, 947.

¹¹⁵ Chiarella v. United States, 445 U.S. 222, 224 (1980).

¹¹⁶ Id. at 224.

that is arguably directed towards other forms of securities manipulation. 117 Powell concluded that "neither the legislative history nor the statute itself affords specific guidance for the resolution of this case." 118

Powell next turned to the common law, which formed the keystone of his fiduciary duty framework. At common law, "misrepresentation made for the purpose of inducing reliance upon the false statement is fraudulent." Misrepresentation through mere silence is only fraudulent, however, when "one who fails to disclose material information prior to the consummation of a transaction . . . is under a duty to do so." Adopting this position constituted a return to the minority rule, where a corporate insider had a duty to disclose material information to shareholders before engaging them in transactions (with the difference that *Chiarella* concerned exchange transactions). While Powell's intuition had much to recommend it, given the deep conceptual problems with building a law of insider trading upon such open-ended statutory language and virtually nonexistent legislative history, it was open to criticism from skeptics and proponents alike of a broad federal insider trading law.

From the side of Powell's critics, there was the question of whether his use of precedent was sound. Powell began with the common law principle that silence was only fraudulent when combined with a duty to speak, which arose when there was information that one party had a right to know "because of a fiduciary or other similar relation of trust and confidence" 123 between the parties. As Professor Bainbridge points out, though, this principle existed only in the context of face-to-face transactions. 124 Powell's use of the principle in the context of market transactions therefore represented the transposition of a common law rule into a much different context, which complicates the status of the law under Rule 10b-5 as a body of federal common law. But more importantly. Powell applied a principle that in its common law context was obviously associated with deceit, where one individual relied on another in a faceto-face context, often concerning investment in a close corporation, to a context where the traditional indicia of deceit are lacking. Given the anonymity of a stock exchange, any one individual's transaction is randomly matched with her counterparty's in a random manner. There may be good reasons to prohibit insider trading, but as critics have noted, it is

¹¹⁷ See supra note 73.

¹¹⁸ Chiarella, 445 U.S. at 226.

¹¹⁹ Id. at 227-28.

¹²⁰ Id. at 228.

¹²¹ See supra notes 51–55 and accompanying text.

¹²² See Pritchard, supra note 111, at 22, 26.

¹²³ Chiarella, 445 U.S. at 228.

¹²⁴ See Bainbridge, supra note 11, at 6; Pritchard, supra note 111, at 22-26.

difficult to understand insider trading as fraud in a conventional sense when it occurs on today's modern exchanges. 125

Justice Powell's interpretation of the Restatement (Second) of Torts Section 551(2)(a) is likewise criticized by those who espouse a broad insider trading rule. ¹²⁶ In his reading of the Restatement, Powell neglected the other four exceptions to the principle that silence does not constitute misrepresentation, and instead only focused on the first exception that dealt with a fiduciary duty or with "other similar relation of trust and confidence." Justice Blackmun, joined by Justice Marshall, called attention to Powell's limited analysis in his dissent. ¹²⁷ Professor Nagy has similarly highlighted the narrow reading of the Restatement. ¹²⁸ The final exception in the Restatement is that a knowledgeable party must disclose

facts basic to the transaction, if he knows that the other is about to enter into it under a mistake as to them, and that the other, because of the relationship between them, the customs of the trade or other objective circumstances, would reasonably expect a disclosure of those facts. 129

This duty could conceivably cover trading on a stock exchange. While we might think that basing an insider trading proscription on this principle involves its application to a context far different than the one it developed in, the Restatement's exception explicitly encompasses "customs of the trade" and other circumstances where one "would reasonably expect a disclosure of those facts." If we then expect that individuals transacting on stock exchanges are not trading on inside information—something that we would certainly hope for, given the beliefs discussed in Parts II and III below, whether or not we could really expect it—this exception could extend to insider trading, as Justice Blackmun argued.

Next, *Dirks v. SEC* extended *Chiarella*'s fiduciary duty-based framework to tippees. ¹³⁰ Raymond Dirks was a securities analyst who learned of significant accounting fraud at Equity Funding of America, a large insurance company. ¹³¹ During the two-week course of his investigation, he discussed his findings with several institutional clients as well as with a *Wall Street Journal* reporter. While the newspaper declined to publish a story on Equity Funding during this period, some of the institutions and investors to whom he talked sold their holdings as the share

¹²⁵ See supra note 9 and accompanying text.

¹²⁶ This line of criticism begins with Justice Blackmun's dissent; see Chiarella, 445 U.S. at 247–49. See also Nagy, supra note 3, at 1325–26; Pritchard, supra note 111, at 18–19.

¹²⁷ Chiarella, 445 U.S. at 248.

¹²⁸ See Nagy, supra note 3, at 1325–26.

¹²⁹ RESTATEMENT (SECOND) OF TORTS § 551(2)(e) (1977).

¹³⁰ Dirks v. SEC, 463 U.S. 646 (1983).

¹³¹ Id. at 648-49.

price fell from \$26 to \$15.132 Dirks was censured by the SEC for aiding and abetting violations of Section 10(b) of the Exchange Act. 133

Dirks confirmed that tippees can be subject to insider trading liability just as insiders could, but only in the event that the tippee has inherited a fiduciary duty to the shareholders from the tipper. The decision therefore steered a middle course between a return to the broad liability of Cady, Roberts and Texas Gulf Sulphur and a narrow view of liability that would end with direct insiders. The Court stated that "the tippee's duty to disclose or abstain is derivative from that of the insider's duty," and that:

[A] tippee assumes a fiduciary duty to the shareholders of the corporation not to trade on material nonpublic information only when the insider has breached his fiduciary duty to shareholders by disclosing the information to the tippee, and the tippee knows or should know that there has been a breach. 136

In addition, the test of tippee liability is "whether the insider personally will benefit, directly or indirectly, from his disclosure." In this way, tippee liability falls under the "traditional" or "classical" insider trading theory and is directly dependent on whether an insider violates a fiduciary duty.

Justice Powell was careful to note that while the fiduciary duty framework was of limited extent, this should not imply a blanket approval of trading on inside information that fell outside its reach. Echoing the language of *Goodwin v. Agassiz*, footnote twenty-one of *Dirks* emphasized that there may be circumstances where trading on inside information is permissible under law, but such conduct may simultaneously amount to "behavior that may fall below ethical standards of conduct." Citing the SEC's *Report of Special Studies of Securities Markets*, ¹³⁹ Justice Powell stated that "in a statutory area of the law such as securities regulation, where legal principles of general application must be applied, there may be 'significant distinctions between actual legal obligations and ethical ideals." ¹⁴⁰

¹³² Id. at 650.

¹³³ Id. at 650-52.

¹³⁴ "In determining whether a tippee is under an obligation to disclose or abstain, it is thus necessary to determine whether the insider's 'tip' constituted a breach of the insider's fiduciary duty." *Id.* at 661.

¹³⁵ *Id.* at 659.

¹³⁶ Id. at 660.

¹³⁷ Id. at 662.

¹³⁸ Id. at 661 n.21.

¹³⁹ SEC REP. OF SPECIAL STUDIES OF SEC. MKTS, H.R. DOC. NO. 95-88, pt. 1, at 237–38 (1963).

¹⁴⁰ Dirks, 463 U.S. at 661.

The distinction between what law requires and what morality requires was important to Justice Powell's reshaping of the law of insider trading because it reflected his understanding of business practice and the role the law should play in policing it. As Professor Pritchard explains, Powell believed that American businesspersons generally conducted themselves ethically, ¹⁴¹ and that overreaching by the SEC and government prosecutors was a real danger to the free conduct of corporate activity. ¹⁴² The fiduciary framework therefore prohibits the most egregious forms of insider trading—which Justice Powell believed were shameful—while allowing for legitimate business conduct, particularly that of securities analysts, as well as preventing prosecutorial overreach.

E. Re-Expansion Through Misappropriation: O'Hagan

United States v. O'Hagan¹⁴³ continued the expansion of insider trading law that began in Dirks. O'Hagan's expansion however took place on a significantly different conceptual basis than that of Chiarella and Dirks, while at the same time purporting to remain within Justice Powell's fiduciary duty framework. Although the primary importance of O'Hagan lay in its expansion of insider trading prosecutions out from their core to less typical but still morally objectionable peripheral cases, it was still open to serious criticism of legal incoherence. As Professor Bainbridge notes, it stretched the fiduciary duty framework "to its breaking point." 144

It appears that O'Hagan represents more of a formalistic attempt to stay within Powell's framework than it does a well thought-out jurisprudence of insider trading. Although the Court reached the right result by extending insider trading to a category of individuals deserving of liability, it did so for reasons that are unclear. The outcome in O'Hagan satisfies our moral intuition while creating problems at the level of the

¹⁴¹ See Pritchard, supra note 19, at 947 ("Powell's nearly forty years of experience in corporate boardrooms led him to trust the character of the average American businessman.").

¹⁴² Id. at 936 n.585.

¹⁴³ 521 U.S. 642 (1997).

¹⁴⁴ Bainbridge, *supra* note 3, at 87.

¹⁴⁵ For criticism of O'Hagan, see id. at 84–85 (Ginsburg's approach is "difficult to square with the basic premises of securities regulation"); Karmel, supra note 56, at 94 (O'Hagan as offering no theoretical justification for insider trading law other than it promotes confidence in markets); Nagy, supra note 3, at 1335 (the opinion never explains why misappropriation theory is limited to those who have breached a fiduciary duty); Park, supra note 3, at 370 ("O'Hagan is unclear with respect to the source and scope of this duty of non-deception."); Saikrishna Prakash, Our Dysfunctional Insider Trading Regime, 99 COLUM. L. REV. 1491, 1506 (1999) (describing O'Hagan as a "pyrrhic" victory for the SEC). But see Randall W. Quinn, The Misappropriation Theory of Insider Trading in the Supreme Court: A (Brief) Response to the (Many) Critics of United States v. O'Hagan, 8 FORDHAM. J. CORP. & FIN. L. 865 (2003).

law itself, ultimately adding to the conceptual problems associated with insider trading law instead of resolving them.

James O'Hagan was a partner in the Minneapolis law firm of Dorsey & Whitney, which was engaged to represent Grand Metropolitan in a tender offer for shares of the Pillsbury Corporation. 146 In order to cover his illegal withdrawals of funds from client accounts, O'Hagan used confidential information to purchase options and shares in Pillsbury that he gleaned from sneaking into his partners' offices. 147 In the end, O'Hagan netted \$4.3 million from his insider trading activity. 148 He was convicted on all Rule 10(b) counts at trial, but the Eighth Circuit later reversed¹⁴⁹ when it rejected the SEC's misappropriation theory, as the Fourth Circuit had done in United States v. Bryan. 150 The Supreme Court subsequently reversed the Eighth Circuit. Justice Ginsburg determined that misappropriating information met the requirement of a "deceptive device" just as much as trading on inside information did in "traditional" or "classical" insider trading. First, misappropriation "defrauds the principal of the exclusive use" of the information just as an insider defrauds a shareholder of the use of confidential information in traditional insider trading. 151 The misappropriation theory substitutes the deception of those who entrusted the insider with information in the traditional theory for the deception of a purchaser or seller by a company insider. 152 Next, Justice Ginsburg found that misappropriation met the requirement that the deception occur "in connection with the purchase or sale of a security" because the insider gained an advantage in the marketplace through his deception. 153 In this way, both elements of a Rule 10(b) violation are met when trading occurs on the basis of misappropriated information.

O'Hagan is primarily important because it extends coverage of the law of insider trading out from core cases to those on the periphery. Although the insiders of the traditional theory constitute the "moral core" of insider trading, misappropriators are also important, as courts and commentators recognized. ¹⁵⁴ In terms of evolutionary psychology, there may

¹⁴⁶ O'Hagan, 521 U.S. at 647.

¹⁴⁷ See Prentice, supra note 3, at 350.

¹⁴⁸ O'Hagan, 521 U.S. at 648.

¹⁴⁹ United States v. O'Hagan, 92 F.3d 612 (8th Cir. 1996).

¹⁵⁰ 58 F.3d 933 (4th Cir. 1995).

¹⁵¹ O'Hagan, 521 U.S. at 652.

¹⁵² *Id*.

¹⁵³ *Id.* at 656.

¹⁵⁴ Misappropriation had been recognized by courts prior to O'Hagan in SEC v. Cherif, 933 F.2d 403 (7th Cir. 1991); SEC v. Clark, 915 F.2d 439 (9th Cir. 1990); United States v. Carpenter, 791 F.2d 1024 (2d Cir. 1986), aff'd on other grounds, 484 U.S. 19 (1987); Rothberg v. Rosenbloom, 771 F.2d 818 (3d Cir. 1985); SEC v. Materia, 745 F.2d 197 (2d Cir. 1984); United States v. Newman, 664 F.2d 12 (2d Cir. 1981). The misappropriation theory had been rejected by the Fourth Circuit in United States v. Bryan, 58 F.3d 933 (4th Cir. 1995) and by the Eighth Circuit in United States v. O'Hagan, 92 F.3d 612 (8th Cir. 1996).

be some difference between a company vice president who trades on inside information and a lawyer like O'Hagan, who comes across such information in the course of his partners' representation of the firm, but not much. Both players have access through their powerful positions to confidential information, and survey results demonstrate that our level of disapproval of these actors is about the same. While misappropriation is not the most common or oldest type of insider trading, it is nearly as objectionable. The difference between the "core" and the "periphery" of insider trading law then refers more to its historical genesis than to the intrinsic moral significance of different forms of insider trading. By extending the insider trading proscription to the periphery, O'Hagan advances the moral objectives of the law.

O'Hagan's second legacy followed from its muddy conceptual basis. The law of insider trading began as state corporate law. Under the "minority rule," insiders were prohibited from trading with shareholders on the basis of inside information because to do so would violate the duty of loyalty. The fiduciary duty framework of Chiarella and Dirks made sense as a federalized, modern version of the minority rule, but the framework does not provide for an analogous duty of loyalty or other fiduciary duty between someone possessing confidential information and a misappropriator. While O'Hagan explained that a misappropriator "defrauds the principal of the exclusive use of that information," such actions may be better understood as examples of violations of fraud-on-the-market generally, or property rights, not of state law fiduciary duties existing between principals and agents.

To state unequivocally that O'Hagan reached the "right result for the wrong reason" ignores the benefits of conceptual clarity. In the decade and a half since O'Hagan, courts have begun to discard the fiduciary duty framework laid out in Chiarella and Dirks and affirmed in O'Hagan because of the framework's legal unsuitability in reaching other morally distasteful types of insider trading. Although the Supreme Court has seemingly approved the lower courts' approaches through its silence, the Court's inaction has led to a circuit split¹⁵⁸ and to the inabil-

Commentators advocating recognition of misappropriation prior to the O'Hagan decision include Brudney, supra note 12, at 354; Donald C. Langevoort, Insider Trading and the Fiduciary Principle: A Post-Chiarella Restatement, 70 CALIF. L. REV. 1, 48–49 (1982). Cf. Lawrence E. Mitchell, The Jurisprudence of the Misappropriation Theory and the New Insider Trading Legislation: From Fairness to Efficiency and Back, 52 ALB. L. REV. 775, 781 (1988) (misappropriation theory as braiding together the "effect" and "conduct" approaches to insider trading law, with the possibility of incoherence resulting).

¹⁵⁵ See infra notes 328–29 and accompanying text.

¹⁵⁶ See supra notes 51–55 and accompanying text.

¹⁵⁷ O'Hagan, 521 U.S. at 652.

¹⁵⁸ The circuits are currently split on the issue of "possession versus use" of inside information, with the Second Circuit following its early determination that trading while in possession of inside information will suffice for an insider

ity of market participants and lawyers to know exactly what the law is. Rule of law depends on clarity of the law, and the current state of insider trading law fails to advance this important societal interest.

F. Abandoning the Fiduciary Duty Framework

Since O'Hagan, lower courts have continued to expand insider trading law beyond the narrow confines of the classical theory. Until the Second Circuit's *Dorozhko* decision, they had done so in ways that were in significant tension or even implicit contradiction with the fiduciary duty framework, but without openly qualifying or flouting that basis for insider trading law. The array of post-O'Hagan cases shows the law grappling with various types of peripheral insider trading, usually but not always expanding its reach, but at a significant cost to the law's internal coherence. ¹⁵⁹ The following section surveys recent decisions that govern the "brazen fiduciary," tippee liability where there is no benefit to the tipper, the "possession versus use" debate, and misappropriation through computer hacking.

In order to sustain the notion that the deception of a fiduciary amounts to a "deceptive device," 160 the O'Hagan Court stated that in

trading conviction and with other circuits holding that prosecutors must establish use of such information. *Compare* United States v. Teicher, 987 F.2d 112, 120–21 (2d Cir. 1993), *and* United States v. Royer, 549 F.3d 886, 899 (2d Cir. 2008), *with* SEC v. Adler, 137 F.3d 1325 (11th Cir. 1998), *and* United States v. Smith, 155 F.3d 1051 (9th Cir. 1998), *cert. denied*, 525 U.S. 1071 (1999).

159 As this Article was going to press, the Second Circuit issued its important and controversial decision in United States v. Newman, 773 F.3d 438, 2014 U.S. App. LEXIS 23190 (2d Cir. 2014). Todd Newman and codefendant Anthony Chaisson were fourth degree tippees from the corporate insiders disclosing confidential information in one alleged instance of insider trading, and third and fourth degree tippees, respectively, in another. The Second Circuit determined that the instructions given to the jury at trial were erroneous, as they did not require the prosecution to demonstrate that "the tippee knew that an insider disclosed confidential information and that he did so in exchange for a personal benefit." 2014 U.S. App. LEXIS 23190, at *4. Relying on Dirks v. SEC, 463 U.S. 646 (1983), the Newman court concluded "that a tippee's knowledge of the insider's breach necessarily requires knowledge that the insider disclosed confidential information in exchange for personal benefit." Id. at *22. Newman is significant because it limits the reach of prosecutors to cases where they can demonstrate that tippees know or should have known of a benefit to their tippers. It also provides another wrinkle in the complex fabric of insider trading law decisions.

160 The O'Hagan Court also adopted this line of reasoning so as to square the decision with Santa Fe Industries, Inc. v. Green, 430 U.S. 462 (1977). In Santa Fe Industries, the Court found that the complaint failed to allege a "material misrepresentation or material failure to disclose," 430 U.S. at 474, and therefore that a fraud charge under Section 10(b) was inappropriate. See O'Hagan, 521 U.S. at 655.

cases falling under the misappropriation theory, "if the fiduciary discloses to the source that he plans to trade on the nonpublic information, there is no 'deceptive device' and thus no § 10(b) violation." This logical extension of the fiduciary duty principle gives rise to the problem of the "brazen fiduciary," one who intentionally discloses to the source of confidential information her intention to trade on such information. 162 SEC v. Rocklage 163 involved just such a defendant. Mrs. Patricia Rocklage was married to the CEO of biotech firm Cubist Pharmaceuticals. 164 Her husband was in the habit of informing her about important corporate events, and on December 31, 2001, he confided in her news of disappointing results in recent drug trials. 165 Unbeknownst to him, Mrs. Rocklage had a preexisting plan with her brother, William Beaver, to inform him of significant corporate news regarding her husband's company. 166 When Mr. Rocklage apprised his wife of the disappointing drug trials, she told him that she would be informing her brother. 167 Despite her husband's protests, she went ahead and did so. 168

In affirming the district court's conviction of Mrs. Rocklage and Mr. Beaver, the First Circuit made a conceptual separation between her original, deceptive acquisition of the information concerning Cubist's stock price and the deceptive trading she enabled through tipping her brother. Distinguishing this case from that of James O'Hagan, 170 the court reasoned that the disclosure immediately prior to her tip to her brother did not negate the original deceptive acquisition of information. On this basis, then, Mrs. Rocklage's original acquisition of information qualified as a deceptive device used in connection with a securities transaction.

Rocklage illustrates a court engaging in contrived reasoning in order to sustain a conviction of a defendant that engaged in seriously objec-

¹⁶¹ O'Hagan, 521 U.S. at 655.

¹⁶² See generally Nagy, supra note 3, at 1344 ("Liability for the Brazen Fiduciary").

¹⁶³ 470 F.3d 1 (1st Cir. 2006).

¹⁶⁴ *Id.* at 3.

¹⁶⁵ *Id*.

¹⁶⁶ *Id.* at 4.

¹⁶⁷ Id.

¹⁶⁸ *Id*.

¹⁶⁹ Id. at 8.

¹⁷⁰ Professor Nagy notes that the *Rocklage* court appeared to interpret the facts of *O'Hagan* incorrectly. Nagy, *supra* note 3, at 1346. The *Rocklage* court assumed that O'Hagan was entrusted with the information concerning the tender offer of Grand Metropolitan for Nabisco by his law firm, whereas he actually uncovered this information by rifling through the desks of his colleagues. *See* Prentice, *supra* note 3, at 350.

¹⁷¹ Rocklage, 470 F.3d at 12–13.

tionable conduct. ¹⁷² Most importantly, the case exhibits a court's disregard of the *O'Hagan* principle that if a fiduciary discloses her intent to trade to the source of the nonpublic information, such actions cannot be deemed a deceptive device under Section 10(b). ¹⁷³ The *Rocklage* court extended liability to a type of misappropriator we instinctively feel acted improperly, but who had met the stated requirement of disclosure that should have made such actions nondeceptive under the governing fiduciary duty framework. *Rocklage* is therefore an important step towards the outer limit of insider trading liability.

Next, in *United States v. Evans*, ¹⁷⁴ an appellate court extended liability to a tippee arguably in violation of the fiduciary duty framework. ¹⁷⁵ Ryan Evans's former college friend, Paul Gianamore, was an investment banking associate at Credit Suisse First Boston. ¹⁷⁶ At their first trial, information was presented to the jury suggesting that Gianamore spoke frequently and in detail with friends about the transactions he was working on. ¹⁷⁷ Evans made approximately \$462,000 trading on information related to four separate transactions that Gianamore worked on, ¹⁷⁸ but there was no indication that Gianamore benefitted in any way from the trading. ¹⁷⁹ The jury at their first trial acquitted both men of conspiracy charges. ¹⁸⁰ The jury also acquitted Gianamore of securities fraud but was deadlocked on the question of whether Evans committed securities fraud. ¹⁸¹ The Seventh Circuit rejected this argument as a matter of law

¹⁷² The closest scenario to *Rocklage* in Green & Kugler's work is their comparison of tipper and tippee liability in Study 2. See Stuart P. Green & Matthew B. Kugler, When is it Wrong to Trade Stocks on the Basis of Non-Public Information? Public Views of the Morality of Insider Trading, 39 FORDHAM URB. L.J. 445, 469–72 (2011). In Pair 3, they ask respondents to gauge the wrongfulness of an executive who tips his brother in order to impress him. Id. at 472. Respondents give the executive doing the tipping a blameworthiness rating of 5.10, while the brother tipped receives a blameworthiness rating of 4.78. Id. at 475. Neither exactly corresponds to Mrs. Rocklage, who is a family member receiving a tip who then tips another family member, but both estimations of blameworthiness in Study 2 Pair 3 are rather high on the 7-point scale they use.

¹⁷³ See Kim, supra note 22, at 945 ("[T]he court all but eviscerated the fraud requirement."); Nagy, supra note 3, at 1344–46.

¹⁷⁴ 486 F.3d 315 (7th Cir. 2007).

¹⁷⁵ See also United States v. Gansman, 657 F.3d 85, 94 (2d Cir. 2011) (defendant entitled to present jury instruction explaining tipper may not be liable even though tippee is); United States v. Corbin, 729 F. Supp. 2d 607, 609–10 (S.D.N.Y. 2011) (wife discussed confidential information with husband who then tipped another); SEC v. Yun, 327 F.3d 1263, 1267–68 (11th Cir. 2003) (wife of corporate officer tips coworker).

¹⁷⁶ Evans, 486 F.3d at 319.

¹⁷⁷ *Id*.

¹⁷⁸ Id. at 319-20.

¹⁷⁹ Id.

¹⁸⁰ Id. at 320.

¹⁸¹ Id. at 318.

and affirmed Evans's conviction. The court cited *United States v. Standefer*¹⁸² for the proposition that the government is not estopped from arguing that a defendant aided and abetted a criminal offense even where the principal is acquitted.¹⁸³ Furthermore, the court reasoned that even though Gianamore did not willfully tip Evans, but rather did so negligently, negligence was sufficient to find Evans guilty as the tippee.¹⁸⁴ As Professor Nagy notes, this ruling violates the fiduciary duty framework of *Chiarella* and *Dirks* in that it allows for tippee liability when the tipper has violated the duty of care, but not the duty of loyalty.¹⁸⁵ It is the duty of loyalty that is at stake in the fiduciary duty framework, not the duty of care, and so the court's decision is in tension with the foundational premises of *Chiarella* and *Dirks*.

The third set of recent cases involves the courts adopting a restrictive approach to insider trading, but in a manner that directly contradicts the fiduciary duty framework. In both SEC v. Adler 186 and United States v. Smith¹⁸⁷ the courts considered the question of whether "mere possession" of material inside information was enough to sustain a conviction for insider trading or whether the government had to demonstrate the actual use of such information. 188 In these cases, the Eleventh and Ninth Circuits respectively held that the government must demonstrate actual use of inside information, that is, a causal connection between the inside information and the trades carried out. The Adler court specified that there was a prima facie inference in favor of use when an insider is aware of material inside information. 189 The possibility however that one could trade while in possession of inside information conflicts with the principle implicit in the fiduciary framework that silence about a material fact while trading with shareholders (or prospective shareholders) itself constitutes deception, and is thus a violation of an insider's fiduciary duty. 190

Given the intrinsic fear that people have of being taken advantage of in group endeavors, ¹⁹¹ the resolution of the "possession versus use" de-

¹⁸² 447 U.S. 10, 25 (1980),

¹⁸³ Evans, 486 F.3d at 322.

¹⁸⁴ *Id.* at 323. *Cf.* SEC v. Obus, 693 F.3d 276, 286 (2d Cir. 2012) (recklessness, though not negligence, on the part of tipper will suffice for insider trading liability).

¹⁸⁵ See Nagy, supra note 3, at 1348.

¹⁸⁶ 137 F.3d 1325 (11th Cir. 1998).

¹⁸⁷ 155 F.3d 1051 (9th Cir. 1998).

¹⁸⁸ See generally Allan Horwich, Possession Versus Use: Is There a Causation Element in the Prohibition on Insider Trading?, 52 Bus. Law. 1235 (1997); Nagy, supra note 3, at 1348–52; Donna M. Nagy, "The Possession vs. Use" Debate in the Context of Securities Trading by Traditional Insiders: Why Silence Can Never Be Golden, 67 U. CIN. L. REV. 1129 (1999).

¹⁸⁹ Adler, 137 F.3d at 1337.

¹⁹⁰ See Nagy, supra note 3, at 1351–52.

¹⁹¹ See infra notes 265–76 and accompanying text.

bate in favor of use runs counter to the general trend of the post-O'Hagan decisions to expand the coverage of insider trading law in accordance with what individuals find naturally suspicious or offensive. Here, the courts require that a causal connection be established in part to avoid making criminal liability turn on a state of mind, as opposed to an actual offense or action. 192 Adler, Smith and the other "possession versus use" cases come down in favor of the legal considerations that govern insider trading cases, even if they are in tension with what evolutionary psychology regards as our psychological proclivities. The current cases that hold that use must be demonstrated to sustain an insider trading charge may therefore be seen as instances of the law restraining our natural psychological suspicion as to the motives of others in the interests of justice.

The final recent significant insider trading case involved an issue previously assumed as settled: whether a computer hacker could be held liable under insider trading law. Because a hacker does not owe a fiduciary duty to those with whom he trades or to the source of his information, hackers were not considered to have violated Section 10(b). In the words of Professor Bainbridge, the Second Circuit's decision in SEC v. Dorozhko in violated an "end run" around the fiduciary duty requirement of Chiarella, O'Hagan, and Zandford. Dorozhko is important not only because it greatly expanded the pool of individuals potentially subject to insider trading law, but also because of its inventive

¹⁹² See Smith, 155 F.3d at 1068 n.25 ("In fact, a knowing-possession standard would, we think, go a long way towards making insider trading a strict liability crime."). The Smith court thus believed that it was important to preserve the requirement that the SEC demonstrate scienter as an element of an insider trading action. Both the Smith and the Adler courts balanced this burden on the government in insider trading cases by establishing that there was a prima facie inference when an individual traded while in possession of inside information because he had done so using such information. Id. at 1069; Adler, 137 F.3d at 1337.

¹⁹³ Dorozhko I, 606 F. Supp. 2d 321, 339–42 (S.D.N.Y. 2008). See, e.g., Nagy, Reframing the Misappropriation Theory of Insider Trading: A Post-O'Hagan Suggestion, 59 OHIO St. L.J. 1223, 1251–56 (1999); Robert A. Prentice, The Internet and Its Challenges for the Future of Insider Trading Regulation, 12 HARV. J.L. & TECH. 263, 296–307 (1999); Joel Seligman, A Mature Synthesis: O'Hagan Resolves "Insider" Trading's Most Vexing Problems, 23 DEL. J. CORP. L. 1, 22 (1998).

¹⁹⁴ Dorozhko II, 574 F.3d 42 (2d Cir. 2009).

¹⁹⁵ See Stephen Bainbridge, The Second Circuit's Egregious Decision in SEC v. Dorozhko, PROFESSORBAINBRIDGE.COM (July 29, 2009), http://www.professorbainbridge.com/professorbainbridgecom/2009/07/the-second-circuits-recent-decision-in-sec-v-dorozhko-available-here-dealt-with-one-of-the-questions-left-open-by-the.html.

¹⁹⁶ SEC v. Zandford, 535 U.S. 813 (2002).

(or alternatively, "shoddy")¹⁹⁷ legal reasoning. At the very least, it highlights the indeterminacy of the law of insider trading. While many have thought that an individual trading on stolen information *should* be liable under Section 10(b), ¹⁹⁸ accomplishing this goal through a debatable reading of complicated case law only adds to the degree of legal uncertainty.

Oleksandr Dorozhko was a Ukrainian national who opened a securities trading account with \$42,500 in early October 2007. ¹⁹⁹ IMS Health was set to announce its third quarter earnings results on October 17 after the close of trading, and Thomson Financial had been hired to assist it with investor relations on the matter. ²⁰⁰ At 2:15 p.m., a hacker accessed the Thomson Financial computer system, and at 2:52 p.m. Dorozhko purchased \$41,670 worth of IMS Health options. ²⁰¹ At 4:33 p.m., IMS Health announced that its third quarter earnings would miss analysts' expectations by twenty-eight percent and its share price fell from \$29.56 to \$21.20 at the beginning of trading the next day. ²⁰² Dorozhko sold his options six minutes after the market opened, netting a profit of \$286,456. ²⁰³ His options amounted to ninety percent of the options purchased on IMS Health stock in the six weeks prior to October 17. ²⁰⁴ Based on this circumstantial evidence, the SEC charged Dorozhko with securities fraud under Section 10(b). ²⁰⁵

Reviewing the controlling precedent of *Chiarella*, *O'Hagan*, and *Zandford*, as well as the rulings of the Fourth Circuit in *United States v. Bryan*²⁰⁶ and the Fifth Circuit in *Regents of University of California v. Credit Suisse First Boston (USA), Inc.*, ²⁰⁷ and scholarly opinion, the district court determined that there could be no securities fraud charge under Section 10(b) because Dorozhko had not breached any fiduciary duty. ²⁰⁸ Judge Buchwald emphasized that the law of insider trading contained "lacunae" ²⁰⁹ and that there were important policy reasons why the law of insider trading required breach of a fiduciary duty. ²¹⁰ In particular, the "deceptive device" element in the law of insider trading re-

¹⁹⁷ See Bainbridge, supra note 195.

¹⁹⁸ Judge Buchwald makes exactly this point in her district court opinion. See Dorozkho I, 606 F. Supp. 2d at 341.

¹⁹⁹ Dorozhko II, 574 F.3d at 44.

²⁰⁰ Id.

²⁰¹ *Id*.

²⁰² Id.

²⁰³ *Id*.

²⁰⁴ *Id*.

²⁰⁵ *Dorozhko II*, 574 F.3d at 44–45.

²⁰⁶ 58 F.3d 933 (4th Cir. 1995).

²⁰⁷ 482 F.3d 372 (5th Cir. 2007).

²⁰⁸ Dorozhko II, 574 F.3d at 343.

²⁰⁹ *Dorozhko I*, 606 F. Supp at 335.

²¹⁰ *Id.* at 342–43.

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quired the breach of a fiduciary duty.²¹¹ Given that Dorozhko had not breached any fiduciary duty and had only stolen information, a Section 10(b) claim was inappropriate.

The Second Circuit reversed. The court first reasoned that the "deceptive" element of a Section 10(b) claim only required the breach of a fiduciary duty where the deception was based on silence. The court declared that "what is sufficient is not always what is necessary, and none of the Supreme Court opinions reviewed by the District Court require a fiduciary relationship as an element of an actionable securities claim under Section 10(b)."212 While logically possible, the court's reasoning flouts the entire basis of insider trading law since Chiarella, when Justice Powell firmly grounded insider trading doctrine in the fiduciary duty of loyalty and not in the broader fraud-on-the-market (or fraud on investors) theory advocated by Chief Justice Burger in his dissent. Given that computer hacking could then be a deceptive device within the meaning of Section 10(b), the court remanded the matter to the district court for further proceedings.

Dorozhko is an important decision on a number of levels. First, it applied the law to the burgeoning world of online trading and did so in a way that satisfied moral intuitions about insider trading.²¹³ In terms of the theme of this Article, Dorozhko is another example of the law of insider trading expanding to cover individuals we feel improperly capture market benefits. The decision also demonstrated that the fiduciary duty framework articulated by Justice Powell is legally incapable of doing what society seems to want insider trading law to do. In attempting to cabin the requirement of a fiduciary duty to instances of fraud based on silence, Dorozhko effectively created a category of fraud by active misrepresentation. In doing so, however, the Second Circuit took an even further step away from the fiduciary duty framework of Chiarella and Dirks without openly announcing a repudiation of that law. 214 Although the Second Circuit does not have the authority to overrule Supreme Court precedent, the Supreme Court has so far signaled its agreement with Dorozhko through acquiescence.

These four areas show the courts grappling with the implications of the fiduciary duty framework in the modern context. With the exception of the "possession versus use" debate, courts are moving to expand the reach of insider trading law. Part II next explains how this expansionary

²¹¹ Id. at 329–30.

²¹² Dorozhko II, 574 F.3d at 49.

²¹³ See, e.g., Prentice, supra note 193, at 299-300 (Justice Ginsburg's opinion, which does not capture theft as misappropriation, as "unsatisfying"). Cf. Kim, supra note 22, at 942 (Dorozhko II as an example of a court succumbing to "the instinct to punish people").

²¹⁴ Cf. Judge Buchwald's statement in Dorozhko I, 606 F. Supp. 2d at 323, that it would be "beyond the purview of this Court" to "eliminate the fiduciary duty requirement" from Section 10(b) jurisprudence.

movement corresponds to what evolutionary psychology shows humans generally desire in social interaction.

II. EVOLUTIONARY PSYCHOLOGY AND SOCIAL EXCHANGE

Evolutionary psychology attempts to explain the basic tendencies of human behavior in terms of evolutionary concepts. In so doing it constructs a general model of human nature that is grounded in the social circumstances of hominid development in the EEA over the course of the past ten million years or so.²¹⁵ Because social exchange is a key feature of life within human communities, evolutionary psychology is deeply relevant to a broad understanding of economics, at the same time that its methodology differs considerably from the economic methodology dominant in recent decades. Instead of beginning with the assumption that the human person is a self-interested, rational individual, that is, homo economicus, evolutionary psychology begins with the recognition of social facts such as altruism, spitefulness, and attention to purity codes, among other things. It then attempts to explain these facts using the central concepts of evolutionary biology. 216 While its conclusions are deeply controversial, it provides a persuasive account of human social life, contributing to our understanding of many important features of human psychology, moral beliefs, and reproductive success and failure.

The relevance of evolutionary psychology to economic issues stems from the embryonic picture it draws of the development of markets and law.²¹⁷ For the problem of insider trading, most important are its treat-

²¹⁵ See Cosmides & Tooby, supra note 8 ("Principle 5: Our moderns skulls house a stone age mind."); Herbert Gintis, Book Review, J. BIOECONOMICS 9:191–99 (2007) (reviewing DAVID J. BULLER, ADAPTING MINDS: EVOLUTIONARY PSYCHOLOGY AND THE PERSISTENT QUEST FOR HUMAN NATURE (2005)) ("[H]uman nature . . . is the product of our species' long evolutionary trajectory").

²¹⁶ Cf. Owen D. Jones, Erin O'Hara O'Connor & Jeffery Evans Stake, Economics, Behavioral Biology, and Law, 19 SUP. CT. ECON. REV. 103, 122–28 (2011) (contrasting the methodologies and goals of economics and biology, respectively).

²¹⁷ See generally Leda Cosmides & John Tooby, Better than Rational: Evolutionary Psychology and the Invisible Hand, 84 Am. ECON. REV. 327, 327–32 (1994); John Tooby, Leda Cosmides & Michael E. Price, Cognitive Adaptations for n-person Exchange: The Evolutionary Roots of Organizational Behavior, 27 MANAGERIAL & DECISION ECON. 103, 103–29 (2006) [hereinafter, Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange]; see also Samuel Bowles & Herbert Gintis, Walrasian Economics in Retrospect, 115 Q. J. ECON. 1411, 1411–39 (2000) (discussing the "behavioral" approach to economics drawing on "biology, psychology, sociology, and experimental economics"); Geoffrey M. Hodgson, The Challenge of Evolutionary Economics, 152 J. INSTITUTIONAL & THEORETICAL ECON. 697, 697–706 (1996); Paul H. Robinson, Robert Kurzban & Owen D. Jones, The Origins of Shared Intuitions of Justice, 60 VAND. L. REV. 1633, 1646–54 (2007) ("The Evolution of Intuitions of Jus-

ment of the psychology of dyadic social exchange, and generalizing from this, what humans perceive as their due when participating in communal activities. Part and parcel of the cognitive machinery of social exchange is our exquisite sensitivity to fears of cheating, that is, that by engaging in free-riding behaviors others may receive more than they deserve from such activities. This Part therefore begins with a review of the problem of altruism, explores how the criticism of the original treatment of altruism leads to a full conception of social exchange and our moral intuitions, and concludes by contrasting the picture of human nature drawn by evolutionary psychology with the rational actor of neoclassical economics.

A. Trivers's The Evolution of Reciprocal Altruism

Robert Trivers's *The Evolution of Reciprocal Altruism* is one of the founding texts of evolutionary psychology. ²¹⁸ Trivers's goal is to provide a formal account of how evolution could favor individuals who displayed a propensity for altruistic behavior, that is, "behavior that benefits another organism, not closely related, while being apparently detrimental to the organism performing the behavior, benefit and detriment being defined in terms of contribution to inclusive fitness." ²¹⁹ Such behavior presents a puzzle to evolutionary theory, ²²⁰ since altruism often puts the individual performing it at risk, thereby potentially reducing its ultimate chances of reproduction. On the other hand, the behavior of various types of animals, particularly humans, provides evidence of consistently altruistic action towards non-kin. Trivers therefore attempts to provide a

tice"); Arthur J. Robson, Evolution and Human Nature, 16 J. ECON. PERSP. 89, 89–106 (2002); Herbert A. Simon, Altruism and Economics, 83 Am. ECON. REV. 156, 156–61 (1993); Ulrich Witt, Evolutionary Concepts in Economics and Biology, 18 E. ECON. J. 405, 405–19 (1992).

²¹⁸ Robert L. Trivers, *The Evolution of Reciprocal Altruism*, 46 Q. REV. BIOLOGY 35 (1971). For journalistic accounts of Trivers's influence, *see* John Horgan, *Why We Lie*, N.Y. TIMES (Dec. 23, 2011), http://www.nytimes.com/2011/12/25/books/review/the-folly-of-fools-by-robert-trivers-book-review.html?pagewanted=all&_r=0; Andrew Brown, *The Kindness of Strangers*, THE GUARDIAN (Aug. 27, 2005), http://www.theguardian.com/books/2005/aug/27/featuresreviews.guardianreview9.

²¹⁹ Trivers, *supra* note 218, at 35.

²²⁰ All genuinely altruistic behavior towards non-kin is prima facie puzzling, because there appears to be no benefit in terms of genetic fitness to risking one's physical well being or sacrificing material interests to unrelated individuals. However, the persuasiveness of Trivers's theory led evolutionary theorists to see reciprocal altruism as "really just long run self-interest." See Herbert Gintis, Samuel Bowles, Robert Boyd & Ernst Fehr, Explaining Altruistic Behavior in Humans, 24 EVOLUTION & HUM. BEHAV. 153, 154 (2003). See also Baily Kuklin, The Nature of Universal Moralities, 75 BROOK. L. REV. 463, 466 (2009).

formal account of how such behavior could be selected for under certain evolutionary conditions.

He begins by considering the case of a drowning man. If the drowning man has a fifty percent chance of dying if not rescued, and the rescuer only a five percent chance of drowning himself, the costs of altruism would be far outweighed by the benefits given certain conditions: if the risk of drowning were so widespread that everyone in the population could expect to be faced with it at some point over the course of their lives, and if individuals would choose to rescue a person who had rescued them, but not if she had not done so earlier. 221 In this stylized world, individuals who fail to act altruistically in the first instance would likely die when at risk of drowning, whereas those who had rescued someone earlier could expect to be saved. Certain biological parameters will increase the likelihood that this result will obtain. Trivers explains that long lifetimes will maximize the chance that individuals will "encounter many altruistic situations," and a low dispersal rate will increase the chance of repeated interactions between individuals, as will mutual interdependence among individuals living in proximity.²²² Furthermore, certain parental-care situations typical of primates could increase this effect, for instance where individuals "are capable of performing an altruistic act for the parents or even another offspring," where there is a relatively flat dominance hierarchy, or where individuals could offer aid to others in combat.²²³

Altruistic behavior can also be understood as a mechanism for overcoming the prisoner's dilemma, where individuals have an incentive to defect in order to reach a potentially higher individual payoff as opposed to taking a chance on their partner to reach a cumulatively superior outcome. Trivers shows that unless the payoff to the defecting player is far greater than the benefit to be achieved by both parties confessing (cooperating), cooperation will occur where the advantages to be gained outweigh "the initial losses to non-altruistic types." Reciprocal altruism can thus be characterized as "symbiosis [with] a time lag," where helping others results in mutual benefit. If our genes control such conduct, under the appropriate circumstances, it should spread within the

²²¹ Trivers, *supra* note 218, at 35–36.

²²² Id. at 37.

²²³ Id. at 38.

²²⁴ *Id.* at 38–39. For the related argument that individuals can overcome social dilemmas through "credible ex ante commitments without relying on external authorities," see Elinor Ostrom, James Walker & Roy Gardner, *Covenants With and Without a Sword*, 86 AM. POL. Sci. Rev. 404, 405 (1992).

²²⁵ Trivers, supra note 218, at 39.

²²⁶ Id. See also Jon Elster, Social Norms and Economic Theory, 3 J. ECON. PERSP. 99, 106 (1989) (social norms as solving "the problem of time inconsistency").

population when individuals dispense altruism by reference to the altruistic tendencies of the recipient.

Moving from the theoretical world to the world of observed behavior, Trivers then argues that we do in fact observe reciprocal altruism in three areas: symbiotic grooming behavior of certain fishes, warning calls among certain birds, and human reciprocal altruism.²²⁷ Many aspects of human psychology are tied to reciprocal altruism but for consideration of our emotional reactions to insider trading, four in particular are important: development of complex self-regulating systems, moralistic aggression, detection of "subtle cheating," and the ability afforded by language to develop rules of exchange in multiparty interactions. ²²⁸ Developmental plasticity is also important. ²²⁹ In addition, the distinction between gross cheating, where a partner utterly fails to reciprocate an altruistic act, and subtle cheating, where a partner merely attempts to reciprocate less than the value of the act originally performed, plays an important role. ²³⁰

Subtle cheating is often evolutionarily adaptive. Conversely, because it will often be difficult to discern when someone is engaged in subtle cheating, human psychology will be finely tuned to detect it. As a result, individuals will be tempted to cheat, and "natural selection will rapidly favor a complex psychological system in each individual regulating both his own altruistic and cheating tendencies and his responses to these tendencies in others." Humans will become sensitive to their responses to cheating, at the same time that they will seek out ways to cheat without being detected themselves. Due to the dangers of cheating, we will develop a mechanism to protect against the exploitation of our initial propensity towards altruism. Trivers refers to this as "moralistic aggression," and we will often react to "injustice, unfairness and lack of reciprocity" in ways that seem "out of all proportion to the offenses committed." 233

Given the complexity of subtle cheating, Trivers argues that natural "[s]election should favor the ability to discern and discriminate against subtle cheaters." We will therefore attempt to connect generosity with the emotional basis for actions; where actions are believed to be due to false or calculating motives, we will distrust the individuals performing them. And finally, due to the difficulty of detecting cheating in multiparty interactions, we will have the propensity to formulate rules of conduct

²²⁷ Trivers, supra note 218, at 39.

²²⁸ Trivers, *supra* note 218, at 48–53.

²²⁹ *Id.* at 53. For the issue of plasticity in connection with moral intuitions concerning insider trading, *see infra* Part III.B.

²³⁰ Trivers, *supra* note 218, at 46.

²³¹ *Id.* at 48.

²³² Id. at 49.

²³³ Id.

²³⁴ Id. at 50.

for such exchanges that will be facilitated by our capacity for language. Cheating will be detected when the rules are violated. In this way, natural selection may provide for the development of law.²³⁵

Trivers revolutionized the evolutionary understanding of human groups by presenting a persuasive and formal case for non-kinship-based altruism, offering a sophisticated account of many behaviors that we observe in both humans and other living beings. In particular, his theory offers the prospect of explaining many observed social and psychological phenomena that seem to run counter to overly simplistic notions of Darwinian theory and the "survival of the fittest." *The Evolution of Reciprocal Altruism* is one of the founding texts of evolutionary psychology and has important applications in psychology, moral theory, economics, and all social sciences that attempt to explain group behavior. For the purposes of analyzing insider trading, the emphasis on cheating and our sensitivity to it is key.

B. Strong Reciprocity, Social Exchange, and Public Goods

While Trivers was instrumental in launching the discipline of evolutionary psychology, his doctrine of reciprocal altruism faced a crucial objection: it relies on the individual's concern for her reputation and the resulting propensity of others to dispense altruistic acts in light of future reputational concerns. Through the mechanism of reputation, reciprocal altruism would appear to be a form of "enlightened self-interest," in the words of Jonathan Haidt. Many evolutionary psychologists think that such a mechanism is too weak to properly account for the cooperation that is actually observed in the social world. Something more is needed.

In particular, Trivers's theory of reciprocal altruism requires that individuals reciprocate because they have an interest in receiving benefits from others in the future. Such reciprocity would occur through the

²³⁵ For an account of the development of law in terms of evolutionary psychology, see Leda Cosmides & John Tooby, *Evolutionary Psychology, Moral Heuristics and the Law*, in HEURISTICS AND THE LAW 175–205 (G. Gigerenzer & C. Engel eds. 2005). *See generally* LAW, BIOLOGY & CULTURE: THE EVOLUTION OF LAW (M. Gruter & P. Bohannan eds., 1983). *See also* Michael D. Guttentag, *Is There A Law Instinct?*, 87 WASH. U. L. REV. 269 (2009).

²³⁶ JONATHAN HAIDT, THE RIGHTEOUS MIND: WHY GOOD PEOPLE ARE DIVIDED BY POLITICS AND RELIGION 206 (Vintage Books 2013).

²³⁷ See, e.g., id. at 207; Ernst Fehr & Urs Fischbacher, Third-party Punishment and Social Norms, 25 EVOLUTION & HUM. BEHAV. 63, 64 (2004); Herbert Gintis, Strong Reciprocity and Human Sociality, 206 J. THEORETICAL BIOLOGY 169, 177 (2000) [hereinafter Gintis, Strong Reciprocity and Human Sociality]; Gintis, Bowles, Boyd & Fehr, supra note 220, at 154 (2003).

maintenance of reputation in small groups,²³⁸ meaning that reputational motives will drive reciprocal altruism. For an individual's reputation to serve as an effective mechanism for altruism, however, the group she is in must be reasonably likely to stay together. As pointed out by Herbert Gintis, though, when groups have the greatest need for reciprocity, in conditions of famine, war, or other crises, they will simultaneously be most prone to dispersal.²³⁹ Therefore, according to the critics, reciprocal altruism alone is unlikely to be strong enough to counter the effects of immediate self-interest in times of crisis. Evolutionary psychologists therefore have proposed and tested further mechanisms to explain the pro-social behaviors that individuals in groups often display. These theories come under the label "strong reciprocity" and rely heavily on the concept of altruistic punishment.

Strong reciprocity goes beyond reciprocal altruism by positing that we have a psychological predisposition not just to discern cheating, but to actively punish it even when it does not directly affect us as individuals. This "taste for punishing free riders" itself operates altruistically, that is, it exacts a net cost on the part of individuals who indulge in it. Economists Ernst Fehr and Simon Gächter offer persuasive experimental evidence for altruistic punishment in *Altruistic Punishment in Humans*. They begin by framing cooperative activity as a public good. Free riders are those who enjoy the benefits of the public good without contributing to its creation and maintenance, or who contribute in amounts less than the benefits they derive. Punishment of free riders thus constitutes a *second-order public good*, one that contributes to the existence of public goods. ²⁴³

Fehr and Gächter recruited 240 students from the University of Zurich to test the existence of altruistic punishment.²⁴⁴ The students joined groups of four members each and were assigned an endowment of twenty money units ("MUs") each.²⁴⁵ While subjects could keep the MUs they did not invest into a common scheme, the group received a return of 1.6, or 0.4 per group member for each MU invested.²⁴⁶ Fehr and Gächter ran two versions of the game, one with a punishment condition and one

²³⁸ See Trivers, supra note 218, at 37 (Condition (2) for an "altruistic situation" is "when a given altruist repeatedly interacts with the same small set of individuals.").

²³⁹ Gintis, Strong Reciprocity and Human Sociality, supra note 237, at 172–73.

²⁴⁰ Cosmides & Tooby, *supra* note 235, at 198.

²⁴¹ Ernst Fehr & Simon Gächter, *Altruistic Punishment in Humans*, 415 NATURE 137 (2002).

²⁴² Id. at 137 ("[T]he punishment of free riders constitutes a second-order public good.").

²⁴³ Id.

²⁴⁴ Id.

²⁴⁵ Id

²⁴⁶ Id.

without.²⁴⁷ In the punishment condition, individuals could pay one MU to punish others for insufficient cooperation, which cost the recipient three MUs.²⁴⁸ In order to rule out reputational effects and reciprocity, the members of each group were anonymous and were changed during each iteration of the game so that group members did not encounter each other more than once.²⁴⁹

The results indicate that despite the cost of inflicting punishment, 84.3% of subjects punished a fellow subject at least once, with 34.3% punishing more than five times during the six iterations and 9.3% more than ten times. ²⁵⁰ Furthermore, the great majority (74.2%) of punishments were inflicted by those making above-average contributions on those who made below-average contributions, and "the more a subject's investment fell short of the average investment of the other three group members, the more the subject was punished."²⁵¹

Fehr and Gächter also found that "[t]he punishment of non-cooperators substantially increased the amount that subjects invested in the public good." Thus, 94.2% of participants made a higher investment in games with the punishment condition than without. Furthermore, while cooperation increased over time in the punishment condition, it tailed off sharply in the non-punishment condition. Thus, 38.9% of participants contributed their whole endowments in the final period of the punishment condition and 77.8% contributed fifteen MUs or more, whereas 58.9% of subjects in the non-punishment game contributed nothing in the final period and 75.6% contributed five MUs or less. In addition, it was not just the possibility of being punished but actual punishment that increased cooperation levels, with subjects who were punished before the sixth period of the game raising their investments by an average of 1.62 MUs. The possibility of the game raising their investments by an average of 1.62 MUs.

Fehr and Gächter's experiment therefore provides convincing evidence for the notion that individuals will "pay to punish," that is, engage in altruistic punishment. Furthermore, it indicates that punishments have very real effects on group behavior: amounts of cooperation remain stable in groups where punishment is operative but fall off in those where it is not. This would presumably lead to group disintegration in many real-world situations. By positing that third parties to interactions will inter-

²⁴⁷ *Id*.

 $^{^{248}}$ Id

²⁴⁹ Id.

²⁵⁰ *Id*.

²⁵¹ Id. at 138.

²⁵² Id.

²⁵³ Id.

²⁵⁴ Id.

²⁵⁵ Id

²⁵⁶ *Id.* As discussed in *infra* Part IV.A, this is commensurate with the findings of Laura Nyantung Beny, *supra* note 10, at 240.

vene at their own expense to ensure their fellow group members do not free ride on group endeavors, the concept of strong reciprocity goes beyond reciprocal altruism and offers a theoretical explanation for the high level of cooperative activity observed in human affairs.

Another important strand of the evolutionary psychology literature explores the psychological ramifications of strong reciprocity. If humans are inclined to punish cheaters, this should mean that according to the model of the human mind espoused by evolutionary psychology, humans have developed heightened sensitivity to detecting free riders or "cheaters." Indeed, Cosmides and Tooby find evidence of this in their studies of the psychology of social exchange.²⁵⁷ Their studies use the Wason selection task paradigm, which tests the reasoning power of subjects by asking them to decide what information is necessary to test the truth of If P, then Q statements.²⁵⁸ In general, individuals do not do well on such tests, even when they have formal training in logical reasoning. 259 When the subject of such questions concerns social exchange, however, success rates increase markedly. 260 Cosmides and Tooby report that "65-80% of subjects" correctly answer questions related to detecting cheaters in social exchanges, suggesting a "pop-out" effect: humans have an ability to detect cheating but not other kinds of subtle rule violations. 261

²⁵⁷ See Cosmides & Tooby, supra note 8 (discussing multiple studies that show high levels of accuracy on Wason selection tasks that ask subjects to detect cheaters in social exchanges); Leda Cosmides & John Tooby, Social Exchange: The Evolutionary Design of a Neurocognitive System, in The COGNITIVE NEUROSCIENCES III 1296–97 (Michael S. Gazzaniga ed., 3d ed. 2004).

²⁵⁸ Cosmides & Tooby, supra note 257, at 1297–98 fig.93.1; see also P.C. Wason & Diana Shapiro, Natural and Contrived Experience in a Reasoning Problem, 23 Q. J. EXPERIMENTAL PSYCH. 63, 63 (1971). Wason and Shapiro found that individuals had a surprisingly difficult time choosing the correct answer to such questions when they were presented abstractly, but the rate of correct responses jumped dramatically when participants were given concrete, experiential context. Id. at 68–69.

Cosmides & Tooby, supra note 8 (citing Patricia W. Cheng et al., Pragmatic Versus Syntactic Approaches to Training Deductive Reasoning, 18
 COGNITIVE PSYCH. 293 (1986) and P.C. Wason & P.N. Johnson-Laird, THE PSYCHOLOGY OF REASONING: STRUCTURE AND CONTENT (1972)).

²⁶¹ Id. Cosmides and Tooby believe that our cheating detection facility is a "neurally isolable subroutine." Cosmides & Tooby, supra note 235, at 196; see also Michael T. McGuire, Moralistic Aggression, Processing Mechanisms, and the Brain: The Biological Foundations of the Sense of Justice, in The Sense OF JUSTICE: BIOLOGICAL FOUNDATIONS OF LAW 31 (Roger D. Masters & Margaret Gruter eds., 1992) (discussing neurotransmitter regulation of mechanisms for social reciprocity); Dominique J.-F. de Quervain et al., The Neural Basis of Altruistic Punishment, 305 SCI. 1254, 1258 (2004) (finding that altruistic punishment is associated with activation of the anterior dorsal striatum, a part of the brain implicated in reward-seeking behavior). Cosmides and Tooby's arguments

In Cognitive Adaptations for n-person Exchange: The Evolutionary Roots of Organizational Behavior, Tooby, Cosmides, and Price present the concept of mental "accounts" in dyadic exchange and monitor the amount of effort individuals put into a relationship versus how much benefit they receive. 262 Dyadic exchange occurs "where two parties deliver benefits to each other, each delivery being made conditional on the other."263 The authors postulate that "[w]hen single exchanges morph into extended series or enduring exchange relationships," the tit-for-tat pattern of occasional interchanges is replaced by an accounting of the "welfare trade-off ratio" experienced by the individuals in the relationship.²⁶⁴ Where one party "incurs high costs in order to deliver benefits to another," the recipient would accrue a debt or obligation in the mind of the one bestowing such benefits. 265 Ordinarily, one would expect that the mental accounts in a freely entered into relationship would be roughly even. If a party expresses indifference, or worse yet cheats in a relationship, the other party will experience "anger and punitive sentiment," with the usual result being a cessation of the relationship or even an attempt at punishment.²⁶⁶

Tooby, Cosmides, and Price believe that the basic intellectual mechanisms that allow for dyadic exchange, such as accounts and concepts like "owe," "debt," "obligation," "exploitation," "cheating," et cetera, pave the way for the more complex interactions of n-party exchanges. ²⁶⁷ By generalizing the formula "I will do x if you do y," to "[f]or individuals 1 through n, I (individual₁) will do x_1 if individual₂ does x_2 and individual₃ does x_3 ..." we enable larger-scale communal endeavors, despite the limiting factors of the difficulty in communicating effectively and of monitoring cheating in complex environments. ²⁶⁸ While cooperation in human groups culminates in the production of public goods, such cooperation can also result in private gain. The same mechanisms involved in simple trade and exchange relationships between individuals give rise to a wide variety of complex partnership and corporate activities, as well as those producing public goods. At heart, most individuals in social situations are "conditional cooperators": willing to partake in communal en-

have given rise to serious criticism. See, e.g., Paul Sheldon Davies, James H. Fetzer & Thomas R. Foster, Logical Reasoning and Domain Specificity, 10 BIOLOGY & PHIL. 1 (1995).

²⁶² Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 108–09. See also McGuire, supra note 261, at 37–38.

²⁶³ Tooby, Cosmides, & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 105.

²⁶⁴ *Id.* at 108.

²⁶⁵ *Id.* at 108, 109.

²⁶⁶ Id. at 109.

 $^{^{267}}$ Id.

²⁶⁸ Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 109.

deavors if they are assured others aren't exploiting their efforts, but cooperating "more when they perceive that co-players are more willing to cooperate . . . and less when they believe that co-players are free riding." As a result, "[h]ow free riding is treated is the central determinant of the survival and health of cooperative organizations." ²⁷⁰

The work of psychologist Jonathan Haidt on moral intuition also sheds light on the psychology of exchange.²⁷¹ Like Gintis, Haidt believes that Trivers's theory of reciprocal altruism lacks a strong enough explanation for the psychological mechanisms at work in sustained group interactions.²⁷² In his theory of moral intuition, Haidt proposes a set of basic "moral modules" that explain our moral feelings: 273 care/harm. fairness/cheating, loyalty/betrayal, authority/subversion. ty/degradation, and liberty/oppression.²⁷⁴ The fairness/cheating module governs our perceptions of group members in social exchange situations. Like Cosmides and Tooby, he believes we have evolved a heightened sensitivity to fairness in social interactions involving group endeavors. For Haidt, fairness is about protecting society from cheaters and slackers, not about ensuring equality of outcomes—a key point to emphasize in market transactions.²⁷⁵ Haidt emphasizes that we have a desire to protect our societies from those who would cause them to unrayel by taking more than their just deserts: "The [f]airness/cheating foundation is about proportionality and the law of karma. It is about making sure that people get what they deserve, and do not get things they do not deserve."276 Like the notion of mental "accounts" that facilitate sustained exchange relationships, proportionality is a way of expressing our basic intuition that individuals are entitled to rewards that reflect the amount of effort, time, or other resources they have put into a project.

Human activities vary however in the rules governing the distribution of benefits. Some resources are divided on a relatively equal, or even communistic, basis while others are not shared at all, or shared strictly with respect to the effort expended in producing them. Studies of hunter-gatherers indicate that plant foods are generally not shared at the group level but are gathered and consumed by individuals and their im-

²⁶⁹ *Id.* at 119. For a similar conception, see generally John R. Hibbing & John R. Alford, *Humans as Wary Cooperators*, 48 AM. J. POL. SCI. 62 (2004).

²⁷⁰ Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 120.

²⁷¹ See generally HAIDT, supra note 236; Jonathan Haidt & Craig Joseph, Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues, DAEDELUS, Fall 2004, at 55; Jonathan Haidt, The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment, 108 PSYCH. REV. 814 (2001) [hereinafter Haidt, The Emotional Dog and Its Rational Tail].

²⁷² HAIDT, *supra* note 236, at 206–07.

²⁷³ *Id.* at 144–46.

²⁷⁴ Haidt & Joseph, *supra* note 271, at 60.

²⁷⁵ HAIDT, *supra* note 236, at 196.

²⁷⁶ Id. at 212.

mediate families.²⁷⁷ When animals are hunted, however, the game harvested is shared among all.²⁷⁸ The explanation Cosmides and Tooby offer is that because plant foraging is relatively predictable, success corresponds to the quality of the effort expended in foraging; hunting, on the other hand, involves a considerable amount of luck.²⁷⁹ Hunting parties that succeed in obtaining meat will share their bounty with all, as other parties may not have encountered animals in the forest through no fault of their own.²⁸⁰ The findings of Cosmides and Tooby and the anthropologists they rely on support a general principle of fairness as proportionality, not equality: to each according to his efforts. Where the context is significantly different, this rule may be modified or suspended, but where results can be gauged relatively accurately according to the effort expended, proportionality reigns as a distributive principle.

Finally, it is important to note that just as the mental faculties that enable reciprocal exchange can give rise to more complex collective actions, collective actions undertaken to pursue nonpublic goods can eventually result in significant public goods. This can occur through explicit group decisions to produce public goods, or, more subtly, as a byproduct of private yet collective action. Public goods are defined as goods that are both nonexcludable and nonrivalrous. It is difficult or impossible to prevent individuals from enjoying or benefitting from them, and such enjoyment or benefit does not result in their diminishment. Classic examples of public goods include national defense, a clean environment, and a stable economy. By monitoring the contributions of individuals to group actions, and attempting to exclude or sanction those who do not contribute in appropriate amounts, societies enable the production of public goods. In addition, the functioning of significant

²⁷⁷ Cosmides & Tooby, *supra* note 235, at 183; *see also* Elizabeth Cashdan, *Hunters and Gatherers: Economic Behavior in Bands*, *in* ECONOMIC ANTHROPOLOGY 21, 27 (Stuart Plattner ed., 1989).

²⁷⁸ Cosmides & Tooby, *supra* note 235, at 183.

²⁷⁹ *Id.* at 184.

²⁸⁰ *Id.* at 185. Cosmides and Tooby report that "[a]mong the Aché of Paraguay, for example, hunters making a good faith effort come back empty-handed four out of ten times." *Id.* at 184–85.

²⁸¹ Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, note that "many groups that may initially emerge to pursue nonpublic goods eventually also produce public goods." *Id.* at 111. In particular, they believe that our membership in groups naturally leads to identification with a group, and that this itself is a public good: "The representations in the minds of observers of the status of a coalition are a common resource that has the properties diagnostic of a public good." *Id.* at 114.

²⁸² See Vincent Ostrom & Elinor Ostrom, *Public Goods and Public Choices*, in POLYCENTRICITY AND LOCAL PUBLIC ECONOMIES 75, 76–79 (Michael D. McGinnis ed., 1999).

²⁸³ See Leda Cosmides & John Tooby, Knowing Thyself: The Evolutionary Psychology of Moral Reasoning and Moral Sentiments, 4 BUS, SCI. & ETHICS

private collective actions gives rise to many public goods, including a sense of orderliness in society and the willingness to cooperate in hierarchical, directed projects. Even pervasive social infrastructure such as the rule of law, the legal system itself, and healthy, stable financial markets can be seen as public goods.²⁸⁴ Their creation is often due to a mix of deliberate political decisions and inadvertent by-products of other collective actions, but as infrastructure they are to a large degree nonexcludable and nonrivalrous. Evolutionary psychology has much to contribute to an explanation of how these features of successful societies are created and sustained.²⁸⁵

In sum, evolutionary psychology presents a picture of the human psyche as intensely concerned with fairness in exchange relations. We possess a faculty of moral intuition that generally frames fairness in terms of proportionality or "just deserts," with the exception of group activities where outcomes for individuals involve a large measure of chance. Furthermore, humans have a natural propensity to police the fairness of benefits individuals derive from group activities, even when they are not directly affected. The phenomena of third-party punishment greatly strengthens social sanctions, including those brought against cheating, making it likely that group norms can emerge and persist as stable social phenomena. ²⁸⁷

A central claim of evolutionary psychology is simply that the moral intuitions supporting social norms lead to increased genic fitness in the EEA on the part of those who possess them.²⁸⁸ Evolutionary psycholo-

^{91, 98–104 (2004);} Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 120 ("How free riding is treated is the central determinant of the survival and health of cooperative organizations.").

²⁸⁴ See Ostrom & Ostrom, supra note 282, at 81 ("The provision of law and order is simply one of many public goods that are important to the welfare of human societies"); Frank Partnoy, Why Markets Crash and What Law Can Do About It, 61 U. PITT. L. REV. 741, 753 (1999) ("[F]inancial stability can be thought of as a public good."). Although commons or "common pool resources" differ in important ways from public goods, see also Kristin N. Johnson, Things Fall Apart: Regulating the Credit Default Swap Commons, 82 U. COLO. L. REV. 167 (2011) (arguing that financial markets can be understood as commons).

²⁸⁵ See, e.g., Robinson, Kurzban & Jones, supra note 217.

²⁸⁶ For an interesting discussion of the concept of "desert" in the law, see GEORGE P. FLETCHER, BASIC CONCEPTS OF LEGAL THOUGHT 95–108 (1996).

²⁸⁷ See Ernst Fehr & Urs Fischbacher, Social Norms and Human Cooperation, 8 TRENDS COGNITIVE SCI. 185 (2004); Ernst Fehr & Urs Fischbacher, Third-party Punishment and Social Norms, supra note 237; Ostrom, supra note 87. On the development of social norms, see generally Richard H. McAdams, The Origin, Development, and Regulation of Norms, 96 MICH. L. REV. 338 (1997).

²⁸⁸ See, e.g., Cosmides & Tooby, supra note 235, at 187 (moral intuitions formed because they promote reproductive success on the part of those holding them).

gists do not conclude that whatever these intuitions prescribe is in fact good, ²⁸⁹ although moral philosophy may reach the conclusion that the content of moral intuitions is in fact good, or largely so. Furthermore, life in the contemporary world will present numerous instances where we naturally attempt to apply these moral intuitions in contexts that bear little or no resemblance to anything we encountered during the course of our evolutionary history.

C. The Human Person According to Evolutionary Psychology Versus the "Rational Actor" of Neoclassical Economics

Evolutionary psychology implicitly contains a definite view of the nature of the human person, and in fact, can be seen as the quest for a definite picture of "human nature."²⁹⁰ Moreover, there is significant tension between the human person according to evolutionary psychology and the "rational actor" or *homo economicus* assumed by neoclassical economics.²⁹¹ In short, evolutionary psychology's person is primarily

²⁸⁹ See Leda Cosmides & John Tooby, Can a General Deontic Logic Capture the Facts of Human Moral Reasoning? How the Mind Interprets Social Exchange Rules and Detects Cheaters, 1 MORAL PSYCHOL. 53, 54–55 (W. Sinnott-Armstrong ed., 2008); Haidt, The Emotional Dog and Its Rational Tail, supra note 271, at 815 (stating that Haidt's social intuitionist model of moral reasoning is descriptive, not normative or prescriptive). Evolutionary psychologists, however, come perilously close to falling into Hume's "is/ought" problem insofar as the fruit of their analyses are the very concepts we use to understand and categorize the moral aspects of behavior; see DAVID HUME, A TREATISE OF HUMAN NATURE 469 (L.A. Selby-Bigge & P.H. Nidditch eds., 2d ed. 1978). For a critique of the approach evolutionary psychology takes to analyzing morality, see John F. Kihlstrom, Threats to Reason in Moral Judgment, 15 HEDGEHOG REV. 8 (2013).

²⁹⁰ See Leda Cosmides & John Tooby, Social Exchange: The Evolutionary Design of a Neurocognitive System, in The New Cognitive Neurosciences, III 1295, 1307 (Michael S. Gazzaniga, ed., 2005) ("social contract algorithms are a reliably developing component of a universal human nature, designed by natural selection to produce an evolutionarily stable strategy for conditional helping."); Gintis, supra note 215, at 192 (Evolutionary psychology implies that "there is a human nature, the product of our species' long evolutionary trajectory."); Cosmides & Tooby, supra note 289, at 55 ("[H]uman nature is comprised of programs that were selected for merely because they outreproduced alternative programs in the past.").

²⁹¹ For general discussions of this contrast, see Colin Camerer, Behavioral Economics: Reunifying Psychology and Economics, 96 NAT'L ACAD. SCI. 10575 (1999); Owen D. Jones, Time Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology, 95 Nw. U. L. REV. 1141 (2001); Russell Korobkin, A Multi-Disciplinary Approach to Legal Scholarship: Economics, Behavioral Economics, and Evolutionary Psychology, 41 JURIMETRICS J. 319 (2001); Ostrom, supra note 88, at 139–44 (contrasting the "rational egoist" with the "conditional cooperator" and "willing punisher" needed to explain collective action situations); Tooby, Cosmides & Price, Cognitive

emotional and intensely social, whereas the rational actor of standard economic thought displays a calculating rationality in furtherance of its (apparent) self-interest and acts in an individualistic, not a communitarian, fashion. While there is a substantial body of literature attempting to integrate the understanding of the human person presented by evolutionary psychology into the law, generally coming under the heading "behavioral law and economics,"²⁹² the understanding of the person offered by evolutionary psychology still presents a challenge to traditional economic theory. This is primarily due to methodological issues, but to some degree political ones also play a part.²⁹³

First, the person according to evolutionary psychology is genuinely *altruistic* insofar as she will act in ways that are contrary to her biological—or for that matter, economic—self-interest.²⁹⁴ Trivers begins with the example of an individual who saves a drowning person with the expectation that this action would be reciprocated in the future if the circumstances required it. Trivers characterizes this as "symbiosis [with] a time lag,"²⁹⁵ and Haidt as an example of "enlightened self-interest."²⁹⁶ But as outlined above, the theory of strong reciprocity goes beyond these characterizations to describe a mechanism whereby individuals acting as third parties will expend resources to engage in punishment that is of no direct benefit to them. Such punishment appears to be psychologically gratifying, but in an economic or a biological sense it is of no benefit to them as individuals; any non-psychical, material benefit that may accrue

Adaptations for n-person Exchange, supra note 217, at 104–05 (contrasting "ecological rationality" as put forward by evolutionary psychology with "both formalized normative theories of rationality and common sense intuitions about functionality"). Haidt also draws a sharp contrast between his view of moral intuition and the view that rationality is key to morality as found in thinkers such as Kant and Kohlberg; see HAIDT, supra note 236, at 34.

²⁹² See, e.g., Christine Jolls, Cass R. Sunstein & Richard Thaler, A Behavioral Approach to Law and Economics, 50 STAN. L. REV. 1471 (1998); Russell B. Korobkin & Thomas S. Ulen, Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics, 88 CALIF. L. REV. 1051 (2000); Grant M. Hayden & Stephen E. Ellis, Law and Economics After Behavioral Economics, 55 U. KAN. L. REV. 629 (2007). For critical appraisals, see Gregory Mitchell, Why Law and Economics' Perfect Rationality Should Not Be Traded for Behavioral Law and Economics' Equal Incompetence, 91 GEO. L. J. 67 (2002); Richard A. Posner, Rational Choice, Behavioral Economics, and the Law, 50 STAN. L. REV. 1551 (1998).

²⁹³ For a philosophical examination of standard law and economics scholarship and its political implications, see Jeanne L. Schroeder, *The Economics of Race and Gender: Rationality in Law and Economics Scholarship*, 79 OR. L. REV. 147 (2000).

²⁹⁴ See de Quervain, et al., supra note 261, at 1257 (noting that punishment is altruistic in a biological sense, but not a psychological one).

²⁹⁵ Trivers, *supra* note 218, at 39.

²⁹⁶ HAIDT, *supra* note 236, at 206.

to an individual from the enforcement of a social norm in a group is far too small to justify the expenditure of resources required to obtain it.²⁹⁷

The person who would act in this manner is therefore far different from the rational actor assumed by mainstream economics, who acts in such a way that tangible, material gains accruing to him are maximized and losses and inefficiencies are minimized. While the rational actor could operate in an altruistic fashion if that were understood to further his interests indirectly, as when altruistic acts are performed for the benefit of kin or are performed in reciprocal altruism, the stronger form of altruism that Gintis, Henrich and Boyd, Fehr and Fischbacher, Haidt, and others argue for is contrary to *homo economicus*. Tooby, Cosmides, and Price characterize the rationality depicted by evolutionary psychology as "ecological rationality," which does not aim to maximize utility but rather simply to produce outputs that promote genic fitness in the conditions in which humans evolved.²⁹⁸

In addition to this primary difference surrounding self-interest, evolutionary psychology and mainstream economics employ significantly different conceptions of the decision-making process their representative individual carries out. For traditional economists, *homo economicus* is a rational actor, in the sense that choices are always the product of the calculation of the costs and benefits of possible plans of action, with the one resulting in the greatest gain, or the least cost, being the one chosen. Homo economicus therefore seeks to maximize his utility in a straightforward way. Furthermore, a sort of godly rationality is assumed, with homo economicus capable of any calculations necessary to this task, and indeed, omniscience as to all possible states of affairs necessary to carry

²⁹⁷ See de Quervain, et al., supra note 261, at 1257; see also McGuire, supra note 261, 41–44.

²⁹⁸ Tooby, Cosmides & Price, Cognitive Adaptations for n-person Exchange, supra note 217, at 104–05. For other conceptions of "ecological rationality," see Daniel G. Goldstein & Gerd Gigerenzer, Models of Ecological Rationality: The Recognition Heuristic, 109 PSYCHOL. REV. 75, 76 (2002) (ecological rationality as the "ability to exploit the structure of information in natural environments"); Vernon L. Smith, Constructivist and Ecological Rationality in Economics, 93 AM. ECON. REV. 465, 469 (2003) (ecological rationality "as an undesigned ecological system that emerges out of cultural and biological evolutionary processes").

²⁹⁹ See Korobkin, supra note 291, at 321 ("Modern microeconomics relies on a particular theory of motivation: that individuals act rationally to optimize the satisfaction of their preferences."); Joseph Persky, *The Ethology of* Homo Economicus, 9 J. ECON. PERSP. 221, 223 (1995) ("In much contemporary usage, the essence of economic man lies not in what he picks but in his rational method for making choices."). But see Robert Ahdieh, Beyond Individualism in Law and Economics, 91 B.U. L. REV. 43, 48 n.24 (2011) (warning that "the rationality assumption" of neoclassical economics "is far more modest than its critics would like to suggest"); JONATHAN SCHLEFER, THE ASSUMPTIONS ECONOMISTS MAKE 77–82 (2012).

them out. 300 Evolutionary psychology on the other hand espouses a modular model of the human mind in which specific tasks required of the information-processing organ that is the human brain are carried out by specific "circuits" or "modules" that act as individual components of the mind. 301 And because our mental faculties are the product of evolution, we possess a bounded rationality, whereby individual mental abilities and tendencies only exist insofar as they furthered natural selection in the EEA. 302 There is no guarantee that such faculties reach any sort of "truth" or possess any inherent accuracy apart from their success in contributing to the evolutionary prospects of the organism possessing them. 303

Evolutionary psychologists also reject a strict conceptual separation of reason from emotion. Instead of assuming a Cartesian worldview, in which reason is fundamentally separate from emotion, evolutionary psychologists view reason as intrinsically conditioned by emotion in such a way that the very distinction begins to break down. The person is understood to be primarily motivated by emotion, so that emotion is the dog wagging the tail of rationality,³⁰⁴ and reason is the mere "tip of the iceberg," so to speak, of human behavior. And there is no assumption that

³⁰⁰ See Schlefer, supra note 299, at 271–72 ("God . . . grants everyone in the model knowledge of the truth [in rational expectations models]."); Frank H. Knight, Risk, Uncertainty, and Profit 197 (1921) ("Chief among the simplifications of reality perquisite to the achievement of perfect competition is . . . the assumption of practical omniscience on the part of every member of the competitive system."); George J. Stigler, The Theory of Price 82 (4th ed. 1987) (a "perfect market is one characterized by perfect knowledge on the part of the traders.").

³⁰¹ See Cosmides & Tooby, The Cognitive Neuroscience of Social Reasoning, in The New Cognitive Neurosciences 1260–61 (Michael S. Gazzaniga ed., 2d ed. 1999).

³⁰² See Ostrom, supra note 87, at 143 ("[H]umans do not develop general analytic skills that are then applied to a wide variety of specific problems Rather, the human brain appears to have evolved a domain-specific, human-reasoning architecture."); Herbert Simon, supra note 217, at 156 ("[H]uman beings are capable only of very approximate and bounded rationality."). Note, however, that from an evolutionary perspective the faculties of the human mind are better than a general purpose, rational mind would be; see Cosmides & Tooby, supra note 217, at 327–32 ("For the problem domains they are designed to operate on, specialized problem-solving methods perform in a matter that is better than rational").

³⁰³ See Cosmides & Tooby, supra note 217, at 327–32.

³⁰⁴ As in Haidt's title, *The Emotional Dog and Its Rational Tail*, *supra* note 271. Haidt also uses the image of emotion as an elephant and reason as its rider; *see* HAIDT, *supra* note 236, at 52. *See also* Leda Cosmides & John Tooby, *Evolutionary Psychology and the Emotions*, *in* HANDBOOK OF EMOTIONS, 91–115 (Michael Lewis & Jeannette M. Haviland-Jones eds., 2d ed. 2000) (emotions as "superordinate programs" that coordinate the various "components of the cognitive architecture").

our moral intuitions, or the decisions they lead us to, are made in any perfect or complete fashion; rather, they are made by means of feelings and heuristics that lead to reproductive success in the EEA.³⁰⁵ Such feelings and heuristics presumably were *better* than their alternatives, at least for the purpose of attaining the goal of relative reproductive success on the part of those who held them, but they are not intrinsically accurate, complete, or even "rational."

The contrast of the person according to evolutionary psychology and homo economicus reflects the problem this Part began with: reciprocal altruism. The theory of reciprocal altruism is meant to account for the altruistic phenomena we observe in the social world without reducing altruism to something else, at the same time that it stays within the parameters of evolutionary biology. The theories of reciprocal altruism and strong reciprocity use the concepts of a time lag and our fundamental social embeddedness to show how the genes carried by an individual will prosper if that individual possesses such traits as a conditional willingness to assist others, sophisticated cheating-detection mechanisms, and an inclination to punish parties that violate norms of fairness even where such violations don't directly affect the individual. This more sophisticated construct still operates within the parameters of the "selfish gene" theory while at the same time explaining genuinely altruistic behavior. 306 Likewise, the theory of mind that evolutionary psychologists espouse still sees rationality as fundamentally in service of the goals of the individual—defined as being able to pass its genes on in the context of the EEA—but with a more sophisticated and realistic set of tools than that presumed by the abstractions of traditional economic theory or rational choice theory. According to evolutionary psychologists, rationality consists of a set of tools reflecting an intensely social human nature, where loyalty and success within the tribe determines one's success in life. It is not a general faculty of ratiocination with all information available to it relevant to the goal of maximizing an individual's preferences.

³⁰⁵ Cosmides & Tooby, *supra* note 87, at 92.

³⁰⁶ The dominant view among evolutionary psychologists is that there is no need to resort to a concept of "group selection" to explain human prosocial phenomena such as reciprocal altruism; see, e.g., Steven Pinker, The False Allure of Group Selection, EDGE (June 18, 2012), www.edge.org/conversation/the-false-allure-of-group-selection#rc. See also Herbert Gintis, Samuel Bowles, Robert Boyd & Ernst Fehr, Gene Culture Coevolution and the Emergence of Altruistic Behavior in Humans, in FOUNDATIONS OF EVOLUTIONARY PSYCHOLOGY 314 (Charles Crawford & Dennis Krebs eds., 2d ed. 2008) (Gene-culture coevolutionary models supporting cooperative behavior among non-kin are not "vulnerable to the classic critiques of group selection by Williams (1966), Dawkins (1976), Maynard Smith (1976), Rogers (1990), and others."). But see generally Alexander J. Field, Why Multilevel Selection Matters, 10 J. BIOECONOMICS 203 (2008).

III. INSIDER TRADING AND THE PSYCHOLOGY OF SOCIAL EXCHANGE

What then is the likely reaction of investors and others to reports of insider trading if the picture of social exchange drawn by evolutionary psychologists is accurate? The answer to this question involves the intersection of two radically different arenas of development—our moral intuitions, as developed over the millions of years of evolutionary history, on the one hand, and the system of trading interests in corporate enterprises on anonymous exchanges on the other. Nonetheless, the answer to this question is not a matter of speculation. The psychological evidence generally confirms what a theoretical examination of insider trading in terms of evolutionary psychology tells us: that humans are highly averse to insider trading because they feel it violates the very basic principle of fairness as proportionality in group endeavors.

A. A Theoretical Perspective

There are many varieties of insider trading. Insider trading is carried out by firm executives, bankers, accountants, lawyers, journalists, and others who become privy to confidential information during the course of their work, and friends, relatives, and acquaintances of all of these parties. And while this is not "insider trading," properly speaking, SEC v. Dorozhko applied insider trading law under Section 10 of the Exchange Act to the use of stolen information. For the purposes of a theoretical examination of how trading on inside information might be perceived given the model of human moral beliefs reviewed in Part II above, however, a few basic assumptions are necessary.

First, we must assume a broad definition of insider trading: that it involves the use of confidential information by an individual, well placed in the corporate situation or not, in order to achieve a gain (or avoid a loss) without the knowledge of other investors in the enterprise or the financial markets in general. Second, we need to assume a number of investors in the corporate enterprise, either as shareholders or as employees holding equity interests or options on such interests. Third, we must assume an implicit understanding that the return shareholders receive from their investments will be *pro rata* in proportion to their equity interests in the company, or if there are multiple, differing classes of

³⁰⁷ *Dorozkho II*, 574 F.3d 42, 43 (2d Cir. 2009).

³⁰⁸ The requirement of lack of knowledge would apply even in the implausible situation where investors had preapproved insider trading by contract, as advocated by Carlton & Fischel, *supra* note 11, because for such information to have any financial advantage, it is essential that it not be a matter of public knowledge. For further development of the argument that companies and insiders ought to be able to modify the insider trading regime by contract, *see* David D. Haddock & Jonathan R. Macey, *A Coasian Model of Insider Trading*, 80 Nw. U. L. REV. 1449 (1986); *see also* Beny, *supra* note 10, at 252–54; Krawiec, *supra* note 79, at 498–99; Prakash, *supra* note 145, at 1517–18.

stock, in proportion to such classes as specified in the terms and conditions governing a particular class of interest.³⁰⁹ This third assumption is grounded in the wariness we have towards engaging in group endeavors where our efforts might be susceptible to free riding. In this case, a shareholder who engaged in insider trading would be engaged in a form of "subtle cheating," where he extracts a benefit from the corporate enterprise out of proportion to his *pro rata* interest. Regardless of whether such insider trading could have other benefits for shareholders,³¹⁰ an individual shareholder who missed out on a potential gain or suffered a loss because she did not have access to information while someone else did would feel consternation or anger upon learning of the insider's good fortune. Fourth, it is necessary to understand the corporate enterprise as a group activity or communal endeavor, as described by evolutionary psychology.

Insider trading violates our deeply held sense of proportionality as fairness once these four premises are accepted.³¹¹ Because we are "con-

³⁰⁹ While it is theoretically possible that investors might authorize individual shareholders or classes of shareholders to trade on inside information, as advocated by Carlton & Fischel, that they would ever do so is exceedingly unlikely. See Carlton & Fischel, supra note 11; Stephen Bainbridge, The Insider Trading Prohibition: A Legal and Economic Enigma, 38 Fl.A. L. Rev. 35, 50–54 (1986) (discussing Carlton & Fischel's approach); James D. Cox, Insider Trading and Contracting: A Critical Response to the Chicago School, 1986 DUKE L. J. 628, 657 (1986) (allowing insider trading is tantamount to licensing managers to embezzle); Pritchard, supra note 111, at 46 (authorizing insider trading could result in state law violations).

³¹⁰ See Bainbridge, supra note 309, at 44 (arguments are inconclusive as to whether insider trading is beneficial for shareholders); Clark, supra note 80, at 61-63 (evidence mixed on whether insider trading has an aggregate net benefit for both shareholders and traders); Cox, supra note 309, at 654 (costs and benefits of insider trading very difficult to quantify); Strudler & Orts, supra note 9, at 383 (the debate over whether insider trading is beneficial is inconclusive because it is empirical, and costs and benefits are very hard to ascertain in complex financial markets). For arguments that insider trading has no victims, or they are very hard to identify, see William Carney, Signalling and Causation in Insider Trading, 36 CATH. U. L. REV. 863 (1987); Peter-Jan Engelen & Luc Van Liedekerke, The Ethics of Insider Trading Revisited, 74 J. Bus. Ethics 497 (2007); Haddock & Macey, supra note 308, at 1453 (shareholders who "buy and hold" should be indifferent to insider trading); William Wang, Trading on Material Nonpublic Information on Impersonal Stock Markets: Who is Harmed, and Who Can Sue Whom Under SEC Rule 10b-5?, 54 S. CAL. L. REV. 1217 (1981). On the other hand, for the argument that insider trading results in tangible harm, see Norman S. Douglas, Insider Trading: The Case against the "Victimless Crime" Hypothesis, 23 Fin. Rev. 127 (1998).

³¹¹ For a related analysis, *see* Park, *supra* note 3, at 368 (the idea that insider trading involves unjust enrichment is grounded in a "common-sense intuition"). *But see* Kim, *supra* note 22, at 946 ("[A]n investor trading over an im-

ditional cooperators" who are willing to engage in communal endeavors only when others do so on the same terms and conditions, ³¹² insider trading triggers a powerful negative emotional response because it allows certain individuals a quiet way to benefit in unpredictable, variable amounts. Just as Tooby, Cosmides, and Price posit that "mental accounts" keep track of an individual's net benefit received in dyadic exchange or group activities, the return to investors based on their *pro rata* ownership interests enforces a proportionality of return based upon the original investment in the enterprise.³¹³ Insider trading alters the proportionality of return in unpredictable ways that are fundamentally open to chance, and thus runs directly counter to our desire for proportionality and predictability in the benefits stemming from group activities.

It is important to note that this understanding of insider trading holds true whether or not success in the corporate enterprise is conceptualized as a predictable result of hard work or as contingent upon luck. A comparison here with the Aché of Paraguav is instructive.³¹⁴ Even if we hold that investment success is open to a considerable measure of luck and that individuals may receive gains (or losses) out of proportion to their effort, insider trading is still unlike the communal sharing of meat. First, while the communal sharing of meat is not keyed to an individual's direct efforts in the hunt, how much any particular individual receives from the hunt is public information.³¹⁵ Second, the amount of meat distributed is not a matter of chance. 316 Distributions follow a pattern where each person receives a roughly predictable, proportional amount of the bounty.³¹⁷ Even if we attempt to justify insider trading through the belief that returns to investors are fundamentally open to chance, 318 insider trading goes far beyond the exception to the general rule of predictability that governs the tribe's sharing of meat.

personal exchange does not expect to receive any disclosure from an insider because she has no way of knowing whether she is trading with an insider.").

³¹² See supra note 269 and accompanying text.

³¹³ Payouts of dividends in the corporate environment, based on the rights each class of stock carries with it accomplishes exactly this, as does the mechanism of "capital accounts" in a partnership or limited liability company. *See* LAURA E. CUNNINGHAM & NOËL B. CUNNINGHAM, THE LOGIC OF SUBCHAPTER K: A CONCEPTUAL GUIDE TO THE TAXATION OF PARTNERSHIPS 31–42 (3d ed. 2006) ("Financial Accounting and Maintenance of Capital Accounts").

³¹⁴ See supra notes 277–80 and accompanying text.

³¹⁵ Cashdan, *supra* note 277, at 37.

³¹⁶ *Id.* at 37–38.

³¹⁷ *Id*.

³¹⁸ Typically this argument would focus on managers who would be entitled to trade on inside information as an "emolument" of office. The SEC stated in *Cady, Roberts* that "[a] significant purpose of the Exchange Act was to eliminate the idea that the use of inside information for personal advantage was a normal emolument of corporate office." *In re* Cady, Roberts & Co., 40 S.E.C. 907, 912 n.15 (1961).

Finally, our moral intuition that insider trading is unfair exists even if the counterarguments that it will result in generalized good by increasing "social welfare" hold true. Manne and his compatriots contend that insider trading results in general gains for financial markets because it improves the efficiency of securities prices and it allows for a useful form of executive compensation. The pro-insider trading arguments, even if they do hold a measure of truth, this would only mean that the dictates of economic efficiency clash with the content of our moral intuitions. In all likelihood, however, insider trading does not bring such gains to financial markets. Instead, combating insider trading appears to lead to, or at least be strongly correlated with, quantifiable benefits. The upshot of this is that the economic activity is deeply dependent upon trust, a result that is beyond the scope of this Article but which follows from the application of evolutionary considerations to economic affairs.

B. Evidence from the Empirical Realm

There are two recent surveys that provide detailed responses to two sets of questions concerning the moral import of various scenarios where individuals trade on inside information: When is it Wrong to Trade Stocks on the Basis of Non-Public Information? Public Views of the Morality of Insider Trading,³²³ by Stuart P. Green and Matthew B. Kugler, and Is it Fair? Perceptions of Fair Investment Behavior Across Countries,³²⁴ by Meir Statman. The results of these papers by and large confirm what evolutionary psychology predicts, as people often harbor deep condemnation towards various insider trading fact patterns in which insiders are perceived as taking advantage of others. Green and Kugler's surveys indicate that people feel that the basic wrong of insider trading involves

³¹⁹ See Manne, supra note 81; see also supra note 310 and accompanying text.

³²⁰ See supra note 310.

³²¹ See also Utpal Bhattacharaya & Hazem Daouk, The World Price of Insider Trading, 57 J. FIN. 75, 104 (2002) (enforcement of insider trading law is associated with a reduction in the cost of equity); Thomas E. Copeland & Dan Galai, Information Effects on the Bid-Ask Spread, 38 J. FIN. 1457, 1463 (1983) (informed traders as causing losses which increase the bid-ask spread demanded by securities dealers); see generally Beny, supra note 10.

³²² See generally Francis Fukuyama, Trust: The Social Virtues and the Creation of Prosperity (1995); Eric D. Beinhocker, The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics 433–34 (2006); David C. Rose, The Moral Foundation of Economic Behavior (2011).

³²³ Stuart P. Green & Matthew B. Kugler, When is it Wrong to Trade Stocks on the Basis of Non-Public Information? Public Views of the Morality of Insider Trading, 39 FORDHAM URB. L.J. 445 (2011).

³²⁴ Meir Statman, *Is it Fair? Perceptions of Fair Investment Behavior Across Countries*, 12 J. INVESTMENT CONSULTING 45–57 (2011).

the use of an unfair advantage against others, not the violation of a fiduciary duty, as *Chiarella*'s legal framework relies on. Additionally, Statman's study shows that culture has significant influence on beliefs concerning the moral status of insider trading.

In their first survey, Green and Kugler ask participants to evaluate the moral status of seven different fact patterns. The first three fact patterns concern insiders to a pending corporate acquisition and involve a senior executive at the target company, a person in a secretarial role at the target, and an executive at the acquiror. The second two fact patterns present a "mark-up man" who prints documents for corporate transactions, mirroring the facts of *Chiarella*, and an investigative reporter who learns of an impending merger and trades in the stock before the news is announced, as in *United States v. Carpenter*. 325 The final two scenarios concern an individual who finds a memo in a taxi cab marked "Confidential—Not for Release" detailing the facts of a proposed merger and an individual who overhears a discussion of a proposed merger at a baseball game, similar to the facts of *SEC v. Switzer*. These three sets of scenarios comprise three different "bands" or groups that Green and Kugler predict survey respondents will react differently to.

And indeed they do. The first set of scenarios, corresponding to "classical" insider trading, garner blameworthiness ratings of 5.69 (1.64), 5.52 (1.74), and 5.13 $(1.81)^{327}$ on a seven-point scale ranging from one (not at all blameworthy) to seven (very blameworthy). 328 The second set, representing the misappropriation scenarios of Chiarella and Carpenter, receive scores of 4.71 (1.77) and 4.63 (1.92), respectively.³²⁹ And the third set of "lucky outsiders" garner blameworthiness ratings of 3.81 (2.14) and 2.94 (1.96).³³⁰ These results illustrate that survey participants generally feel that the classic insider trading offenses are the most blameworthy. Survey participants still significantly condemn misappropriation offenses but feel least disdainful towards outsiders finding or overhearing nonpublic information. While only the third set of scenarios are considered less blameworthy than not, all the other scenarios merit some disapproval and the classic insider cases merit the most. The results of Green and Kugler's first survey support the notion of a "moral core" of insider trading offenses, with less blame attaching as we move further away from that core. 331

³²⁵ 791 F.2d 1024 (2d Cir. 1986), aff'd on other grounds, 484 U.S. 19 (1987).

³²⁶ 590 F. Supp. 756 (W.D. Okla. 1984).

³²⁷ Standard deviations are contained within the parentheses.

³²⁸ Green & Kugler, supra note 323, at 463.

³²⁹ *Id*.

³³⁰ Id.

³³¹ Green and Kugler use the concept of "core" (as well as outlying) cases of insider trading. *See id.* at 446, 453. *See also* Prentice, *supra* note 3, at 345. ("[I]t is clear that the core notion of insider trading occurs when corporate insid-

Regardless of whether conduct is seen as connected with the violation of a fiduciary duty, the intent to unfairly take advantage of others is what gives rise to moral condemnation. First, in Band 1 of the Study 1 results, respondents rate Scenario 3 as essentially equivalent to Scenarios 1 and 2 in terms of both blameworthiness and whether a criminal sanction was warranted.³³² Recall that Scenarios 1 and 2 pose examples of "traditional" or "classical" insider trading in which an executive and a secretary, respectively, at a target company engage in insider trading. In Scenario 3, an executive at an acquiror misappropriates information from his employer concerning the target and uses that information to purchase target shares.³³³ Scenarios 1 and 2 receive blameworthiness ratings of 5.52 and 5.13, and 79.2% and 77.1% ratings as to whether a criminal penalty was warranted.³³⁴ Similarly, the misappropriation scenario receives a blameworthiness rating of 5.69, with 83.3% of respondents recommending a criminal penalty. 335 Green and Kugler remark that "[r]espondents thus made essentially no distinction between the classical and misappropriation theories with respect to criminalization, blameworthiness, or punishment."336 If the classical theory represents the "moral core" of insider trading law, and misappropriation its extension, here the two types of insider trading are judged almost equivalently.

Another interesting result is that in Study 2, tippees garner more blame from survey respondents than tippers.³³⁷ Since the tippees are further away from the interests harmed, those of the shareholders in the company in which they trade, and at a remove from the breach of fiduciary duty between the tippers and their source of information, this means that respondents do not evaluate the morality of actions in terms of closeness to the interests harmed.³³⁸ Green and Kugler find that respondents give a 5.10 blameworthiness rating in the case of an executive tipping for personal gain, but a 5.35 rating to the analyst tippee.³³⁹ Twentynine percent believe that the executive in this scenario should be punished criminally, while thirty-nine percent of respondents say the same for the analyst.³⁴⁰ In the case of an executive tipping for good motives, as in *Dirks*, the executive receives only a 3.03 blameworthiness rating while the reporter trading on such a tip receives a 5.81 blameworthiness

ers trade in their firms' securities on the basis of material, nonpublic information.").

³³² Green & Kugler, *supra* note 323, at 463.

³³³ *Id.* at 460.

³³⁴ Id. at 463.

³³⁵ Id.

³³⁶ *Id.* at 462.

³³⁷ Id. at 475.

³³⁸ Id.

³³⁹ *Id*.

³⁴⁰ Id.

score, the highest of all the Study 2 scenarios.³⁴¹ The results of these two tippee scenarios indicate that what we feel is morally blameworthy is some specific conduct, not the direct proximity to wrongdoing through the breach of a fiduciary duty. As in the case of misappropriation, the fact that the trader is at a remove from the company and the source of the information is not determinative of the act's moral status.

What might explain these blameworthiness ratings? A plausible explanation is that we are highly attuned to an individual's act of wrongdoing and have a psychological need to condemn such conduct. Green and Kugler's explanation of the results indicates that they believe that if a tippee is understood as committing the more serious wrong, that indicates that "the basic wrong of insider trading lies in the fact that the insider uses an unfair advantage against other traders and thereby 'cheats' them." If, on the other hand, the tipper is thought of as committing the "more basic wrong," "the basic wrong in insider trading is the misappropriation of information." The sum of the plausible explanation of the plausible explanation of the plausible explanation of the property of the property of the plausible explanation of the property of the plausible explanation of the plausible explausible explanation of the plausible explausible explausible

This way of understanding the difference between tipper and tippee liability sets up a contrast between a narrow conception of the violation of a fiduciary duty and a broader conception of unfairness.³⁴⁴ It seems to me that the participants in Green and Kugler's surveys express this as a contrast between instances of insider trading that evidence a strong intention to cheat, harm, or otherwise deceive others, and those that do not. The contrast then becomes, psychologically speaking, one between a focus on the intention of the actor and the harm suffered by particular individuals. Both are wrong, but respondents rate cases where individuals seem to have a direct intention to cheat more harshly than those where they do not. A review of a few important examples shows that respondents judge the actions of traders harshly where it appears that a trader blatantly abuses the trust of others or is otherwise engaged in obiectionable conduct. 345 Furthermore, respondents condemn behaviors even where there is no violation of a fiduciary duty, as in the case of the tippee in Study 2 reviewed above.346 It therefore appears that the basic wrong of insider trading amounts to taking advantage of others, as Green and Kugler observe. 347 When we evaluate the morality of insider trading

³⁴¹ *Id*.

³⁴² Id. at 469-70.

³⁴³ *Id.* at 470.

³⁴⁴ Note that this conception of unfairness is commensurate with that offered by evolutionary psychology, that is, fairness as proportionality. The insider trader violates this by receiving more than her due.

³⁴⁵ For example, respondents assign the executive at the target company a blameworthiness rating of 5.52, give the executive at the acquiror a rating of 5.69, and give the reporter who acts on a tip in Study 2 a rating of 5.81. Green & Kugler, *supra* note 323, at 463, 475.

³⁴⁶ *Id.* at 475.

³⁴⁷ Id. at 471-72.

cases, we focus on the wrongness of the insider trader's actions and not on the harm their counterparties suffer.

A second point is that tippees in two of the three scenarios tested in Study 2 received higher blameworthiness marks than tippers. 348 In Scenario 1, an executive tipping for gain receives a blameworthiness award of 5.10, while her tippee receives a rating of 5.35.349 Similar to the facts of Dirks, an executive tipping to reveal a fraud in Scenario 2 receives a blameworthiness grade of only 3.03, while the reporter trading on this information receives a grade of 5.81.350 This is the highest reported blameworthiness grade in the entire set of three studies.³⁵¹ In these scenarios, the tippee is at a remove from the entity owed a fiduciary duty. As in the case of misappropriation, there is another link in the chain of attenuation between the tippee and the company as well as the shareholders who are owed a fiduciary duty. This does not matter to survey respondents. Green and Kugler interpret this as evidence that the principal wrong in insider trading is an unfair advantage vis-à-vis other traders. 352 However, these results could also be interpreted as respondents focusing on the individual who is perceived to be the main actor carrying out the unfair activity, that is, the tippee trading on the information, and not the tipper. Even where the tipper expects to gain, this wrong is somewhat less blameworthy than that of the tippee. Another instance of a trader receiving a high blameworthiness rating without a fiduciary duty is the case of a U.S. Food and Drug Administration official who trades on advance knowledge of a drug approval.³⁵³ Such conduct violating the trust given to a government official receives a 5.16 rating on the blameworthiness scale. 354

Finally, Meir Statman's study also presents interesting evidence regarding the effects of culture on moral beliefs concerning insider trading. He tests students and finance professionals in Australia, India, Israel, Italy, the Netherlands, Tunisia, Turkey, and the United States. In a fact pattern modeled on *United States v. O'Hagan*, 355 students judging the insider trader's conduct as acceptable range from a low of thirty-six percent in the United States to a high of seventy-six percent in India. As for the finance professionals, acceptability ratings range from five percent in the United States to fifty-six percent in Turkey. Individuals

³⁴⁸ Cf. United States. v. Evans, 486 F.3d 315 (7th Cir. 2007), discussed supra at Part I.F.

³⁴⁹ Green & Kugler, supra note 323, at 475.

³⁵⁰ *Id*.

³⁵¹ *Id*.

³⁵² Id. at 469-70.

³⁵³ Id. at 472, 475.

³⁵⁴ *Id*.

^{355 521} U.S. 642 (1997).

³⁵⁶ Statman, supra note 324, at 49, Table 1.

³⁵⁷ Id.

from countries with insider trading regimes such as the United States, the Netherlands, and Australia consistently rate insider trading actions as less acceptable than individuals from countries with little or no enforcement, such as Italy, India, Turkey, and Tunisia. Statman interprets this as demonstrating the effect of a legal regime on the beliefs of individuals concerning insider trading.³⁵⁸ Statman's study is also interesting because it shows differences in how face-to-face transactions are judged, as well as differences in how observers gauge the acceptability of insider trading transactions based on the power held by the person committing them. 359 Evolutionary psychology is able to predict both of these differences, as individuals gauge the wrong of an action depending on the face-to-face deception involved and the level of threat emanating from a particular individual. While evolutionary psychologists, such as Haidt, posit that the mental modules forming our moral intuition are to some extent the universal products of human evolution, they also recognize significant variation in their expression from one society to another.³⁶⁰

The empirical studies confirm what evolutionary psychology teaches: insider trading feels wrong to us because at some level it is perceived to be fundamentally unfair.³⁶¹ This fairness is neither a utopian conception of equality nor an overweening attention to harm, but rather a concept focused on an individual attempting to claim more than his rightful share in a group activity. Secondarily, there is significant variation of this perception of wrongness from culture to culture. Where individuals have a basic expectation that trading in financial markets will be conducted without the use of inside information, there is a much higher estimation of the moral wrongness of insider trading. By creating the framework within which such economic activity occurs, the legal system itself can have a significant influence on our moral beliefs.

IV. TOPICS FOR FURTHER RESEARCH

The approach of evolutionary psychology is a fruitful one and is gradually being applied to numerous problems in social psychology as

³⁵⁸ Id. at 48 ("[T]he street between fairness and the law is a two-way street where the law affects perceptions of fairness while perceptions of fairness shape the law.").

³⁵⁹ Id. at 51-53.

³⁶⁰ See, e.g., HAIDT, supra note 236, at 111-15 (section entitled "Beyond WEIRD Morality"; "WEIRD" stands for "Western, educated, industrialized, rich, and democratic"); see also Joseph Henrich, Steven J. Heine & Ara Norenzayan, The Weirdest People in the World, 33 BEHAV. & BRAIN SCI. 61 (2010).

³⁶¹ Green & Kugler's results support this interpretation, although they note that there are other plausible explanations for why insider trading is viewed as wrong, such as a "breach of duty to the source of confidential information." Green & Kugler, *supra* note 323, at 453. Nonetheless, their results indicate that it is primarily the perception of unfairness that drives our views on insider trading. *Id.* at 479.

well as applied ethics. It has received some attention in the legal literature, particularly in the areas of family law and criminal law,³⁶² but only minimal attention in corporate and financial law.³⁶³ This Article is intended to be a beginning step in this direction in a field of legal scholar-ship that has received sustained attention since the late 1960s, but little resolution of its central debates.³⁶⁴ An approach to insider trading law based on evolutionary psychology offers the appeal of a theoretical position that is in principle amenable to empirical confirmation of many of its claims. While it does not resolve all fundamental moral and political questions that insider trading gives rise to, it offers a persuasive explanation for many of the phenomena associated with insider trading. Two further issues that are particularly relevant are the questions of whether and how insider trading regulation contributes to the growth of financial markets, and how to create a jurisprudence or "theory" of insider trading.

A. Evolutionary Psychology, Trust, and the Health of Financial Markets

Given an account of market behavior that emphasizes the desire to punish cheaters, does the development of insider trading law, and more importantly, the enforcement of this law, lead to the development of financial markets as a public good? The research of Laura Beny suggests that it does, as she documents a correlation (she is careful not to say causation) between insider trading enforcement and healthy, active financial

³⁶² See, e.g., Martin Daly & Margo Wilson, Crime and Conflict: Homicide in Evolutionary Perspective, 22 CRIME & JUST. 51 (1997); Owen D. Jones, Sex, Culture, and the Biology of Rape: Toward Explanation and Prevention, 87 CALIF. L. REV. 827 (1999); Owen D. Jones, Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology, 95 Nw. U. L. REV. 1141 (2001); Owen D. Jones & Robert Kurzban, Intuitions of Punishment, 77 U. CHI. L. REV. 1633 (2010); Robin B. Kar, The Deep Structure of Law and Morality, 84 Tex. L. REV. 877 (2006); Baily Kuklin, Peril Invites Rescue: An Evolutionary Perspective, 35 HOFSTRA L. REV. 171 (2006); Neel P. Parekh, Note, When Nice Guys Finish First: The Evolution of Cooperation, The Study of Law, and the Ordering of Legal Regimes, 37 U. MICH. J.L. REFORM 909 (2004); Eyal Zamir, Loss Aversion and the Law, 65 VAND. L. REV. 829 (2012).

³⁶³ In the insider trading literature, Robert Prentice touches upon evolutionary psychology explanations for the fairness argument in *Permanently Reviving the Temporary Outsider*, *supra* note 3, at 379 ("[T]he study of evolution has made it clear that social emotions are at the root of human morality."). For a similar discussion within the context of antitrust law, see Thomas J. Horton, *Fairness and Antitrust Reconsidered: An Evolutionary Perspective*, 44 MCGEORGE L. REV. 823 (2013).

³⁶⁴ See Clark, supra note 80, at 65 ("In summary, there are many supporters on both sides of the insider trading debate, so the issue is not likely to be resolved in the near future.").

markets.³⁶⁵ This result seems to confirm the supposition that we shy away from participating in group endeavors when we cannot trust that their benefits will be distributed equitably. An account of our psychological proclivities in market interactions can shed light on trust in markets and their successful creation and maintenance.

B. A Unified Jurisprudence of Insider Trading Law

Does the understanding of moral intuitions concerning market interactions offered here point in the direction of a utilitarian or a deontological justification for insider trading law? Even though the combination gives rise to some deep questions about their compatibility, evolutionary psychology is, I submit, more compatible with a deontological ethic than a utilitarian one. This is primarily because our moral intuitions are expressed as commands, oughts, and prohibitions, and also because we are focused on discerning others' intentions and whether or not they comport with the rules we formulate for social interaction. Furthermore, our rules expressing moral intuitions are not couched in terms of cost-benefit analyses but in absolutes. Therefore, a deontological ethic seems much closer to an evolutionary psychology perspective than a utilitarian one both in terms of content and method, ³⁶⁶ even though in other key ways

³⁶⁵ See Beny, supra note 10; see also Laura N. Beny, Do Investors in Controlled Firms Value Insider Trading Laws? International Evidence, 4 J.L. ECON. & POL'Y 267 (2008) (presenting evidence that stricter insider trading laws are positively associated with higher corporate values); Laura N. Beny & Anita Anand, Private Regulation of Insider Trading in the Shadow of Lax Public Enforcement: Evidence from Canadian Firms, 3 HARV. BUS. L. REV. 215 (2013); Stanislav Dolgopov, Risks and Hedges of Providing Liquidity in Complex Securities: The Impact of Insider Trading on Options Market Makers, 15 FORDHAM J. CORP. & FIN. L. 387 (2010) (discussing how insider trading increases transactions costs in derivatives markets); Julan Du & Shang-Jin Wei, Does Insider Trading Raise Market Volatility?, 114 ECON. J. 916 (2004) (describing how insider trading activity is positively associated with market volatility); Art A. Durnev & Amrita S. Nain, Does Insider Trading Regulation Deter Private Information Trading? International Evidence, 15 PAC.-BASIN FIN. J. 409, 411 (2007) ("[I]nsider trading restrictions are on average associated with higher firm value."); Raymond P.H. Fishe & Michael A. Robe, The Impact of Illegal Insider Trading in Dealer and Specialist Markets: Evidence from a Natural Experiment, 71 J. FIN. ECON. 461 (2004) (noting that insider trading appears to reduce market liquidity). For discussion of this topic in the legal literature, see generally Kim, supra note 22, at 967–70 (review of finance literature on insider trading enforcement); Park, supra note 3, at 355-57 (discussing securities regulation generally as instrumental in preserving efficiency of markets); Robert A. Prentice & Dain C. Donelson, Insider Trading as a Signaling Device, 47 AM. BUS. L.J. 1, 67–71 (2010) (discussing how insider trading enforcement contributes to investor confidence).

³⁶⁶ See also *supra* Part II.C, which contrasts the picture drawn of the human person by evolutionary psychology with the *homo economicus* of neoclassical

evolutionary psychology represents a severe challenge to a Kantian-style ethics.³⁶⁷

Another unresolved question stems from the fact that moral intuition commands an individual to engage in genuinely altruistic behavior that is not to his or her direct benefit. What about at the level of the group, though? Does the behavior that moral intuition commands ultimately serve the reproductive fitness of the group, or could there be moral commands that are not of biological or economic benefit? This is an important question because it raises the issue of the differences between the EEA and current environments, including the "ecosystem" of the financial markets and the appropriate rules governing behavior in them. Evolutionary psychology tells us that our moral intuitions are geared towards success in the EEA.³⁶⁸ Are contemporary financial markets so different from the conditions in the EEA that our moral intuitions do not or should not apply to behavior in the financial markets?

These are two of the many questions that I contend that an evolutionary psychology approach gives rise to when applied to the issue of

economics. Because it attempts to compare various alternatives in terms of quantifiable costs and benefits, the standard economic perspective is associated with utilitarianism. See, e.g., Kenneth J. Arrow, Some Ordinalist-Utilitarian Notes on Rawls' Theory of Justice, 70 J. Phil. 245, 246 (1979) ("The implicit ethical basis of economic policy judgment is some version of utilitarianism.").

³⁶⁷ In Kant's thought itself, this is because the commands of morality are intrinsically opposed to dictates of the natural world, which are governed by physical causes and so are necessarily determined by other physical states of affairs preceding them in time. See, e.g., IMMANUEL KANT, CRITIQUE OF PRACTICAL REASON 28 (Lewis W. Beck trans., 1956) (a free will "must be conceived as wholly independent of the natural law of appearances in their mutual relations, i.e., the law of causality"); see also Jerome B. Schneewind, Autonomy, Obligation, and Virtue: An Overview of Kant's Moral Philosophy, in THE CAMBRIDGE COMPANION TO KANT 309, 314 (Paul Guyer ed., 1992) ("Kant was a Newtonian. He held that the sequence of events in the world is necessary. But its laws involve no commands and no sanctions. Morality, however, is not science."). Because it ultimately comes under biology, for Kant himself evolutionary psychology could not ground a proper moral philosophy. Most modern evolutionary psychologists would likewise reject a Kantian stance on ethical questions; see, for example, HAIDT, supra note 236, at 32-60, where the author contrasts a "rationalist" perspective in psychology drawing on Plato, Kant, and Kohlberg with a Humean one, and associates himself firmly with the latter. On the other hand, evolutionary psychology seems to draw a picture of human ethical life that is more compatible with a deontological philosophy of commands and prohibitions than one advocating (often indeterminate, given the complexity of the world) cost-benefit analyses to arrive at determinations of what one ought to do. As a result, it may be possible that while the method evolutionary psychology uses to arrive at its results is far different from the one Kant advocates, the picture it draws of human ethical life looks similar to the one deontological moral theory prescribes.

³⁶⁸ See supra note 288 and accompanying text.

insider trading. At any rate, I hope I have shed light on exactly why many of us feel that insider trading is deeply unfair. An evolutionary psychology approach to insider trading also illuminates the internal structure of insider trading doctrine, with violations by powerful insiders as its moral core and harms to traders and shareholders at its periphery. Since Justice Powell's fiduciary duty approach is underinclusive from a moral point of view, prosecutors and judges have responded to pressure to expand the law against insider trading. While legally defective, because it is fractured to the point of incoherence, the current state of the law is morally satisfying.

CONCLUSION

American insider trading law expands to its broadest point in Texas Gulf Sulphur, contracts with Chiarella and Dirks, expands again with O'Hagan, and then expands further with the recent near-abandonment of the fiduciary duty framework in the lower courts. In coming to occupy more and more of the periphery of insider trading, the law satisfies the human desire to prevent individuals from taking more than their fair share of the profits of modern capitalist enterprise. The survey of the law presented in Part I shows that this expansion comes at a significant cost: given its status as a multifarious collection of case law decisions, insider trading law has become a doctrinal mess. A detailed look at Chiarella and Dorozhko reveals judges failing to interpret the applicable source materials accurately, thereby leading to questions regarding the rule of law in a common law system based on the honest and rigorous use of precedent. While the Supreme Court has the power to announce radical shifts in the law should it choose to do so, a lower court is not vested with that authority in our system. And there is a significant measure of irony in both Chiarella and Dorozhko: Justice Powell's retrenchment of the law is driven in part by his faith in the moral character of American businesspersons to obey the law and his fear of prosecutorial overreach. Likewise, the *Dorozhko* decision is satisfying to those who believe trading on stolen information is wrong, but its ultimate effect may be to reduce respect for the law.

The post-Chiarella trajectory of insider trading law reaches a terminus that generally corresponds to what evolutionary psychology indicates humans generally desire in group endeavors. On the descriptive level, then, there is a correspondence between our general moral predispositions and the current state of the law. Such a correspondence, however, does not necessarily mean that this state of the law is good. As David Hume observes, we cannot infer the "ought" from the "is." As the pendulum of insider trading law has swung back and forth and back again, we have reached a state of doctrinal incoherence that reminds us of the value of good law, which guides human conduct through clearly

³⁶⁹ See HUME, supra note 288, at 469.

delineated rules that put generally agreed upon societal values into effect.
