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On Apology and Consilience

Erin O'Connor

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ON APOLOGY AND CONSILIENCE

Erin Ann O'Hara* and Douglas Yarn**

Abstract: This Article joins the current debate about the proper relationship between apology and the law. Several states are considering legislation designed to shield apologies from the courtroom, and mediators are increasing their focus on the importance of apologies. The article develops an evolutionary economic analysis of apology that combines the tools of economics, game theory, and biology to more fully understand its role in dispute resolution. When the analysis is applied to the uses of apology before and at trial, a more sophisticated understanding of the relationship between apology and the law emerges.

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INTRODUCTION

Two first-grade girls threw a kindergartener from the school's monkey bars during recess, breaking his arm. The injured child was rushed to the hospital, and the girls were sent to the principal's office. Although they responded quickly and effectively once summoned, the children's teachers were nowhere in sight during the incident. Two days later, the mother of the boy expressed anger to her lawyer-neighbor over the failure of the teacher, the school, and the girls to apologize to her and her son. Thinking like a lawyer, the neighbor unwisely attempted to reason with the mother by remarking that the school and the teacher could not apologize without subjecting the public school district to legal liability. This further provoked the mother, who responded, "I don't care about the money or the medical bills! My son is owed an apology and I deserve some assurance that the playground will be better supervised in the future! The attitude that you express makes me MORE, not less, likely to want to sue the *#%*s!!!"¹

This incident encapsulates the problem of apology in dispute resolution. Victims desire an apology.² Apology is an important component of dispute resolution, and any useful model of conflict resolution must acknowledge a human preference for apologies. At the same time, an apology is an admission against interests, which, under American evidentiary rules, can be introduced at trial to help prove liability.³ An apology can prevent litigation, but apology and litigation

1. From an experience of one of the authors. A recent Associated Press story illustrates a similar sentiment. A school bus collided with a freight train and three school children were killed. The mother of one of the victims thought that the bus driver should be imprisoned, but her statement to the press indicated that her resentment had as much to do with the driver's failure to apologize as it had to do with her reckless driving: "She has not once tried to say she was sorry . . . she was at fault. She broke the law, and she should have to pay for it." *Mother of Bus Victim Says Driver Hasn't Apologized*, THE TENNESSEAN, Dec. 15, 2001, at 2B.

2. Third parties' perceptions of justice also are affected by apologies. An experimental study of amnesty grants in South Africa indicated that subjects' perceptions of the unfairness of a particular grant of amnesty were significantly affected by the offering and acceptance of an apology to the victim's family. James L. Gibson, *Truth, Justice and Reconciliation: Judging the Fairness of Amnesty in South Africa*, AM. J. POL. SCI. (forthcoming 2002).

3. Rule 801(d) of the Federal Rules of Evidence provides in pertinent part:

A statement is not hearsay if . . . [t]he statement is offered against a party and is (A) the party's own statement, in either an individual or representative capacity, or (B) a statement of which the party has manifested an adoption or belief in its truth, or (C) a statement by a person authorized by the party to make a statement concerning the subject, or (D) a statement by the party's agent or servant concerning a matter within the scope of the agency or employment, made during the existence of the relationship

FED. R. EVID. 801(d). See also Jonathan R. Cohen, *Legislating Apology: The Pros and Cons* 32 (October 8, 2001) (unpublished manuscript, on file with the author) [hereinafter *Legislating*].

appear to be operating at cross purposes. While the victim desires an apology to resolve the dispute, the potential defendant is hesitant to issue one in anticipation of a lawsuit.

Forgone apologies impose costs on transgressors as well as victims. Wrongdoers often want to be forgiven, and concomitantly, may feel an urge to apologize. These desires to apologize and to receive forgiveness are themselves important human emotions that can enable a transgressor to overcome the conflicting emotions of shame and humiliation to press for reconciliation.⁴ Any hesitation that results from our legal rules can exacerbate cognitive dissonance in the transgressor, and may foreclose apology, forgiveness, and reconciliation where they would otherwise be forthcoming.

The urge to apologize may at times, overcome significant potential negative legal consequences. Consider a recent, very public example that arose out of the accidental sinking of the Japanese fishing vessel, *Ahene Maru*, by the nuclear submarine, U.S.S. *Greenville*. On March 28, 2001, during the Naval inquiry the *Greenville's* captain, Commander Scott Waddle, asked to meet with the families of *Ahene Maru's* lost crewmembers. As one of the fathers related the encounter, “[Commander Waddle] bowed and they saw his tears hit the floor. It had a profound effect. Kazuo Nakafa, the father of a fishing instructor whose son is missing at sea, did not understand much English, but he said . . . he understood two of Waddle’s words very clearly: . . . ‘very sorry.’ . . . At that moment his anger suddenly dissipated.”⁵ Although it was clear that his career was finished, Commander Waddle was also facing a possible court marshal and prison time, so his act of apology was made “against legal advice.” In fact, when he first attempted to apologize, his attorneys successfully dissuaded him from doing so.⁶ Like Commander Waddle,

Apology] (“for centuries evidence law has provided that admissions by party opponents are admissible”) (emphasis in original).

4. As discussed in Part I, *infra*, an effective apology typically enhances a transgressor’s feelings of shame and humiliation because it requires the transgressor to occupy a position of moral inferiority to the victim.

5. *All Things Considered: Submarine Week* (NPR Radiobroadcast, Mar. 9, 2001), available at http://search.npr.org/cgi/cmn/segment_display.cfm?segID=119723 (last visited Oct. 10, 2002).

6. A few weeks earlier, Commander Waddle’s attorney-advised partial apology, in which he expressed regret but took no responsibility for the incident, was not accepted. Kris Frieswick, *Say You’re Sorry*, CFO MAG., May 1, 2000, at <http://cfo.com/article/1,5309,2922,00.html> (last visited Oct. 15, 2002).

other transgressors report acting on conscience despite the potential legal consequences.⁷

In the face of a heartfelt apology, victims, like the father of the Japanese student, similarly report feeling a near instantaneous erosion of anger and pain. Interestingly, the emotional healing process often seems to occur outside the will of the victim. Using a personal example, one of us was angry with her spouse for an entire afternoon, mentally rehearsing the outraged speech she would deliver to her husband when she returned home. However, by the time that she had gotten six words into the speech, her husband stopped her with an elaborate and heart-felt apology. She felt the anger dissipate so quickly that she found herself protesting that she wasn't finished being angry. She attempted twice to articulate her anger and pain, but despite these apparent efforts to the contrary, she had lost her conviction.

In contrast, victims who receive no apology can become angry and vindictive, pursuing litigation at a cost that far exceeds any rational expectation of monetary award.⁸ Returning to the playground incident, perhaps the lawyer-neighbor, who is one of this article's authors was correct in assuming that the school was making an economically rational decision to remain silent for fear of legal exposure.⁹ Unfortunately, the decision to express this assumption clearly enraged the injured boy's mother and may have had the unwanted effect of increasing the risk of a lawsuit. Indeed, recent literature provides ample anecdotal evidence that plaintiffs are more likely to sue when they do not get an apology, and more likely to forgo compensation when they receive one.¹⁰

7. Jonathan Cohen reports a story about a lawyer who, after several days' consideration, wrote a letter of apology to a woman whose car he hit while driving. Jonathan R. Cohen, *Advising Clients to Apologize*, 72 S. CAL. L. REV. 1009, 1056-58 (1999) [hereinafter *Advising Clients*]. Conversely, some people will refuse to apologize even when the monetary costs of doing so are nominal.

8. For a story about a trial over a missing snowman figure on a \$38.00 gingerbread house, see Paula M. Young, *Mediation and the Power of an Apology: The Case of the Missing Snowman*, MISSOURI LAWYERS WEEKLY, Apr. 2000.

9. Cf. Stephen B. Goldberg et al., *Saying You're Sorry*, 3 NEGOTIATION J. 221, 222 (1987) (recounting commonplace advice from insurance companies to policyholders not to express sympathy to parties injured by policyholders so as to avoid potential liability). Notice that the individual's motivation to apologize can be in tension with the incentives of an entity that bears potential legal liability. Insurers prefer that policyholders not apologize, and employers similarly might prefer that erring employees withhold apologies. See Jonathan R. Cohen, *Apology and Organizations: Exploring An Example from Medical Malpractice*, 27 FORDHAM URB. L.J. 1447, 1468-70 (2000) [hereinafter *Apology and Organizations*] (discussing principal-agent tensions in the context of dispute resolution).

10. See *Apology and Organizations*, *supra* note 9, at 1447-63 (discussing policy of Kentucky hospital to apologize to patients for errors and reporting possible decrease in costs as result of policy); Steven Keeva, *Does Law Mean Never Having to Say You're Sorry*, A.B.A. J., Dec. 1999, at 64, 65 (estimating that 30% of medical malpractice cases could be avoided with a simple apology);

Such behavior is confounding from a simple law and economics perspective under which decisions to sue and settle are asserted to depend only upon 1) the parties' estimates of the likelihood that the plaintiff will win, 2) the dollar value of the award, and 3) the costs of trial and judgment enforcement.¹¹ Although these are undoubtedly important determinants of individual decision making, the calculated, cool quantitative logic of such models ignores apology as a valued method of dispute resolution. Setting aside for the moment the less tangible value of apology, the anecdotal evidence suggests that apology can be very valuable, in dollar terms, to disputing parties. In the context of wrongdoing, people often value apology more than monetary compensation. Ford and Firestone had to broadcast a videotaped apology on national television to reach a settlement with a woman paralyzed by an accident caused by a roll-over of a Ford Explorer with defective Firestone tires.¹² In the face of several attractive monetary offers, Paula Jones demanded—but never received—an apology from President Clinton as a condition of settlement.¹³ Many lawyers are cognizant of the value of apology,¹⁴ and experienced negotiators and mediators have

Deborah L. Levi, *The Role of Apology in Mediation*, 72 N.Y.U. L. REV. 1165, 1167 (1997) (stating that apology can often move parties closer to settlement); Peter H. Rehm & Denise R. Beatty, *The Legal Consequences of Apologizing*, 1996 J. DISP. RESOL. 115, 117 (1996) (noting that apologies can diffuse anger and help avoid litigation).

11. See, e.g., Russell Korobkin & Chris Guthrie, *Psychology, Economics and Settlement: A New Look at the Role of the Lawyer*, 76 TEX. L. REV. 77, 78 (1997) (law and economics models traditionally “assume that litigants seek to maximize their wealth through the legal system”). Important early law and economics models of suit and settlement include Richard A. Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 2 J. LEGAL STUD. 399, (1973), and George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984). The literature in the field is now vast. For reviews of the models and refinements, see Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 27 J. ECON. LITERATURE 1067 (1989); Andrew F. Daughety, *Settlement*, in THE ENCYCLOPEDIA OF LAW AND ECONOMICS (Boudewijn Bouckaert & Gerrit de Geest eds., 2000). In contrast, Peter Huang has attempted to model emotions into litigation decisions. See generally Peter H. Huang, *Emotional Responses in Litigation*, 12 INT’L. REV. L. & ECON. 31 (1992).

12. Frieswick, *supra* note 6.

13. See *The Paula Jones Settlement*, WASH. POST, Nov. 15, 1998, at C6. In lieu of an apology, Clinton ended up paying Jones \$850,000. See Neil A. Lewis, *Clinton Settles Jones Lawsuit with a Check for \$850,000*, N.Y. TIMES, Jan. 13, 1999, at A14.

14. In a survey of one state’s bar association, 83% of responding lawyers agreed that apology alone could settle many disputes. See Douglas Yarn, *Survey of Lawyers’ Attitudes Toward ADR*, conducted on behalf of the Georgia Supreme Court’s Commissions on Dispute Resolution and Professionalism, on file with author. See also Goldberg et al., *supra* note 9 (noting that sometimes the injured party only wants the other party to admit wrongdoing); Keeva, *supra* note 10, at 65

witnessed how apologies can bridge considerable distances in negotiating positions.¹⁵

Failure to take into account these human tastes for apology and forgiveness can have significant consequences, and yet these important, emotion-laden preferences have historically garnered little attention from our formal legal system. Recently, proponents of apology and forgiveness, particularly from the alternative dispute resolution (ADR) movement, have urged increased sensitivity to the uses and nuances of these behaviors and their effect on the resolution of disputes.¹⁶ In direct response to the perceived conflict between apology and litigation, some commentators promote evidentiary reforms that provide “safe harbors.”¹⁷ In these safe harbors, parties can apologize without acting contrary to legal advice, like Commander Waddle, or increasing their civil liability exposure, as the school may have feared. Several states have already responded by considering the adoption of apology-friendly legislation.¹⁸

(claiming close to 30% of medical malpractice cases would never have occurred if doctor had apologized).

15. See Russell Korobkin & Chris Guthrie, *Psychological Barriers to Litigation Settlement: An Experimental Approach*, 93 MICH. L. REV. 107, 148 (1994), in which the authors conducted an experiment that showed tenants are more likely to accept \$900 settlement offer from landlord when it was accompanied by an apology than when it was offered without an apology.

16. See, e.g., Hiroshi Wagatsuma & Arthur Rosett, *The Implications of Apology: Law and Culture in Japan and the United States*, 20 LAW & SOC'Y REV. 461, 495 (1986) (advocating greater use of apology in American legal system); Levi, *supra* note 10, at 1167; Max Bolstad, *Learning From Japan: The Case For Increased Use of Apology in Mediation*, 48 CLEV. ST. L. REV. 545, 569–78 (2000) (urging the use of apology in mediation based on the experience of the Japanese); see generally NICHOLAS TAVUCHIS, *MEA CULPA: A SOCIOLOGY OF APOLOGY AND RECONCILIATION* 121 (1991).

17. Cohen, *Advising Clients*, *supra* note 7, at 1031–42, 1061–64; Aviva Orenstein, *Apology Excepted: Incorporating a Feminist Analysis Into Evidence Policy Where You Would Least Expect It*, 28 SW. U. L. REV. 221, 247–55 (1999).

18. Massachusetts has excluded the admissibility of statements, writings and gestures expressing sympathy or benevolence. MASS. GEN. LAWS ch. 233, § 23D. The law arose after the killer of a state legislator's daughter failed to apologize out of fear of legal consequences. See Lee Taft, *Apology Subverted: The Commodification of Apology*, 109 YALE L.J. 1135, 1151 (2000). Texas and California have enacted similar legislation. See TEX. CIV. PRAC. & REM. CODE ANN. § 18.061 (West 1997 & Supp. 2002) (rendering inadmissible “a communication that . . . expresses sympathy or a general sense of benevolence relating to the pain, suffering, or death of an individual involved in an accident,” but rendering admissible “statements concerning negligence or culpable conduct pertaining to an accident or event”); CAL. EVID. CODE §1160 (rendering inadmissible benevolent and sympathetic statements and gestures); see generally William K. Bartels, Note, *The Stormy Seas of Apologies: California Evidence Code Section 1160 Provides a Safe Harbor for Apologies Made After Accidents*, 28 W. STATE U. L. REV. 141 (2000–01). However, these statutes fall short of protecting apologies that admit liability or fault. More recently, West Virginia, Connecticut, and Hawaii have begun to consider changes in evidence rules that would specifically exclude evidence of apologies. See *Legislating Apology*, *supra* note 5, at 19–22 (discussing enacted, proposed and pending apology legislation).

Moreover, the use of court-ordered or “coerced” apologies in criminal cases appears to be on the rise.¹⁹ Apology is considered an important objective in victim-offender mediation.²⁰ It is also a topic of increasing interest for mediators in civil disputes²¹ because the mediation forum already protects apologies, partial or full,²² from use at trial.²³ In a conscious decision to satisfy the preference for apology, businesses and hospitals are among the institutions that are experimenting with apology policies in an effort to reduce their liability.²⁴

The movement for strengthening the role of apology in law while providing it more protection from the legal system is not without criticism. Critics of this movement maintain that coerced, “partial,” and protected apologies, as well as those induced by intervening parties such as judges and mediators, are less meaningful and without sufficient moral weight to lead to forgiveness and reconcile parties.²⁵ Indeed, it is argued that such “commodified” apologies can undermine the fundamental value of apology in reconciliation efforts.²⁶ In reply, one commentator argues that such apologies are valuable nonetheless because they satisfy a variety of individual and societal interests other than reconciliation.²⁷

This Article joins the emerging debate by exploring the question of how the legal system should treat apology, if at all, through the lens of evolutionary biology and economics. Part I examines the components

19. Elizabeth Latif, Note, *Apologetic Justice: Evaluating Apologies Tailored Toward Legal Solutions*, 81 B.U. L. REV. 289, 296–98 (2001).

20. This is largely associated with the restorative justice movement. See, e.g., MARK J. UMBREIT, VICTIM MEETS OFFENDER: THE IMPACT OF RESTORATIVE JUSTICE AND MEDIATION 18–22 (1994); Rose Ruddick, *A Court-Referred Scheme*, in MEDIATION AND CRIMINAL JUSTICE: VICTIMS, OFFENDERS AND COMMUNITY 82, 85 (Martin Wright & Burt Galaway eds., 1989) [hereinafter MEDIATION AND CRIMINAL JUSTICE]; June Veivers, *Pre-Court Diversion for Juvenile Offenders*, in MEDIATION AND CRIMINAL JUSTICE, *supra*, at 69, 74–76; Latif, *supra* note 19, at 292–95. See also John O. Haley, *Apology and Pardon: Learning From Japan*, 41 AM. BEHAV. SCIENTIST 842 (1998) (advocating that concepts of apology used in Japanese criminal proceedings can be applied in the U.S.).

21. See *supra* note 10.

22. “Partial” apologies are expressions of sympathy or benevolence for the injured person’s condition without admitting fault or responsibility for the causal act. *Advising Clients*, *supra* note 7, at 1030. See *infra* notes 35–63 and accompanying text for discussion of the elements necessary for full apologies.

23. See, e.g., N.C. GEN. STAT. § 7A-38.1(1). For a compilation of such laws, see SARAH R. COLE ET AL., 1 MEDIATION: LAW, POLICY, & PRACTICE app. A (2d ed. 1994).

24. See *Apology and Organizations*, *supra* note 9.

25. Taft, *supra* note 18, at 1146–49.

26. *Id.*

27. Latif, *supra* note 19, at 311–20.

and nuances of individual apology as described by the legal, sociological, and social psychological literature. The nuances of apology described in Part I are better understood in the context of evolved human predispositions toward deception and discernment. Part II uses tools of evolutionary biology and economic analysis to place apology and forgiveness more broadly into human interaction as co-evolved behaviors. Using the analysis developed in Part II, Part III considers the role of apology and forgiveness in the context of trial and provides a cost-benefit framework for more careful consideration of the use of apology in the courtroom.

Throughout this Article we focus on private rather than public apology. We primarily address apology in the context of the dyadic relationship between the victim and the transgressor.²⁸ Thus, by implication, we may have much more to say about individualistic rather than communal societies.²⁹ Moreover, we treat forgiveness in the context

28. Nicholas Tavuchis comments that “whatever the actual or conceptual status of the relevant units (individuals, corporate entities, or collectivities), *the fundamental pattern of sociation in apologetic discourse is dyadic*. That is to say, its exclusive, ultimate, and ineluctable focus is upon interaction between the primordial social categories of Offender and Offended.” TAVUCHIS, *supra* note 16, at 46 (emphasis in original).

29. Much of the validity of a biological explanation for behavior rests on the relative universality of the behavior in question. The social psychologists and linguists either assume or—in the case of politeness theory, discussed *infra* in Part II.A.—document the widespread existence of apologetic behaviors. See generally PENELOPE BROWN & STEPHEN C. LEVINSON, *POLITENESS: SOME UNIVERSALS IN LANGUAGE USAGE* (1987). Some psychologists have compared Japanese and American children and concluded they react similarly to transgressions and to apologies despite socialization in different cultural contexts. See generally Ken-Ichi Ohbuchi & Kobun Sato, *Children's Reactions to Mitigating Accounts: Apologies, Excuses, and Intentionality of Harm*, 134 J. SOC. PSYCHOL. 5–17 (1999) (citing V.L. Hamilton et al., *Credit and Blame Among American and Japanese Children: Normative, Cultural, and Individual Differences*, 59 J. PERSONALITY & SOC. PSYCHOL. 442 (1990)).

The anthropological and ethnographic literature is less conclusive on this subject; we conclude that apologetic and forgiveness behaviors are universal although their expression and frequency vary with the particular situation and cultural milieu. The only directly relevant study attempting a cross-cultural survey of apology simply indicates that apology is more prevalent in some societies than in others. See Letitia Hickson, *The Social Contexts of Apology in Dispute Settlement: A Cross-Cultural Study*, 25 ETHNOLOGY 283 (1986). Hickson indicates that apology may be a more predominant dispute resolution mechanism in hierarchical societies. Unfortunately, the researcher is relying on ethnographic reports gathered over more than a one hundred year period by other researchers who may not have been looking for apologetic behavior or who may have defined apologetic behavior or apologetic discourse differently. While not arguing or supporting the conclusion that apology exists in some societies and not others, Hickson does make a good argument that cultures differ to the extent to which their members stress apology as a remediative technique. She argues that an apology is particularly important to speed settlement in societies with a hierarchical, kin-based political organization and in societies in which children's most frequent companions are adults as opposed to older children or peers. Either factor alone may predispose members of a culture to use apology more often. She finds three elements that together promote a cultural emphasis on apology: “(1)

of its relationship to apology, often ignoring a fuller treatment of forgiveness as an independent subject. Although we believe our analysis can enlighten the important and growing role of apology in criminal law, this article focuses on civil dispute resolution. A more comprehensive evolutionary economic approach would successfully analyze the role of apology, forgiveness, and reintegration in a more comprehensive ethnographic context and in both civil and criminal contexts. At best, then, this Article represents a useful beginning rather than an end to an evolutionary economic analysis of the subject.

We reach a number of conclusions, the most important of which is that both sides of the debate on the admissibility of apology fail to fully appreciate the effect of the evidentiary rules on the incentive to apologize. Importantly, the apology scholars have focused on the role of apology evidence in establishing liability, but they have neglected the fact that apology evidence very often has the practical effect of reducing damages. We consider this dual role for apology at trial and the incentives that admissibility creates for both parties. We conclude that in

restrictions on mobility and hence a compelling interest in the continuation of important relationships; (2) a social context that promotes complimentary, hierarchical forms of behavior; and (3) the tendency to define disputes as challenges to reputation." *Id.* at 292.

The dichotomy between so-called "shame" and "guilt" cultures may explain some of the cultural variability in apologetic behavior. In a shame-based culture, tradition, expressed through myth and ritual, provides the individual with a set of ideal rules of behavior and character traits with which to emulate and compare oneself and one's actions. There is intense pressure to conform and severe negative sanctions for ignoring tradition. The individual identifies closely with the group. In guilt-based societies, the individual is more differentiated from the group, and guilt, an internal sense of deviation from the social code, replaces shame as the social construct guiding moral behavior. Arguably, self-differentiation and self-awareness and therefore guilt is promoted by literacy, leading one psychologist to conclude that the concept of forgiveness can have different meaning in guilt cultures. Michael C. Luebbert, *The Survival Value of Forgiveness*, in *EVOLUTION OF THE PSYCHE* 169, 185 (David H. Rosen & Michael C. Luebbert eds., 1999). But guilt has not replaced shame entirely in any society, and at the level of behavioral biology, the distinction is irrelevant as both shame and guilt only serve to reinforce ingrained conciliatory behaviors such as apology and forgiveness. Indeed, past labeling of Japan and the West as shame and guilt cultures respectively has been strongly questioned as a valid distinction in the context of apologies. See TAVUCHIS, *supra* note 16, at 37-44.

Similar distinctions have been drawn between collectivist and individualist cultures in the context of apology. Collectivist culture members may be more likely to apologize for the actions of other members of the group and to frame apologies in more relational terms, whereas individualistic culture members are less likely to make apologies for others and the apologies are presented in more personal terms. Harry C. Triandis, *Individualism and Collectivism: Past, Present, and Future*, in *HANDBOOK OF CULTURE AND PSYCHOLOGY* 35, 39 (David Matsumoto ed., 2001).

We do not intend to take a position one way or another on the magnitude or importance of cultural differences in the context of apology except to assert that reconciliatory behaviors, of which apology and forgiveness are expressions, are present in all human cultures for reasons articulated in the next part of this article. Of course, the expressions may vary substantially across cultures.

order to prevent possible opportunism by both transgressors and victims, generally evidence of apology should either be admitted at all phases of litigation or excluded entirely from the courtroom. Furthermore, the choice between these two options likely must turn on considerations other than the effect of admissibility on apology. In short, so long as evidence of apology can be considered at all phases or none of a civil trial, the present debate on its admissibility is largely irrelevant. On the other hand, the evidence rules might matter for those legal situations where damages matter more than the prospect of liability or vice versa. We also conclude that a taste for both apology and forgiveness, rooted in biology, causes people to consistently overvalue them in non-repeat interactions and creates a situation ripe for strategic abuse in large, complex, less-interdependent societies.

Quite separate from our normative conclusions, we consider this article to be an exercise in consilience, "the linking of fact and fact-based theory across disciplines to create a common groundwork of explanation."³⁰ We believe that recent advances in evolutionary theory and a growing awareness of biological influences on behavior enrich the usefulness of economic models of legal behavior. Such advances also provide a firmer foundation and common frame of reference for policy dialogue around this and many other issues in the law. Moreover, we hope to show that the social scientific literature on the Prisoner's Dilemma³¹ needs to focus more on the importance of conciliation and the

30. EDWARD O. WILSON, *CONSILIENCE: THE UNITY OF KNOWLEDGE* 8 (1998).

31. In its classic form:

two individuals are imprisoned and accused of having cooperated to perform some crime. The two prisoners are held separately, and attempts are made to induce each one to implicate the other. If neither one does, both are set free. This is the cooperative strategy. In order to tempt one or both to defect, each is told that a confession implicating the other will result in his or her release and, in addition, a small reward. If both confess, each one is imprisoned. But if one individual implicates the other, and not vice versa, then the implicated partner receives a harsher sentence than if each had implicated the other. We can symbolize the payoffs as follows: T is the temptation to implicate the other; R is the reward that each one gets if neither one defects; P is the punishment each one gets if both defect; and S is the sucker's payoff, the penalty one suffers if implicated by the partner. Thus, $T > R > P > S$

The dilemma is: If each one thinks rationally, then each one will decide that the best course is to implicate the other, thus making both worse off than if each had decided to trust the other. Consider the first individual's problem: If his partner fails to implicate him, then he himself ought to implicate his partner in order to gain T instead of R; and if his partner implicates him, then it will be better for him to implicate his partner, since he will then suffer P instead of S.

ROBERT TRIVERS, *SOCIAL EVOLUTION* 390 (1985). The Prisoner's Dilemma disregards ethical considerations; it is simply rational to be selfish in this moral vacuum whenever the temptation to defect exceeds the benefits of cooperation. For a discussion of the Prisoner's Dilemma story, see Phillip D. Straffin, Jr., *The Prisoner's Dilemma*, 1 U.M.A.P. JOURNAL 103 (1980). For general

role of biology in diffusing conflict and restoring cooperation. At the same time, we hope to help shift the focus of current law and biology scholarship away from a single-minded use of evolutionary theory to predict and analyze egoistic, socially-destructive behaviors.³² It is time for this new field of legal scholarship to press beyond rape, murder, sexual harassment and child abuse to explore more fully the biological roots of altruism, cooperation, and conciliation and their relationship to law and policy.³³

I. APOLOGY AND ITS NUANCES

Apology is a somewhat amorphous phenomenon, the essence of which is difficult to capture in words. However, we all seem to know this phenomenon when we observe or experience it. In the social psychology literature, apologies are described generally as admissions of

treatment of the paradigm, see R. DUNCAN LUCE & HOWARD RAIFFA, *GAMES AND DECISIONS* 94–102 (1967); ANATOL RAPOPORT & ALBERT M. CHAMMAH, *PRISONER'S DILEMMA, A STORY IN CONFLICT AND COOPERATION* (1965).

32. See generally Kingsley R. Browne, *An Evolutionary Perspective on Sexual Harassment: Seeking Roots in Biology Rather Than Ideology*, 8 J. CONTEMP. LEGAL ISSUES 5, 8–9 (1997) (“much of the conflict that is labeled ‘sexual harassment’ is traceable in part to the fact that evolution has resulted in conflicting interests between the sexes, which in turn has resulted in different sexual psychologies in men and women”); Kingsley R. Browne, *Women at War: An Evolutionary Perspective*, 49 BUFF. L. REV. 51 (2001) (greater male preference for risk-taking and aggressiveness reproductively advantageous and helps explain male warrior spirit as well as the rape and enslavement of women in war); Laura M. Sullivan, Note, *An Evolutionary Perspective of Peer Sexual Harassment in American Schools: Premising Liability on Sexual, Rather Than Power Dynamics*, 3 WM. & MARY J. WOMEN & L. 329 (1997); Robin Fretwell Wilson, *Children at Risk: The Sexual Exploitation of Female Children After Divorce*, 86 CORNELL L. REV. 251 (2001); Owen D. Jones, *Realities of Rape: Of Science and Politics, Causes and Meanings*, 86 CORNELL L. REV. 1386 (2001); Owen D. Jones, *Law and The Biology of Rape: Reflections on Transitions*, 11 HASTINGS WOMEN’S L.J. 151 (2000); Owen D. Jones, *Sex, Culture and the Biology of Rape: Toward Explanation and Prevention*, 87 CAL. L. REV. 827 (1999); Cheryl Hanna, *Can A Biological Inquiry Help Reduce Male Violence Against Females?*, 22 VT. L. REV. 333 (1997); Brian Kennan, *Evolutionary Biology and Strict Liability for Rape*, 22 LAW & PSYCHOL. REV. 131 (1998); Owen D. Jones, *Evolutionary Analysis in Law: An Introduction and Application to Child Abuse*, 75 N.C. L. REV. 1117 (1997) [hereinafter *Child Abuse*]; *Symposium on Biology and Sexual Aggression: Part I*, 39 JURIMETRICS J. (Winter 1999); *Symposium on Biology and Sexual Aggression: Part II*, 39 JURIMETRICS (Spring 1999).

33. Some efforts along these lines have already been made. See, generally, THE SENSE OF JUSTICE: BIOLOGICAL FOUNDATIONS OF LAW (ROGER D. MASTERS & MARGARET GRUTER, eds., 1992); Christopher Badcock, *Reciprocity and the Law*, 22 VT. L. REV. 295 (1997); E. Donald Elliott, *The Tragi-Comedy of the Commons: Evolutionary Biology, Economics and Environmental Law*, 20 VA. ENVTL. L.J. 17 (2001); Owen D. Jones, *Time-Shifted Rationality and the Law of Law’s Leverage: Behavioral Economics Meets Behavioral Biology*, 95 NW. U. L. REV. 1141, 1176–77 (2001) (providing biological explanation for human tendency toward excess cooperation).

blameworthiness and regret for doing harm.³⁴ Because an apology accepts both responsibility and blameworthiness, it differs from excuse, explanation, and justification, which all attempt to deflect or deny blameworthiness. Apologies can be effective tools for de-escalating conflicts and avoiding the negative consequences of bad actions.³⁵

Related to apology is the likewise amorphous concept of forgiveness. Forgiveness is a primary object of apology.³⁶ It precedes apology's ultimate object: reconciliation, a return to the relationship that existed before the transgression.³⁷ Although both apology and forgiveness involve interpersonal interactions, forgiveness is also an intra-psychic phenomenon of cognitive restructuring that can occur independent of both an apology and the victim's external manifestations of forgiveness.³⁸ In genuine forgiveness, the victim of an unjust injury voluntarily abandons her resentment and her desire to retaliate.³⁹ We focus on apology in this paper, but our supposition is that apology and forgiveness are significantly intertwined emotional phenomena.

A. *Defining Apology*

In recent years, sociologists, social psychologists, moral philosophers, and legal commentators have attempted to distill the essence of effective

34. See, e.g., Bruce W. Darby & Barry R. Schlenker, *Children's Reactions to Apologies*, 43 J. PERSONALITY & SOC. PSYCHOL. 742, 742 (1982); Bruce W. Darby & Barry R. Schlenker, *Children's Reactions to Transgressions: Effects of the Actor's Apology, Reputation and Remorse*, 28 BRIT. J. SOC. PSYCHOL. 353, 353 (1989) [hereinafter *Children's Reactions to Transgressions*].

35. See *Children's Reactions to Transgressions*, *supra* note 34, at 353–54; Ohbuchi & Sato, *supra* note 29, at 5–17.

36. Tavuchis' primary argument on the topic of apology is that "the singular achievement of apologetic discourse paradoxically resides in its capacity to effectively eradicate the consequences of the offense by evoking the unpredictable faculty of forgiveness." TAVUCHIS, *supra* note 16, at viii.

37. Reconciliation is distinguishable from apology and forgiveness, both of which facilitate and are motivated by possible reconciliation. See Everett L. Worthington, Jr., *The Pyramid Model of Forgiveness: Some Interdisciplinary Speculations about Unforgiveness and the Promotion of Forgiveness*, in DIMENSIONS OF FORGIVENESS: PSYCHOLOGICAL RESEARCH & THEOLOGICAL PERSPECTIVES 107, 129–131 (Everett L. Worthington, Jr. ed., 1998) [hereinafter DIMENSIONS OF FORGIVENESS] (outlining the range of measures that predict reconciliation).

38. Roy F. Baumeister, Julie J. Exline, & Kristin L. Sommer, *The Victim Role, Grudge Theory, and Two Dimensions of Forgiveness*, in DIMENSIONS OF FORGIVENESS, *supra* note 37, at 79, 85–86.

39. Robert D. Enright & Catherine T. Coyle, *Researching the Process Model of Forgiveness Within Psychological Interventions*, in DIMENSIONS OF FORGIVENESS, *supra* note 37, at 139, 140. Forgiveness does not necessarily imply a release from liability or responsibility to repair or compensate for the harm. It should be distinguished from pardoning, in which the offender is released from the legal penalties, condoning, in which the injured person justifies the offense, excusing, in which the injured believes the offender's actions are defensible, and forgetting and denial. *Id.* at 141.

apologies—those likely to elicit forgiveness and reconciliation. Although they vary slightly in expression, apology theorists have identified four basic elements contained in an effective or “full” apology—identification of the wrongful act, remorse, promise to forbear, and offer to repair.⁴⁰

First, the transgressor must identify her wrongful act. She must articulate, with specificity, the deed that has caused harm. Vague reference to possible wrongdoing simply won’t do, a point illustrated by two historically prominent but ineffective public apology attempts. First, in his resignation speech, President Nixon stated, “I regret deeply any injuries that may have been done in the course of events that led to this decision.”⁴¹ Later, Senator Bob Packwood faced accusations that he had sexually harassed several women while serving in Congress. Failing to learn from Nixon’s mistake, he responded with “I’m apologizing for the

40. Although we see four essential components to apology, several commentators have identified more or fewer than four elements. *See, e.g.*, ERVING GOFFMAN, *RELATIONS IN PUBLIC: MICROSTUDIES OF THE PUBLIC ORDER* 113 (1971) (asserting that an apology must contain the following elements: 1) an expression of remorse and regret, 2) a manifestation of guilt for having transgressed socially proscribed conduct, 3) sympathy with the application of and approving sanction, 4) repudiation of the bad behavior and defamation of the self that so behaved, 5) espousal of the correct behavior and “an avowal henceforth to pursue that course,” and 6) “performance of penance” and an offer of restitution). Tavuchis finds two fundamental requirements, “the offender has to be sorry and has to say so.” TAVUCHIS, *supra* note 16, at 36. He believes that other features, such as “offers of reparation, self-castigation, shame, embarrassment, or promises to reform,” are implicit in the state of “being sorry.” *Id.* Cohen identifies three elements: admitting fault, expressing regret to the act, and expressing sympathy for the harm caused. *Advising Clients*, *supra* note 7, at 1014–15. Taft distinguishes an “authentic” apology as having two key elements—an unequivocal expression of sorrow and an admission of wrongdoing. Taft, *supra* note 18, at 1154. Levi uses the term “happy-ending apology” and asserts that it requires responsibility and regret for a harmful act. Levi, *supra* note 10, at 1174–75. Relying on similar criteria in Wagatsuma & Rosett, *supra* note 16, at 469–70, Orenstein asserts that “[a]t their fullest, apologies should: (1) acknowledge the legitimacy of the grievance and express respect for the violated rule or moral norm; (2) indicate with specificity the nature of the violation; (3) demonstrate understanding of the harm done; (4) admit fault and responsibility for the violation; (5) express genuine regret and remorse for the injury; (6) express concern for future good relations; (7) give appropriate assurance that the act will not happen again; and, if possible, (8) compensate the injured party.” Orenstein, *supra* note 17, at 239. An apology that contains all essential elements might be referred to as a “full” apology. Although we assert that in general a full apology is a necessary prerequisite to forgiveness and reconciliation, in practice there are exceptions. In some cases, a full apology may not necessarily achieve reconciliation, while a partial apology in another instance may.

Our use of the term “effective” apology simply assumes that the ultimate goal of apology, reconciliation, is more likely to be achieved with an apology that contains most if not all of the elements, implicitly or explicitly. Some commentators use the term “authentic” or “full” apologies.

41. THEODORE H. WHITE, *BREACH OF FAITH: THE FALL OF RICHARD NIXON* 350 (1975).

conduct that it was alleged that I did.”⁴² In both instances, the speaker’s words seemed qualified and defensive, as though he was afraid to make himself vulnerable to his audience for his wrongdoing. But the very essence of genuine, effective apology is the recognition of the fact that a wrong makes the transgressor vulnerable, at least socially, to the victim who holds the moral high ground.⁴³ Failure to convey vulnerability eviscerates the would-be apology. At the same time, however, the conveyance of vulnerability can leave some transgressors extremely reluctant to apologize.⁴⁴

Second, the transgressor must express remorse for her wrongful act.⁴⁵ The apologizer regrets both the transgression and the harm to the relationship that has been caused.⁴⁶ Remorse and its accompanying

42. Aaron Lazare, *Go Ahead, Say You’re Sorry*, 28 PSYCHOL. TODAY 40, 76 (Jan/Feb 1995). The ineffectiveness of these apologies is frequently discussed in the apology literature. See, e.g., Latif, *supra* note 21, at 307–08; Taft, *supra* note 18, at 1141; TAVUCHIS, *supra* note 16, at 55–57.

43. “[Apologies] constitute—in their most responsible, authentic, and, hence, vulnerable expression—a form of self-punishment that cuts deeply because we are obliged to retell, relive, and seek forgiveness for sorrowful events that have rendered our claims to membership in a moral community suspect or defeasible.” TAVUCHIS, *supra* note 16, at 8; see also JEFFRIE G. MURPHY & JEAN HAMPTON, FORGIVENESS AND MERCY 28 (1988) (“[O]ur moral relations provide for a ritual whereby the wrongdoer can symbolically bring himself low (or raise us up . . .)—in other words, the humbling ritual of *apology*, the language of which is often that of *begging* for forgiveness.”) (emphases in original). We place power in the hands of the victim to determine whether forgiveness and reacceptance is appropriate. See JORAM GRAF HABER, FORGIVENESS 102 (1991) (noting that “forgiveness is at the victim’s discretion”); TAVUCHIS, *supra* note 16, at 18 (apology is “about a fall from social grace related to someone—the *only one*—who has the power to restore the offender to that state”) (emphasis in original).

44. See Taft, *supra* note 18, at 1142 (noting difficulty of offering apology); Orenstein, *supra* note 17, at 245–46; Lazare, *supra* note 42, at 78; see *infra* note 99 (discussing shame, humiliation, vulnerability and powerlessness associated with apologizing).

45. Standard dictionary definitions of apology typically include an expression of regret. See, e.g., WEBSTER’S THIRD INTERNATIONAL DICTIONARY (1961) (apology defined as “. . . an admission to another of a wrong or discourtesy done him accompanied by an expression of regret”); OXFORD ENGLISH DICTIONARY (2d ed. 1989) (apology defined as “[a]n explanation offered to a person affected by one’s action that no offence was intended, coupled with the expression of regret for any that may have been given; or, a frank acknowledgement of the offence with expression of regret for it, by way of reparation”). See also Deborah Tannen, *I’m Sorry, I Won’t Apologize*, N.Y. TIMES MAGAZINE, July 21, 1996, at 34–35 (“[Y]our face should look dejected, your voice should sound apologetic . . . the depth of remorse should be commensurate with the significance of the offense.”); *Advising Clients*, *supra* note 7, at 1014–15 (listing the expression of regret as an essential element of apology).

46. TAVUCHIS, *supra* note 16, at 20.

[T]he expression of regret (and hence, sorrow) that is essential to an apology speaks to the offended other(s) of a shared loss resulting from one’s unreasonable action. It refers to something done (or not done), said (or unsaid), that betrays, and threatens whatever defines, binds, and is deemed worthy. Reason points outward; apologies direct attention inward. Regret, gently but firmly, reminds us of what we were before we erred, what our place was, where we stood in relation to the other, and what we have lost. And regret is sad about this state because it

sorrow are often conveyed with body language and facial expression in face-to-face apologies. More distant apologies often require explicit, and perhaps more extreme, statements of sorrow and regret.⁴⁷ Without remorse, there is no apology, as in the example of Reverend Jerry Falwell's response to criticism of his assertion that the Antichrist was alive and was a Jewish man. In his subsequent apology he expressed no remorse. In fact, he said "I apologize not for what I believe," and apologized instead for his lack of "tact" and "judgment" in making the statement.⁴⁸

Third, the apology must include a promise of forbearance.⁴⁹ In essence the apologist attempts to separate himself from his transgression, and to move forward without moral stain. The transgressor acknowledges that he has done something bad, but with the apology says that he is not a bad person. This signal serves a useful purpose. The apologist often seeks to continue his relationship with the victim, and uses the apology in an attempt to bond himself to better behavior in the future. Even total strangers share at least a temporary relationship by virtue of the fact of the injury, and apology can help pave the way for constructive discussions about reparations.⁵⁰ To continue the relationship beyond the resolution of this transgression, the apologist's promise of forbearance

was me, my actions and conduct, and not those of someone else, or conditions beyond my control, that brought about my estrangement. In other words, it was *my* poverty, *my* breach of trust, that led to the loss.

Id. (emphasis in the original); see also Latif, *supra* note 19, at 306 ("[a]n expression of guilt communicates that the offender is distressed over hurting the victim, that the potential loss of the relationship matters to the offender, and that the offender is disappointed with himself over the incident").

47. TAVUCHIS, *supra* note 16, at 27, provides an example of an effective apologetic letter:

Dear Hank:

There is no way I can erase the tragic error of my bumbling tongue this morning. I never would consciously offend you in any way, because I respect and treasure your friendship. I hope that along with all the other good qualities you possess, forgiveness is among them. For I need your forgiveness now very much.

Sincerely,
Elizabeth

Id. The letter was originally printed in AMY VANDERBILT, *THE AMY VANDERBILT COMPLETE BOOK OF ETIQUETTE: A GUIDE TO CONTEMPORARY LIVING* 477 (1952) (Revised and expanded by Letita Baldrige, 1978).

48. See *Falwell Apologizes for Antichrist Remarks*, MARANATHA CHRISTIAN J., Feb. 10, 1999, at <http://www.mcjonline.com/news/news3030.htm> (last visited Oct. 15, 2002).

49. Wagatsuma & Rosett, *supra* note 16, at 469–70 (stating that "meaningful apology" requires, *inter alia*, promise that harmful act will not recur).

50. See *Advising Clients*, *supra* note 7, at 1020.

might well require credibility; however, mere reconciliation presumably requires no more than the perception that the transgressor sincerely wishes to forbear. Of course, it is also possible for an apology to increase the likelihood that the transgressor will reform her behavior. In other words, an apology can serve to remind the transgressor of the value of the relationship to her. It can have a transformative effect on the transgressor's future behavior.

Identification of the wrongful act, remorse, and promise to forbear are elements that confirm the validity of a norm shared by the victim and transgressor. Through a clear expression of these elements, the transgressor displays recognition of the norm violated and acceptance of the mutuality of that norm. In fact, community leaders or norm entrepreneurs might use apology as a mechanism for establishing new social norms. Eventually, those new social norms may be expressed in substantive law. Conversely, if interacting parties have failed to establish shared social norms prior to an alleged transgression, the apology can be delayed pending discussion of appropriate standards of conduct.

Finally, when the transgressor is guilty of wrongdoing, then his effective apology requires an offer of repair,⁵¹ even though forgiveness often results in the victim bearing some or all of the costs of the harms.⁵² The overzealous little league ball player must offer to pay for a broken window, and the negligent doctor must offer to perform remedial procedures. Indeed, when direct compensation seems inappropriate or infeasible, many transgressors make costly gestures designed to offset the moral wrong. The man who breaks a date sends flowers, while the unfairly accusatory wife cooks an elaborate meal. The transgressor may express her willingness and, perhaps necessity, of offsetting the costs imposed on a victim through self-mutilation and even suicide attempts.⁵³

51. Wagatsuma & Rosett, *supra* note 16, at 469–70 (“meaningful apology” requires, *inter alia*, willingness to compensate injured victim).

52. See *supra* note 39 (forgiveness need not pardon one from legal penalties).

53. See Leo Katz, *Why the Successful Assassin Is More Wicked Than the Unsuccessful One*, 88 CAL. L. REV. 791, 796 (2000) (using example of wrongdoer who feels so much remorse he engages in self-mutilation). Examples of the symbolic use of self-mutilation and suicide abound in literature. In the Greek myth of Oedipus, as told by Sophocles, the Second Messenger recounts how Oedipus blinds himself upon the realization that the murderous and incestuous prophecy has played out:

He with them struck the pupils of his eyes,
Such words as these exclaiming: “They should see
No more the ills he suffered or had done;
But in the dark should look, in time to come,
On those they ought not, not know whom they would.”
With such like wails, not once or twice alone,

A consistent strand running through these elements is that the offender accepts blame for the wrongful act and thus bears responsibility for future forbearance and reparations. The more unambiguously and emphatically a transgressor accepts blameworthiness, the more likely the apology will induce meaningful reconciliation. For example, a clear expression of responsibility (“I’m sorry I did x”) is more effective than one that deflects or avoids (“I’m sorry about x”). The latter could be interpreted as merely an expression of sympathy rather than an apology.

Implicit in this discussion of apology is some sense of what effective apologies are not. A communication between parties may sound like an apology, but be missing a key element. Consider, for example, the recent Sino-American row over the collision of a Chinese jet and U.S. spy plane flying in airspace the Chinese seek to restrict.⁵⁴ The Chinese jet crashed, killing its pilot. Out of necessity, the U.S. plane landed on Chinese territory, Hainan Island, without permission from the Chinese government.⁵⁵ The Chinese government detained the plane’s crew of twenty-four Americans for eleven days and demanded an apology from

Raising the lids, he tore his eyes, and they,
 All bleeding, stained his cheek, nor ceased to pour
 Thick clots of gore, but still the purple shower
 Fell fast and full, a very rain of blood.
 Such were the ills that fell on both of them,
 Not on one only, wife and husband both.
 His former fortune, which he held of old,
 Was rightly honored; but for this day’s doom
 Wailing and woe, and death and shame, all forms
 That man can name of evil, none have failed.

SOPHOCLES, OEDIPUS THE KING, lines 1323–38 (E.H. Plumptre trans., *The Harvard Classics*, Vol. VIII, Part 5, P.F. Collier & Son, 1909–14); available at <http://www.bartleby.com/8/5/3.html> (last visited Oct. 15, 2002). Consider also the following biblical example:

Ye have heard that it was said by them of old time, Thou shalt not commit adultery: But I say unto you, That whosoever looketh on a woman to lust after her hath committed adultery with her already in his heart. And if thy right eye offend thee, pluck it out, and cast it from thee; for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell. And if thy right hand offend thee, cut it off, and cast it from thee: for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell.

Mathew 5:27–30 (King James). Shakespeare has called on the sentiment as well. Recall that Othello kills himself after realizing Iago has falsely enraged his jealousy with adulterous lies and tricked him into killing his beloved and innocent wife. His last words: “I kiss’d thee ere I kill’d thee; no way but this, Killing myself to die upon a kiss.” WILLIAM SHAKESPEARE, OTHELLO act 5, sc. 2, line 415 (*The Oxford Shakespeare: The Complete Works of William Shakespeare*, Oxford University Press, Craig, W.J. ed., 1914), available at www.bartleby.com/70/ (last visited Oct. 15, 2002).

54. See Mitch Frank, *Bush’s Big Test*, TIME, Apr. 16, 2001, at 26.

55. *Id.*

Washington. After a number of attempts at framing a mutually-acceptable statement,⁵⁶ the standoff eventually ended with a letter stating that the U.S. was “very sorry” for the loss of the Chinese pilot and for landing in Hainan without permission.⁵⁷ The letter did not apologize for flying in that airspace or for the plane’s defending itself from the pursuit of the Chinese jet.⁵⁸ In the end, then, the Americans took no responsibility for the incident, and they still got their crew back.

The U.S. statement was not an apology as we define it because it purposely avoided any recognition of a wrongful act other than landing in Chinese territory without permission—an easily accepted mutual norm. The statement failed to address the fundamental source of the conflict. Furthermore, the statement was rhetorical and strategic.⁵⁹ Formal recognition of the communication as an apology served each party’s goals of deescalating the immediate hostilities while saving face with their respective citizenry and posturing for future negotiations over U.S. flights near Chinese territory. Like so many “public apologies” issued by officials with political agendas, the U.S. statement was much too guarded and too focused on short-term considerations to be considered “effective” in any fundamental sense.

In addition to incomplete apologies and strategic apologies, apologies masquerading as argument are likely to prove ineffective. Argumentative apologies typically begin with, “I’m sorry, but . . .” statements. The speaker starts her sentence with conciliation, in the hopes of softening her opponent, and ends the sentence with accusation. “I’m sorry” here is intended to convey reasonableness and to usurp the moral high ground rather than to express remorse.⁶⁰ Similarly, “I’m sorry, but . . .”

56. Initially, Secretary of State Colin Powell expressed “regret” over the fate of the Chinese pilot, and President Bush followed up with a similar statement of regret. But the Chinese government found these statements unsatisfactory. The Chinese recognize four distinct levels of apology: *yihan* and *wan xi*, meaning roughly “excuse me” or a mild “I’m sorry”; *feichang bao qian*, approximating “very sorry”; *dao qian*, implying significant responsibility (what the Chinese initially demanded) and which in diplomatic terms suggests a degree of submission. This third level of apology is rarely given and is apparently never offered by a person in power. The very highest level is called *xie zui*, the forgiveness asked by a criminal in capital crime cases. Robert Marquand, *U.S. ‘Sorry’ Heard in Beijing as an Apology*, CHRISTIAN SCI. MONITOR, April 12, 2001, at 1.

57. Peter Wonacott, *China Set to Release Crew of Downed U.S. Spy Plane*, ASIAN WALL ST. J., Apr. 12, 2001, at 2.

58. *Id.*

59. Deborah Levi labels this type of apology a “tactical apology.” Levi, *supra* note 10, at 1172–73. It might also be labeled a “formalistic apology” in which the words are said but there is no remorse. Levi, *supra* note 10, at 1174.

60. Levi equates such an apology with Pruitt’s “attitudinal structuring tactic” in bargaining behavior. Levi, *supra* note 10, at 1174 (citing DEAN G. PRUITT, NEGOTIATION BEHAVIOR 80 (1981)).

sometimes prefaces an excuse or explanation. The speaker typically finishes off this sentence by presenting facts calculated to convince the victim that his act was not really wrongful, or that an apology is not ultimately necessary. An example would be President Clinton's apology for his conduct when he stated that although "deeply regret[ting]" his actions, Ken Starr was out of control and that "[e]ven Presidents have private lives."⁶¹ Explanations and excuses may, at times, help to foster reconciliation because they may convince the victim of some mitigating circumstance thereby altering the perceived intent of the transgression. However, they can backfire by fostering further resentment by the victim. Although some potential exists for fostering reconciliations, "I am sorry, but" statements lack the requisite defenselessness to be considered apologies in the sense discussed in this Article.

B. *The Nuances Of Apology*

Apology is a nuanced phenomenon. Word choice matters a lot, as evidenced by the Sino-American spy plane exchange. Context is also extremely important. Sometimes, an abbreviated expression of apology can carry with it the implied presence of unspoken elements but other times it cannot. At times a written apology is effective, but often face-to-face communications are necessary.⁶² Some offenses are so small they do not require apology. Others are so big that apology (or certainly forgiveness) is not possible.⁶³ The timing of an apology seems to matter as well, in a way that depends on the severity of the transgression.⁶⁴ For small offenses, effective apologies need to occur right away, but for some larger offenses, delay can be more effective.⁶⁵ In these latter situations, immediate apologies may not imply sufficient remorse and suffering.⁶⁶ Whether an apology must be elaborate in order to be effective may vary with the severity of the harm or the degree to which

61. William J. Clinton, *Speech to the American Republic Regarding Monica Lewinsky*, Aug. 17, 1998, available at www.zpub.com/un/un-bc-sp1.html (last visited Oct. 10, 2002).

62. See TAVUCHIS, *supra* note 16, at 26–27 (comparing oral and written apologies).

63. See *id.* 25 (some injuries too offensive for apology).

64. See *id.* at 87–90.

65. See *id.* at 23; Bolstad, *supra* note 16, at 549 (“[A]n apology offered too quickly or too glibly may be dismissed as inauthentic.”).

66. The gravity of the offense may turn at least as much on the *mens rea*, or state of mind of the transgressor than it does the magnitude of harm. One who harms intentionally or knowingly may need to delay an apology longer than one who harms merely negligently. On the other hand, if one is hoping to convey to a victim that his harm was a mere accident, an early apology might be more effective. The effectiveness of the delay here likely turns on the victim's prior beliefs about the transgressor's state of mind.

the offender is culpable for the harm.⁶⁷ The victim's perceptions of the character of the act and the offender's intentions and prior reputation are additional contextual factors that determine whether an apology will be accepted.⁶⁸

Nuances and the expression and interpretation of apologetic discourse may vary with culture, but regardless of cultural differences, the victim typically pays careful attention to nonverbal cues. Consciously or unconsciously, victims pay attention to just about everything: eye contact, breath, body posture, facial expressions, tone of voice, pace of speech, and even order of words.⁶⁹ All available information about the transgressor's apology can go into an interpretation of its sincerity.⁷⁰ But why? Why should it matter to the victim whether the apology is sincere? Or, to phrase the question slightly differently, why isn't it always sufficient for the transgressor to admit that he committed a wrong? The next section explores current theories' answers to this question. It concludes that none are sufficiently explanatory, and offers an alternative analysis that incorporates tools from both biology and economics.

II. THE ROOTS OF CONCILIATORY DESIRES

In Part A of this section, we discuss others' accounts of the role or importance of apology and conclude that each treatment, although

67. One study showed that more elaborate apologies were offered when offenders had a high degree of responsibility or when consequences were severe. The type of apology offered (elaborate v. perfunctory) is determined by "magnitude" of event, which itself is determined by the two factors of responsibility and severity. Barry R. Schlenker & Bruce W. Darby, *The Use of Apologies in Social Predicaments*, 44 SOC. PSYCHOL. Q. 271, 275-76 (1981). Other researchers attempted to ascertain the factors that will determine whether an apology is rejected by varying the offender's responsibility for the event and, independently, the severity of the event. Although they found strong correlations between responsibility and severity, they were struck by the fact that degree of responsibility had little influence over anger dissipation but degree of severity did. Thus, if the event was not serious, anger was more likely to dissipate quickly. Mark Bennett & Deborah Earwaker, *Victims' Responses to Apologies: The Effects of Offender Responsibility and Offense Severity*, 134 J. SOC. PSYCHOL. 457, 458 (1994).

68. *Children's Reactions to Transgressions*, *supra* note 34, at 353-55 (stating that the mitigating effect of apologies is determined on the basis of the remorse that observers perceive, and there is a close correlation between perception of remorse and acceptance of apology (forgiveness) regardless of the intentionality of harm).

69. See ROBERT H. FRANK, *PASSIONS WITHIN REASON: THE STRATEGIC ROLE OF THE EMOTIONS* 126 (1988) (discussing interpretational clues to sincerity); Robert N. Strassfeld, *Robert McNamara and the Art and Law of Confession: "A Simple Desultory Philippic (or How I was Roberta McNamara'd Into Submission)"*, 47 DUKE L.J. 491, 516 (1997) (noting that judges rely on defendant demeanor to assess sincerity of remorse).

70. *Advising Clients*, *supra* note 7, at 1064, 1066 (noting that recipient of apology can judge its sincerity and feigning sincerity is difficult for many offenders).

offering valuable descriptions of some aspect of apology, is lacking an ultimate explanation of the phenomenon. That is, no prior apology scholar has adequately explained why we care about apology and forgiveness. Only by understanding why we care can we fully appreciate how apology and forgiveness can be manipulated, or abused. In Part B we offer an evolutionary economic theory of apology.

A. Current Theories On The Use And Effectiveness Of Apology

To determine why victims might care whether apologies are sincere, we must return to the powerful emotions bound up in apology and forgiveness. Why do people often feel motivated to apologize when they do wrong? Why do some victims seek revenge and vindication when no apology comes forth, while others may forgive without receiving an adequate apology? How does the receipt of a sincere apology have the potential to transform a terrible moral wrong into a mere misfortune of life in the eyes of the victim? Why does a formerly vindictive person forgo both vengeful behavior and demands for compensation when an apology is received? The emotions for apology and forgiveness can be compelling, but can they be explained?

A number of social psychologists purport to explain the emotions behind making an apology. Several social psychologists focus on transgressors' attempts to ameliorate the negative image of themselves that others may adopt after a transgression. Under impression management concepts,⁷¹ for example, people attempt to control the image that others have of them in social interactions. Apology is one of several types of remedial actions "designed to convince the audience that an undesirable event should not be considered a fair representation of what the actor is 'really like' as a person."⁷² Similarly, under attribution theory and the attributional model of emotion and motivation,⁷³ people react to causal attributions. Apology reduces or prevents the attribution of negative identity by leading others to perceive the transgression as less under the control of the transgressor. If the transgressor is determined to be less responsible for the transgression, his social identity is restored

71. See generally BARRY R. SCHLENKER, IMPRESSION MANAGEMENT: THE SELF-CONCEPT, SOCIAL IDENTITY, AND INTERPERSONAL RELATIONS (1980).

72. *Id.* at 154. Goffman takes a similar approach by describing apology as a remedial interchange which "[splits] the self into a blameworthy part and a part that stands back and sympathizes with the blame giving, and, by implication, is worthy of being brought back into the fold." GOFFMAN, *supra* note 40, at 113.

73. See generally BERNARD WEINER, AN ATTRIBUTIONAL THEORY OF MOTIVATION AND EMOTION (1986).

and forgiveness becomes more likely.⁷⁴ Under the correspondent inference theory, people make inferences about individuals based on their actions.⁷⁵ A negative act infers a negative personality trait and vice versa. Apology breaks the link between the negative act and the perception that the transgressor intended to produce that act. It thereby reduces the perception of negative attributes and facilitates forgiveness.⁷⁶ Communication theorists provide a similar framework in which parties engage in apologetic discourse for purposes of image restoration.⁷⁷

Each of these accounts of apology is woefully incomplete. The accounts are useful because 1) they hint at why transgressors may wish to apologize, and 2) each of them focuses on the admittedly important role that reputation plays in interpersonal relations and the fact that apologies can help restore transgressors' reputations. However, their exclusive focus on transgressors limits their usefulness because they fail to account for victims' desire for apology. According to the impression management, attribution, correspondent, inference, and communication theories of apology, victims should be at best indifferent to, and possibly hostile to, transgressors' apologies. And yet, quite the opposite seems to be true. Moreover, the accounts may not qualify as "theories" at all.⁷⁸ Like so much of psychology, this literature attempts to classify behavior and describe effective strategies. Unfortunately, very little by way of explanation or prediction is provided.

By contrast, other social psychologists offer politeness theory,⁷⁹ which attempts to explain why victims desire apology from transgressors. Under this account, transgressions harm the social identity of the victim, by, for example, giving the impression that the victim can be taken advantage of.⁸⁰ Apology helps restore the victim's social identity.⁸¹ Politeness theory helps to underscore the fact that victims' reputations

74. Seiji Takaku, *The Effects of Apology and Perspective Taking on Interpersonal Forgiveness: A Dissonance-Attribution Model of Interpersonal Forgiveness*, 141 J. SOC. PSYCHOL. 494, 495 (2001).

75. *Id.*

76. *Id.*

77. A good summary of the communication theorists' perspective can be found in WILLIAM L. BENOIT, *ACCOUNTS, EXCUSES, AND APOLOGIES: A THEORY OF IMAGE RESTORATION STRATEGIES* (1995).

78. See SCHLENKER, *supra* note 71, at v (admitting that "no definitive theory of impression management has yet been achieved").

79. See BROWN & LEVINSON, *supra* note 29.

80. The transgression actually reflects negatively on social perceptions of the victim. Other members of society perceive the victim as an "easy mark" so to speak or that the victim in some way "asked for it."

81. See generally Ken-Ichi Ohbuchi et al., *Apology as Aggression Control: Its Role in Mediating Appraisal of and Response to Harm*, 56 J. PERSONALITY & SOC. PSYCHOL. 219 (1989).

are affected by both transgressions and apologies. Unfortunately, its single-minded focus on victims limits its usefulness because it fails to account for transgressors' desire to apologize. Any useful "theory" of apology must explain its usefulness to both transgressors and victims.

Some researchers have hypothesized that the emotions behind apology and forgiveness can be explained by equity theory.⁸² Equity theory posits that individuals attempt to maintain a balance between inputs and outputs in relationships and experience anxiety when the social exchange becomes inequitable. If not in response to a perceived inequity, a transgression can induce anxiety in the transgressor, and any seemingly unprovoked harm causes anxiety in the victim. The inequity can be redressed either by the victim harming the transgressor or by the transgressor compensating the victim. Applying equity theory, apology is a partial compensation reducing the disequilibrium favoring the transgressor. This relief of disequilibrium reduces the anxiety suffered by both parties. Forgiveness also enables the victim to reach emotional equilibrium. Curiously, when the victim responds by forgiving, it actually increases the social debt or the equity anxiety that can result in higher motivation for the transgressor to compensate.⁸³ Thus, under equity theory, apology decreases the amount of compensation required by the victim to resolve the dispute with the transgressor. In other words, forgiveness tends to increase the value of compensation offered by the transgressor.

One important implication of equity theory is that both apology and forgiveness are valued components of dispute resolution that can be traded off against other valued components of dispute resolution. Moreover, these components, apology, forgiveness and compensation, are endogenously related to one another. Put differently, the dollar amounts that victims demand and transgressors are willing to pay to settle disputes will turn on the existence of apology and forgiveness during the course of their communications with one another and with others. In this sense, equity theory is remarkably similar to an exchange model wherein an apology is depicted as an "implicitly bargained-for exchange" in which the object of the exchange is the apology.⁸⁴ As an exchangeable good, the apology has some value that is exchanged for something that the victim gives up. For example, the victim may reduce

82. See generally Brad R.C. Kelln & John H. Ellard, *An Equity Theory Analysis of the Impact of Forgiveness and Retribution on Transgressor Compliance*, 25 PERSONALITY & SOC. PSYCHOL. BULL. 864 (1999).

83. *Id.* at 864–65.

84. Levi, *supra* note 10, at 1175–77.

his demand for monetary compensation, settle a lawsuit or cease withholding some benefit to the offender.

Recent apology scholars have rejected the exchange model as being overly quantitative and insensitive to the qualitative factors that help explain why apology fails.⁸⁵ Levi, for example, favors a ritual model, drawn largely from Tavuchis' work, in which apology is "a corrective ritual performed by two subjects in order to redress a moral power imbalance between them."⁸⁶ Under this approach, the transgressor must cede the moral high ground to the victim and accomplishes this through apology. Similarly, Taft rejects the commodification of apology, preferring a model involving moral balance.⁸⁷ The ritual model of apology describes the role of moral imbalance in apology, and Taft is surely correct that eliminating this imbalance is a large part of the value of apology. Unfortunately, the ritual model, while descriptively useful, is essentially useless as a predictive matter. Apology can serve to identify and correct an imbalance, but which imbalances will be corrected, and why? The moral balance description is too subjective to be useful.

Moreover, this categorical resistance to consequentialist analyses leaves the concept of apology without rigor. Although placing actual dollar values on apology may seem offensive, the fact is that apologies settle disputes with actual dollar consequences. If victims entertain the tradeoff between apology and monetary compensation, perhaps a model of apology should too. Much more importantly, however, it is possible to construct an exchange model without ignoring important qualitative factors involved in apology. Our position is that dollars are not everything, and law and economic models of suit and settlement need to take into account other important systematically ignored factors. At the same time, any model of human behavior must recognize that actions involve tradeoffs among a whole host of considerations—emotional, reputational, monetary, and otherwise. It simply ignores reality to dismiss attempts at rigorous analysis as "commodification" or "insensitivity."

The social psychologists, put together, do a better job than do the moral balance analysts of explaining why victims and transgressor might

85. *Id.* at 1177. Although Cohen refers to apology and forgiveness in economic terms as "commodities" in a monopolistic market (the apology is only available from the offender and vice versa), he notes the tendency in economic analysis, including settlement analysis, of downplaying non-physical aspects of consumption or non-pecuniary elements such as apology. *Advising Clients*, *supra* note 7, at 1016–17 n.24.

86. Levi, *supra* note 10, at 1177.

87. See Taft, *supra* note 18, at 1154–57.

value apology. However, most social psychologists focus on the effect of apology on the impression of third parties. Although we think third-party impressions can contribute to apology and forgiveness in important ways, no “theory” of apology is satisfactory if it cannot also explain why so many people desire apologies even when the transgression or the expressions of remorse or forgiveness are not shared publicly. Moreover, most of this literature is primarily descriptive, begging the question of what is the ultimate cause⁸⁸ for the physiologically-triggered emotions involved. A deeper explanation for apologetic behavior and its concomitant emotions is needed.

Finally, Orenstein focuses on the quite fascinating questions of whether and why women are more willing to apologize than are men.⁸⁹ As Orenstein points out, there is significant anecdotal evidence and some empirical data that women are in fact more likely to apologize than men.⁹⁰ For example, Deborah Tannen, who has studied communication in the workplace, observed that women tend to use apology more often as a device to smooth over interpersonal difficulties.⁹¹ However, others have not found any sex differences in willingness to apologize.⁹² Apparently, there exists no evidence at all on whether men or women more readily apologize for more severe offenses.⁹³ Regarding less severe transgressions, there is some evidence that sex differences in apologetic behavior depend on context. For example, men are more likely to apologize for intrusions on time, whereas women are more likely to apologize for intrusions on physical space.⁹⁴ Clearly more work needs to be done before we can reliably conclude that men and women significantly differ in their apologetic behavior. If sex differences ultimately do matter for apology and forgiveness, we need an explanation for these differences. Culture may play an important role in

88. See *infra* note 103 and accompanying text for a discussion of the importance of distinguishing proximate and ultimate causes of human behavior.

89. See Orenstein, *supra* note 17.

90. *Id.* at 250.

91. Tannen, *supra* note 45, at 34; see also Janet Holmes, *Sex Differences and Apologies: One Aspect of Communicative Competence*, 10 APPLIED LINGUISTICS 194, 197 (1989); Amy Ash Nixon & Fran Silverman, *Sorry Situation: There's A Gender Gap When it Comes to Apologies*, SEATTLE TIMES, Mar. 30, 1997, at M6 (quoting DEBORAH TANNEN, TALKING FROM 9 TO 5 (1994)).

92. See Bruce Fraser, *On Apologizing*, in CONVERSATIONAL ROUTINE: EXPLORATIONS IN STANDARDIZED COMMUNICATION SITUATIONS AND PREPATTERNED SPEECH 259, 269 (Flourian Coulmas ed., 1981); Levi, *supra* note 10, at 1184–85.

93. See Orenstein, *supra* note 17, at 252.

94. Judith Mattson Bean & Barbara Johnstone, *Workplace Reasons for Saying You're Sorry: Discourse Task Management and Apology*, 17 DISCOURSE PROCESSES 59, 79 (Roy O. Freedle ed., 1994).

the explanation; however, indications are that apologetic and remedial behavior, although variable in their specifics, are found in most if not all cultures.⁹⁵ If so, biology might matter for apology. Biology might also help to explain any systematic sex differences in apologetic behavior.⁹⁶ Consequently, we turn now to the role of apology in evolution.

B. *An Evolutionary Economic Explanation for Apology*

The tastes for apology and forgiveness are sufficiently common that we might say they are⁹⁷ “two quintessentially human (and in fact highly valued) traits.”⁹⁸ Despite their emotional complexity,⁹⁹ we believe that evolutionary biology can help us understand why they are valued.¹⁰⁰ Put differently, an evolutionary treatment of apology compliments the usefulness of previous analyses of the topic while simultaneously transcending the bounds of social psychology, of the constrained perspective of feminist and cultural analyses, and of the nonconsequentialism of moralistic, normative treatments.

This Part B begins with a brief introduction of the concepts in evolutionary biology that are relevant to some of the human behaviors and emotions that law addresses. It describes the role of cooperation, (or reciprocal altruism), cheater tendencies, moralistic aggression (or spite), punishment, and deception in evolutionary theory generally and describes how tastes for apology and forgiveness could be evolutionarily

95. See *supra* note 29 for a discussion of the cross-cultural evidence.

96. In the environment in which humans evolved, men and women apparently formed coalitions with differing frequency for differing purposes. Men needed to cooperate when hunting was necessary, whereas, women formed close social bonds to assist in the rearing of offspring. If women in fact relied more on social bonds, then we might expect them to engage in the relationship-preserving behavior of apology more often. And, if women valued reliability more than men, they could be expected to be less forgiving. Moreover, if relationships and reliability were more valued in differing contexts for men and women we might expect them to rely on apologetic behavior differently. We offer this supposition to draw a possible link between evolution and sex differences with regard to apology.

97. See *supra* note 29 for a discussion of the cross-cultural evidence.

98. Orenstein, *supra* note 17, at 242 (parenthetical in original).

99. The emotional aspects of apology are not as simple as our textual discussion to this point may appear to suggest. Apologies can be warm, fuzzy and cathartic, but they can also involve shame, humiliation, and a sense of vulnerability and powerlessness. Moreover, an otherwise self-righteous victim can experience guilt if he angrily rejects a sincere apology. The intensity of these emotions can vary across situations and individuals, and there may also be important sex differences in this behavior and its accompanying emotions. See *supra* note 96 and accompanying text.

100. Cf. Jones, *Child Abuse*, *supra* note 32, at 1170 (“evolutionary theory can, in ways relevant to law, both reveal and make sense of surprising patterns in human behavior”).

adaptive. This subpart then attempts to incorporate these evolutionary concepts into an economic framework.

The evolutionary biology primarily serves to help explain why emotional commitments favoring apology and forgiveness could have been adaptive in the environment in which our human brains evolved. Moreover, by understanding why these commitment strategies likely were adaptive in an earlier time, we can understand how, and why, these commitments can be exploited today to serve potentially maladaptive functions. More basically, evolutionary biology can help explain why people often cooperate in non-repeat interactions, and why they often apologize and forgive with no prospect of future interactions. For readers who are prepared to accept the idea that, despite the Prisoner's Dilemma models, people commit themselves to behave appropriately, the evolutionary biology approach below may not be a necessary component of the normative analysis that follows in Part III. However, rational actor scholars will not easily accept the empirical assertion that many people feel compelled to behave altruistically, or without clear calculation of immediate costs and benefits. For this latter group we offer the following ultimate explanation of such seemingly (though not ultimately) irrational behavior.

1. *An All Too Brief Overview of Law-Relevant Evolutionary Biology*

A. *Reproductive Success and Behavioral Causation*

According to behavioral biology, much of human and other animal behavior can be better understood through an evolutionary lens.¹⁰¹ Behavior depends on mechanisms that are both *proximate* and *ultimate*.¹⁰² "Proximate and ultimate causes operate together, with all behavior depending on ultimately-shaped proximate mechanisms."¹⁰³

101. Much of the material presented in this section can be found in Owen Jones' excellent summary. Jones, *Child Abuse*, *supra* note 32. One difficulty with the developing law and biology scholarship is the need for each author to present a lengthy description of evolutionary theory as background for the reader who may be uninitiated to the discipline. Our summary does little justice to the theory of evolution, but rather than repeating all of what others have done so well previously, we refer you to Professor Jones' article and his comprehensive list of citations. *Id.* at 1121 n.3. More recently, Professor Jones has substantially updated that list and made it publicly available at www.sealsite.org/readings.htm (last visited October 18, 2002).

102. These terms for causation are used differently in biology than in law. *See generally* Owen Jones, *Genes, Behavior, and Law*, 15 POL. & LIFE SCI. 101 (1996).

103. Jones, *Child Abuse*, *supra* note 32, at 1128. *See generally* John Alcock & Paul Sherman, *The Utility of the Proximate-Ultimate Dichotomy in Ethology*, 96 ETHOLOGY 58 (1994).

Biochemical and physiological changes combined with the individual's developmental and environmental history *proximately* cause the emotional state or feelings that shape behavior surrounding apology and forgiveness. We look to evolutionary processes to explain what *ultimately* caused such broadly observable behaviors in our species. Ultimate causes are important because they can shed better light on what motivates behavior than can a simple-minded focus on the proximate emotional feelings alone. More importantly for our purposes, they can help us to establish the existence and strength of the proximate emotions that underlie behavior.

Evolutionary biologists begin with the assumption that the primary objective of the gene is *reproductive success* relative to others.¹⁰⁴ *Natural selection* acts to filter the less reproductively successful from the more reproductively successful.¹⁰⁵ Intra-species variation of physical and behavioral traits is either advantageous to reproductive success (adaptive), disadvantageous (maladaptive), or neutral.¹⁰⁶ Because it increases an individual's reproductive success relative to others, the incidence of an adaptive, inheritable trait can be expected to increase in successive generations in a population.¹⁰⁷ Conversely, maladaptive traits should decrease in frequency over time.¹⁰⁸ Thus, natural selection helps determine the observable proportions of particular traits, physical and behavioral, in a given population.¹⁰⁹ If an appreciable number of the members of a species exhibit a certain behavioral trait, then a predisposition to behave in that manner may have enhanced the survivability of the individual's genes over time. In other words, it may be said that the behavior is evolutionarily adaptive, part of an "evolved

104. See ROBERT TRIVERS, *SOCIAL EVOLUTION* 21 (1985). To be more precise, transmission of one's genes to future generations can be accomplished directly, by producing one's own offspring, and indirectly, by maximizing the ability of relatives (who share genes) to produce offspring. *Id.* at 53–57. Technically, natural selection is assumed to favor those traits that maximize inclusive fitness, or the reproductive success of self and genetically related others. *Id.* at 57.

105. Jones, *Child Abuse*, *supra* note 32, at 1135–36 (“[n]atural selection, like a giant colander sorting small pebbles from large, sifts the less reproductively successful members of a species from the more reproductively successful”).

106. *Id.* at 1137 n.53.

107. *Id.*

108. *Id.*

109. *Id.*

psychology”¹¹⁰ that yielded more reproductive success than contrary behaviors that are absent or less present in the population.¹¹¹

According to evolutionary biologists, organisms use various *reproductive strategies* to pass on their genes and ensure the survival or reproductive success of their offspring. Sexual and asexual reproduction are examples of two different reproductive strategies.¹¹² Of course, in sexual reproduction, a given set of genes is more likely to survive if the organism can attract evolutionarily desirable mates (whose genes can enhance the survival of one’s own genes). For example, these sexual selection pressures are believed to have caused the development of the peacock’s tail, which is beautiful but slows down the peacock.¹¹³ Notice that natural selection and sexual selection can work at cross purposes with one another. Thus, the peacock’s tail adds to the attractiveness but not the survivability of the bird.¹¹⁴ Some evolutionary psychologists believe that sexual selection is responsible for much of the development of art, music, and intellectual discourse over the last several centuries.¹¹⁵ Indeed, our extraordinary mental capacities may be the human equivalent of the peacock’s tail.

Optimal reproductive strategies should be *condition-dependent* resulting in physical attributes and behavioral predispositions that vary

110. *Id.* at 1139 (Natural selection “effectively creates evolved psychologies, to the extent that a psychology is a short way of describing species-typical information processing pathways tending to yield some behaviors, in given circumstances, more than others.”).

111. Note that nothing in evolutionary theory suggests that *all* individuals must exhibit a behavioral trait for that trait to be considered a heritable product of evolutionary forces. Indeed, the prevalence of one trait in a portion of the population can make it adaptive for some subgroup of the population to lack that trait. *See infra* notes 180–89 and accompanying text (discussing adaptiveness of both predisposition to cooperate, and, assuming the presence of cooperators, predisposition to defect).

112. Jones discusses the tradeoff between sexual and asexual reproductive strategies. Jones, *Child Abuse*, *supra* note 32, at 1142–43. On the advantages of sexual reproduction, see generally MATT RIDLEY, *THE RED QUEEN: SEX AND THE EVOLUTION OF HUMAN NATURE* 55–87 (1994); William D. Hamilton, *Sex Versus Non-Sex Versus Parasite*, 35 *OIKOS* 282 (1980); R. Stephen Howard & Curtis M. Lively, *Parasitism, Mutation Accumulation and the Maintenance of Sex*, 367 *NATURE* 554 (1994); Richard J. Ladle, *Parasites and Sex: Catching the Red Queen*, 7 *TRENDS IN ECOLOGY AND EVOLUTION* 405 (1992).

113. Jones, *Child Abuse*, *supra* note 32, at 1144.

114. It may be that conspicuous displays (i.e., the peacock’s tail) signal the survivability of the individual, by conveying the idea that the individual is so strong that he/she is able to survive despite the handicap. AMOTZ ZAHAVI & AVISHAG ZAHAVI, *THE HANDICAP PRINCIPLE: A MISSING PIECE OF DARWIN’S PUZZLE* 32–33 (1997). Quite aside from the sheer size of the peacock’s tail, the color and symmetry of the tail could be an advertisement for parasite resistance, a related but slightly different phenomenon. *Id.*

115. *See* GEOFFREY MILLER, *THE MATING MIND: HOW SEXUAL CHOICE SHAPED THE EVOLUTION OF HUMAN NATURE* (2000).

with changing environmental conditions.¹¹⁶ The female opossum produces a disproportionate number of male babies when she is well-fed because those males are more likely to enjoy greater reproductive success than will her females and the male offspring of less well-fed possums.¹¹⁷ Also, humans from colder climates tend to weigh more and have more body surface than those from warmer climates.¹¹⁸ Because behavioral plasticity can be adaptive, those with the cognitive capability to finely distinguish environmental situations and respond appropriately will gain an advantage relative to others. For example, we may be better off if we behave differently in warmer climates than in colder areas. Hostile environments should trigger reactions that are dormant in friendly environments. And, we should behave differently among friends than we do strangers. “[I]n species with advanced cognitive capacities, behavioral plasticity is further increased by an ability to analyze a very large number of variables, to assess probable outcomes as a consequence of given behaviors, and to choose among them.”¹¹⁹ For humans, then, we can expect the cognitive capacities to diminish but not eclipse the influence of condition-dependent predispositions.¹²⁰

B. Cooperation As An Adaptive Strategy

Cooperation has been an area of focus for behavioral biologists in recent decades.¹²¹ One can easily understand the value of purely selfish behaviors in enhancing the survivability of one’s genes. Thus, intra-species rivalries, competition, even rape and homicide, become unsurprising from a biological perspective.¹²² Cooperation and altruism among related individuals should also be an intuitively sensible strategy

116. Jones, *Child Abuse*, *supra* note 32, at 1146.

117. Steven N. Austad & Mel E. Sunquist, *More Sons for Plump Possums*, NAT. HIST., Apr. 1988, at 74, 74–75.

118. TRIVERS, *supra* note 104, at 32–33.

119. Jones, *Child Abuse*, *supra* note 32, at 1146.

120. *Id.*

121. Although there is considerable focus in biology on competition among species and individuals, symbiosis, mutuality, and cooperation have received increasing attention, despite common perceptions of evolutionary theory. “Survival of the fittest” did not originate with Darwin, nor does it accurately describe the focus of his research.

122. Which may explain why behavioral biology under its alternative labels, sociobiology and evolutionary psychology, was so scornfully rejected by many social scientists. See Joan Vogel, *Biological Theories of Human Behavior: Admonitions of a Skeptic*, 22 VT. L. REV. 425, 425 n.1 (1997) (warning against evil uses of biological theories and citing several books detailing the uses and abuses of biological theories).

from a biological perspective because it increases the survivability of shared genes

To explain, we should expect that an individual would be willing to act to the benefit of one's child if doing so increases the survivability of that child by more than twice the degree to which it jeopardizes one's own survivability. This is because, on average, the child shares half of its genes with each of its parents.¹²³ Moreover, an individual should be twice as likely to assist her own child as she is likely to assist her niece or nephew, because the niece and nephew share a mere quarter of her genes on average, as compared to one half for her child. And, in general, the more closely related two individuals are, the more each is willing to invest in the welfare of the other.¹²⁴

Trivers describes this phenomenon as it relates to warning calls in Belding's ground squirrels.¹²⁵ Some of these ground squirrels call out when they see a predator approaching. The other squirrels are better able to flee the predator with this warning, but the caller is more likely to be killed because the caller has revealed her location. Careful study of these ground squirrels showed that adult females frequently call out while adult males rarely do. Kinship theory explains this distinction because adult female ground squirrels are typically surrounded by their relatives while adult males tend to travel alone. Indeed, the more relatives that an adult female has nearby, the more likely she is to call. Moreover, these females are much more likely to call if sisters, half-sisters or daughters are nearby than they are if cousins, nieces or granddaughters are nearby. Other species discriminate similarly in their altruistic behaviors.¹²⁶

123. TRIVERS, *supra* note 104, at 45.

124. For a terrific discussion of kinship and its effect on social organization, see TRIVERS, *supra* note 104, at 109:

Just as natural selection favors traits that increase an individual's production of surviving offspring, because parent and offspring are genetically related, so natural selection favors traits that increase the survival of other categories of relatives, such as siblings and cousins. Since aiding one kind of relative must usually conflict with aiding another, as when investment in nephews and nieces decreases investment in offspring, we expect mechanisms of choice to evolve that reflect differential degrees of relatedness. Each individual will seem to value the reproductive success of others, compared to his own, according to the [degrees of relatedness] that connect them.

125. *Id.* at 110–14. For the original literature on warning calls in ground squirrels, see generally Paul W. Sherman, *Nepotism and the Evolution of Alarm Calls*, 197 *SCIENCE* 1246 (1977); Christopher Dunford, *Kin Selection for Ground Squirrel Alarm Calls*, 111 *AMER. NAT.* 782 (1977); Daniel W. Leger & D. H. Owings, *Responses to Alarm Calls by California Ground Squirrels: Effects of Call Structure and Maternal Status*, 3 *BEHAV. ECOL. & SOCIOBIOL.* 177 (1978).

126. Jones, *Child Abuse*, *supra* note 32, at 1149–50.

Cooperation and altruism¹²⁷ among unrelated individuals are also common for humans and other animals. We help neighbors, fellow church members, friends, even strangers, and with no expectation that we share genes. The primate literature indicates that grooming and other forms of assistance extend beyond kinship for some other animals as well. What can explain non-kin cooperation and altruism? Each of these forms of assistance confers benefits on the recipient at a cost to the actor. Since natural selection operates at the level of the individual or gene rather than the group, the existence and persistence of a trait that benefits the group at the expense of the individual's reproductive success seem counterintuitive.¹²⁸ Is there an explanation for this altruism that is consistent with evolutionary theory, given that the two cooperating individuals compete with one another for relative gene survival?

The precise answer to this question is still debated,¹²⁹ but at least part of this seemingly altruistic behavior is captured by the logic of reciprocal altruism.¹³⁰ The idea is that some of what we label altruistic is really the first step toward reaping the benefits of anticipated cooperation. A does B a favor today in anticipation of being able to call on B tomorrow for a return favor.¹³¹ When B returns the favor, both A and B are made better off relative to others competing for the survival of their genes. Under the logic of reciprocal altruism, a cost to reproductive success today is a net gain to reproductive success tomorrow, providing B actually reciprocates.¹³²

127. In the biological context, altruistic acts are those that increase the recipient's reproductive success at the expense of the actor's. See TRIVERS, *supra* note 104, at 41–42.

128. See Jones, *Child Abuse*, *supra* note 32, at 1140 (citations omitted).

129. For a discussion of the current debate on individual versus group selection, see Todd Zywicki, *Was Hayek Right About Group Selection?*, 13 REV. OF AUSTRIAN ECON. 81 (2000). For a discussion of the earlier debate and an argument favoring the individual selection hypothesis, see TRIVERS, *supra* note 104, at 67–85. For a treatment of the history of the debate, see Ernst Mayr, *Driving Forces in Evolution: An Analysis of Natural Selection*, in THE EVOLUTIONARY BIOLOGY OF VIRUSES 29 (Stephen S. Morse, ed., 1994).

130. Another explanation for favoring non-relatives with resources is mutualism, which occurs under conditions where cooperation can yield a larger immediate payoff in reproductive success to each cooperator than they can achieve without cooperation. Jones, *Child Abuse*, *supra* note 32, at 1150–51. In contrast, reciprocal altruism occurs in conditions under which the altruistic actor defers reproductive gains or incurs an immediate reproductive loss in order to achieve a net reproductive gain over not acting altruistically. Jones, *Child Abuse*, *supra* note 32, at 1150–51.

131. A is more likely to confer the benefit today if it is a less costly favor. Thus, if A is a successful hunter today and A and his kin cannot eat all of his kill before it spoils, then A is likely to be willing to share with B. If A finds a way to preserve the meat or his family is quite hungry, then A may be less willing to reach out and share with B.

132. See generally Robert L. Trivers, *The Evolution of Reciprocal Altruism*, 46 Q. REV. BIOLOGY 35 (1971).

C. *Cheaters, Moralistic Aggression, And Tit-For-Tat*

Therein lies one of the main problems of cooperation. How does one ensure that B will reciprocate? Indeed, if cooperation creates benefits for the group, it is in B's self-interest, and increased relative reproductive success to enjoy the gains without taking the risks or expending the effort of cooperative action. This is the classic "free-rider," Prisoner's Dilemma, or cheater problem.¹³³

If cheating benefits the individual, cheating behavior becomes evolutionarily adaptive. In the face of potential cheating, however, it would be similarly advantageous for others to discourage or retaliate against cheaters. In fact, those who have the capacity to precommit themselves to punishing cheaters, even at a cost to themselves, may be better able to ensure cooperative reciprocation by their beneficiaries.¹³⁴ The emotional urge to retaliate, sometimes called a retributive instinct, can therefore be adaptive. Experimental economists have found that subjects are willing to incur real costs to punish those who defect, free ride, or behave unfairly.¹³⁵ Biologists call this retaliatory behavior moralistic aggression,¹³⁶ and it extends beyond human efforts to get even.¹³⁷ Consider, for example, the interaction between three chimpanzees in a colony at the Arnhem Zoo.¹³⁸ One of the larger adult females, Puist, supported Luit, one of the dominant males, in chasing Nikkie, another male. When Nikkie later behaved threateningly toward Puist, she held out her hand to solicit support from Luit. When Luit

133. This problem of inducing beneficial cooperation when individuals have incentives to cheat, or not cooperate, is at the core of law and economics. See CHARLES J. GOETZ, *CASES AND MATERIALS ON LAW AND ECONOMICS*, Ch. I (1984) (chapter devoted to Prisoner's Dilemma, free-rider problem, and external effects created).

134. Cf. FRANK, *supra* note 69, at 48 (binding commitment to file costly suit could deter bad behavior by others).

135. See Elizabeth Hoffman et al., *On Expectations and the Monetary Stakes in Ultimatum Games*, 25 INT'L J. GAME THEORY 289, 300 (1996) (finding subjects willing to give up profits to punish those who take too large a share of the total dollar amount to be distributed); Elizabeth Hoffman et al., *Preferences, Property Rights, and Anonymity in Bargaining Games*, 7 GAMES & ECON. BEHAV. 346 (1994) (same); see also Ernst Fehr & Simon Gächter, *Cooperation and Punishment in Public Goods Experiments*, 90 AMER. ECON. REV. 980 (2000) (finding subjects heavily punish free riders in public goods experiments).

136. E. Donald Elliott, *Law and Biology: The New Synthesis?*, 41 ST. LOUIS U. L.J. 595, 609 (1997).

137. See generally Frans de Waal, *Food Sharing and Reciprocal Obligations Among Chimpanzees*, 18 J. HUMAN EVOLUTION 433 (1989).

138. This zoo in the Netherlands offers the rare opportunity to observe a relatively large population of chimpanzees interacting within an enclosed, outdoor natural habitat.

failed to help Puist, she immediately chased Luit while barking furiously, and hit him.¹³⁹

The general logic behind cooperation and retaliation is central to game theory, a set of tools used by both biologists and economists. Game theorists apply the Prisoners' Dilemma game¹⁴⁰ to explore the conflict between self-interest and the common good. Two individuals may be jointly better off if they cooperate with one another, but individually, each prefers to defect. In the classic Prisoner's Dilemma paradigm, the individuals are jointly worst off if each defects, but without some way to bind each party to cooperate, the dominant strategy for each player is to defect. By contrast, the iterated Prisoner's Dilemma shows how egoists can achieve cooperation based on their own self-interest and independent of notions of morality and ethics.¹⁴¹ When players anticipate that they will interact indefinitely into the future, the gains from defecting today are more than offset by the lost opportunity to reap cooperative gains over time.¹⁴² If each player can adopt a strategy that deters defection by the other, then cooperation can emerge. This was borne out by the experiments of Robert Axelrod who used computers that tested game theorists' strategies in a repeat Prisoner's Dilemma game.¹⁴³ The submitted program that performed best overall started by cooperating and then mirrored each previous move of the other player. Defection was met with defection, and cooperation with cooperation. Axelrod reasoned that the robust character of this strategy, known as "tit-for-tat," came from a combination of niceness, retaliation, forgiveness, and clarity:

Its niceness prevents it from getting into unnecessary trouble. Its retaliation discourages the other side from persisting whenever defection is tried. *Its forgiveness helps restore mutual cooperation.*

139. TRIVERS, *supra* note 104, at 377. Trivers' description of chimpanzee interaction in this colony originates from FRANS DE WAAL, CHIMPANZEE POLITICS: POWER AND SEX AMONG APES 207 (1982).

140. See *supra*, note 34, for a description of the classic model.

141. For treatments of the Prisoner's Dilemma, the emergence of cooperation, and the basic irrationality of homo economicus, see generally MICHAEL TAYLOR, THE POSSIBILITY OF COOPERATION (1987); EDNA ULLMAN-MARGALIT, THE EMERGENCE OF NORMS (1977); DAVID COLLARD, ALTRUISM AND ECONOMY (1978); Amartya K. Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 PHIL. & PUB. AFFAIRS 317 (1977); FRANK, *supra* note 69.

142. The lost future gains are premised on an assumption that when a player defects, the other defects from that point forward. See James W. Friedman, *A Non-Cooperative Equilibrium for Supergames*, 28 REV. OF ECON. STUD. 1 (1971) (presenting trigger strategy of perpetual defection under conditions of certainty to maintain equilibrium of cooperation).

143. ROBERT AXELROD, THE EVOLUTION OF COOPERATION (1984).

And its clarity makes it intelligible to the other player, thereby eliciting long-term cooperation.¹⁴⁴

Playing a “survival of the fittest” game pitting several strategies against one another in random encounters, Axelrod found that nice, naive strategies suffered at the hands of nasty/defection-prone strategies, but after eliminating enough of the nice ones, nasty strategies began running into each other and declining. Tit-for-tat then emerged as the most successful strategy.¹⁴⁵

So, how does this fit into biology and evolution? Prior to Axelrod’s computer simulations, a geneticist, John Maynard Smith, borrowed the game from the economists and adapted it to biology.¹⁴⁶ He created a game between Hawks (aggressive/defectors) and Doves (passive/cooperators).¹⁴⁷ If a Hawk encounters a Dove, the former easily defeats the latter. If two Hawks encounter each other, they are both badly wounded, but if two Doves encounter each other, they receive benefits. Smith showed that natural selection would result in an evolved instinct to engage in an evolutionarily stable strategy, one in which no one animal using the strategy would be worse off than an animal using another strategy.¹⁴⁸ When the game is played over and over, the Hawks thrive at the expense of the Doves; however, as the population of Doves decreases, the Hawk population declines as Hawks mostly encounter each other. A successful strategy is one in which a Dove acts like a Dove when encountering other Doves and turns into a Hawk, or retaliates, when encountering a Hawk. Essentially, this behaviorally plastic strategy is also tit-for-tat.¹⁴⁹

One deters others from defecting with repeat interactions and the threat of retaliation. Repeat interactions create an anticipation of future

144. *Id.* at 54 (emphasis added).

145. *See id.* at 53–54.

146. J. Maynard Smith & G.R. Price, *The Logic of Animal Conflict*, NATURE, NOV. 2, 1973, at 15. For a discussion of the contribution of the Smith and Price article, see MATT RIDLEY, *THE ORIGINS OF VIRTUE: HUMAN INSTINCTS AND THE EVOLUTION OF COOPERATION* 59–60 (1997).

147. “In the original paper, the term ‘dove’ was changed at the last minute to ‘mouse’ in deference to George Price’s religious sensibilities.” RIDLEY, *supra* note 146, at 271 n.6.

148. J. Maynard Smith, *Optimization Theory in Evolution*, 9 ANNUAL REV. OF ECOL. & SYSTEMATICS 31 (1978). The evolutionarily stable strategy is similar to the Nash equilibrium. “A Nash equilibrium for a game is a collection of strategies, one for each player, such that every player’s strategy is optimal given that the other players use their equilibrium strategy.” H. SCOTT BIERMAN & LUIS FERNANDEZ, *GAME THEORY WITH ECONOMIC APPLICATIONS* 81 (1993) (emphasis omitted). The Nash equilibrium was first described in John Nash, *Non-Cooperative Games*, 54 ANNALS OF MATHEMATICS 286 (1951).

149. *See* RIDLEY, *supra* note 146, at 60 (“Tit-for-tat is in practice another name for Maynard Smith’s Retaliator.”).

benefits that one does not wish to risk by behaving non-cooperatively, and retaliation can make non-cooperation too costly, even without the prospect of future cooperative benefits. Thus, a sufficient retaliatory threat helps assure that people will behave according to a variety of shared norms that foster cooperative behavior, either directly or indirectly.

2. *Emotions Temper Emotions: Apology And Retribution*

Reciprocity is central to human and other highly social primate societies. The phrases "I'll scratch your back, if you'll scratch mine," "one good turn deserves another," "do unto others . . .," and "an eye for an eye" illustrate its centrality to humans. Unfortunately, however, non-compliant behavior inevitably occurs. Sometimes one defects by accident, oversight, misunderstanding, short-sighted selfish impulses, indifference, or just plain meanness. Given the defection, retaliation can prove costly to both the transgressor and the victim. The transgressor experiences guilt and the dread of future retaliation, itself psychologically costly, and focuses her resources on defensive rather than productive activities. The victim also invests both material and psychological resources into non-productive activities. Guilt, anger, spite, fear, and defensive and retaliatory acts are all proximately caused by our physiology and bio-chemistry in combination with our unique life experiences. The ultimate causes of these emotions and behaviors should be viewed in the context of adaptive strategies over evolutionary time. However, if people were behaviorally plastic, they could find ways to minimize the costs of noncompliance. In other words, both transgressors and victims would be better off if they could find some way to temper the costs of moralistic aggression.

Re-enter apology and forgiveness. In Tavuchis' influential sociological study of apology, he states that apologetic behavior is "not easily explicated by elementary conceptions of reciprocity."¹⁵⁰ We respectfully disagree. Together, apology and forgiveness can work to set the individuals on the road to future reciprocation and cooperation. At a minimum, they can help the parties avoid the non-productive aspects of moralistic aggression. A promise of forbearance and offer of repair seem more appealing than revenge to both parties, if they can be induced to put their negative emotions aside. In addition, the most effective way to

150. TAVUCHIS, *supra* note 16, at 34.

soften the victim is to place him in a position of power vis-à-vis the transgressor. Thus, the role of the elements of apology are clarified.

If this description of how apology and forgiveness fit more broadly into human interactions is at all accurate, then a capacity to develop the emotional framework necessary for the effective use of apology and forgiveness can be seen as adaptive. Those who feel a need to apologize and forgive can conserve their resources for activities that enhance their survivability and reproductive fitness. They thus are placed at a competitive advantage relative to those individuals who must incur the full costs of moralistic aggression.

Scientists have found evidence that non-human primates possess a somewhat similar taste for post-conflict conciliation.¹⁵¹ Frans de Waal, a noted ethologist, explains the similarities:

I first realized that this subject can be studied in other species after witnessing a fight in the chimpanzee colony of the Arnhem Zoo in the Netherlands. It was the winter of 1975 and the colony was kept indoors. In the course of a charging display, the dominant male attacked a female, which caused screaming chaos as other chimpanzees came to her defense. When the group finally calmed down, an unusual silence followed, with nobody moving, as if the apes were waiting for something. Suddenly the entire colony burst out hooting, while one male worked the large metal drums in the corner of the hall. In the midst of the pandemonium I saw two chimpanzees kiss and embrace.

Strange as it may sound, it took me hours to realize what had happened. I kept thinking about the embrace and the excited group response. It seemed more than a mere sequence of interesting behavior patterns: the embracing individuals had been the same male and female of the initial fight. When the word "reconciliation" popped into my mind, it immediately illuminated the connection. From that day on I noticed that emotional reunions between aggressors and victims were quite common. The phenomenon

151. See generally Frans de Waal, *Reconciliation among Primates: A Review of Empirical Evidence and Theoretical Issues*, in PRIMATE SOCIAL CONFLICT 111 (William A. Mason & Sally P. Mendoza eds., 1993); Frans de Waal & R. Ren, *Comparison of the reconciliation behavior of stump-tail and rhesus macaques*, 78 ETHOLOGY 129 (1988); Frans de Waal & A. Van Roosmalen, *Reconciliation and consolation among chimpanzees*, 5 BEHAV. ECOL. SOCIOBIOL. 55 (1979); Frans de Waal & D. Yoshihara, *Reconciliation and Redirected Affection in Rhesus Monkeys*, 85 BEHAVIOR 224 (1983); A. York & T. Rowell, *Reconciliation Following Aggression in Patas Monkeys*, 36 ANIM. BEHAV. 502 (1988); Karolina Westlun et al., *Post-Conflict Affiliation in Common Marmosets*, 52 AMER. J. PRIMATOLOGY 31 (2000).

became as obvious that it was hard to imagine that it had been overlooked for so long by me and by scores of other ethologists.¹⁵²

Focusing on forgiveness rather than apology, de Waal comments:

Forgiveness is not, as some people seem to believe, a mysterious and sublime idea that we owe to a few millennia of Judeo-Christianity. It did not originate in the minds of people and cannot therefore be appropriated by an ideology or a religion. The fact that monkeys, apes, and humans all engage in reconciliation behavior means that it is probably over thirty million years old, preceding the evolutionary divergence of these primates . . . reconciliation behavior must be seen as a shared heritage of the primate order. Our species has many conciliatory gestures and contact patterns in common with the apes (stretching out a hand, smiling, kissing, embracing, and so on).¹⁵³

Concluding that non-human conflict resolution is equivalent to the human version is difficult, however, for two reasons. First, and most obviously, the non-humans lack language.¹⁵⁴ Second, the dominance hierarchies are stronger for some non-human primate species. As a consequence in these hierarchies, the subordinate typically approaches the dominant to seek out conciliation.¹⁵⁵ In the relatively more egalitarian human relationship, the transgressor approaches the wronged party to request forgiveness.¹⁵⁶ But, for both species, one party places itself in a position of clear powerlessness relative to another and performs an act that resembles a plea for future conflict to subside. To some extent then, human reconciliation has parallels in the rest of the animal world.

152. FRANS DE WAAL, PEACEMAKING AMONG PRIMATES 5 (1989).

153. *Id.* at 270–71.

154. *But see id.* at 271 (“Language and culture merely add a degree of subtlety and variation to human peacemaking strategies.”). Non-humans are capable of communication.

155. De Waal notes that although the peacemaking initiative is divided equally between dominant and subordinate chimpanzees, dominants typically refuse to initiate reconciliations following heavy physical aggression and during changes in the dominance hierarchy. *Id.* at 44. De Waal also notes that in stump-tail monkeys, 94% of the reconciliation rituals begin by subordinate initiation, and the process highlights the dominance hierarchy. *Id.* at 163–65. In contrast, Bonobos, who are in many ways behaviorally closest to humans, typically reconcile with initiation by dominants (who typically start the conflict). *Id.* at 220.

156. Nevertheless, one interesting implication of evolutionary biology is that we should expect to see effective apologies by subordinates more often than we see apologies by dominants in hierarchical human settings. In these circumstances, apologies would serve the additional function of reinforcing the hierarchy. Hickson, *supra* note 29, at 285–87, finds that apology is relatively more important in hierarchical human societies, although it is difficult to know whether it is the hierarchical or the kin-based nature of these societies that drives the result.

3. *Deception And Discernment*

Strategically, the parties face a potential “time-inconsistency”¹⁵⁷ problem with apology and forgiveness. *Ex post* each individual is better off with conciliation than with moralistic aggression, but *ex ante* the possibility of conciliation can undercut the deterrent value of the threat of retaliation. In fact, a truly strategic person understands that he can get away with cheating, defection, and free-riding behavior by apologizing after the fact. To the extent that the victim feels compelled to forgive in the face of an apology, that victim becomes vulnerable to potential predation, making the emotional framework potentially maladaptive rather than adaptive.¹⁵⁸

This raises the problem of deception by cheaters and discernment or detection by cooperators. Common examples of adaptive inter-species deception in nature include camouflage and mimicry.¹⁵⁹ The reproductive advantages available from free riding on the benefits of cooperation make intra-species deception similarly adaptive. After all, “the ability to elicit altruistically cooperative acts from others without reciprocating . . . makes Gullible’s loss Deceiver’s gain.”¹⁶⁰ Communication and signaling thus become opportunities for deception, but the potential costs of deception create countervailing evolutionary pressures that favor the ability to detect deceit and identify cheaters. A co-evolutionary arms race ensues in which increasingly skilled deception is matched by increasingly skilled discernment.¹⁶¹ To be effective,

157. The term originated in the macroeconomic literature but refers generally to conflicting incentives across time. See generally Robert J. Barro & David B. Gordon, *Rules, Discretion and Reputation in a Model of Monetary Policy*, 12 J. MONETARY ECON. 101 (1983); Finn E. Kydland & Edward C. Prescott, *Rules Rather than Discretion: The Inconsistency of Optimal Plans*, 85 J. POL. ECON. 473 (1977).

158. Cf. Jeffrie G. Murphy, Symposium, *The Role of Forgiveness in the Law*, 27 FORDHAM URB. L. J. 1351, 1359 (2000) (“If I were going to set out to oppress other people, I would surely prefer to select for my victims persons whose first response is forgiveness rather than persons whose first response is revenge.”).

159. Camouflage enables an animal to avoid detection by predators, while mimicry enables an animal to free ride off of the adaptive features of another species. Jones, *Child Abuse*, *supra* note 32, at 1151.

160. *Id.*

161. Robert Trivers, *Deceit and Self-Deception: The Relationship Between Communication and Consciousness*, in *MAN AND BEAST REVISITED* 175, 176 (Michael H. Robinson & Lionel Tiger eds., 1991). In fact, our large brain size may ultimately be attributable, at least in part, to an evolutionary arms race between deceivers and detectors of deception.

cheating behavior must become increasingly covert, but then this creates selection pressure to become increasingly skilled at detecting cheating.¹⁶²

We suggest here that similar co-evolutionary pressures have been at work in the context of apology and forgiveness. One way to induce another to cooperate is to make a promise about future performance, and apology is, in part, a promise to comply with shared norms henceforth. The transgressor proffers an apology in an attempt to obtain forgiveness and induce the victim to continue in a cooperative relationship that yields her benefits. In this sense, an apology, even when made sincerely, can be a form of deception in order to, as Ambrose Bierce cynically noted, “lay the foundation for a future offense.”¹⁶³

Generous forgivers who can discern sincere from insincere apologies have an advantage over both uniformly generous and stingy forgivers. The discerning forgiver can minimize the *ex post* costs of moralistic aggression while simultaneously maintaining the deterrent value of potential retaliation and possibly reestablishing mutually-beneficial cooperation. Leda Cosmides¹⁶⁴ describes the uncanny ability that people have to detect cheating behavior in those around them. Other studies indicate that lay people are significantly better than chance at detecting deception.¹⁶⁵ At this point, it becomes clearer why apology has grown so nuanced over time. The more intricate the components of an apology, the better able the victim is to discern the sincerity of the transgressor’s communicated remorse.

To the extent that forgiveness turns on the perceived sincerity of an apology, victims can punish perceived insincere apologies in at least two ways. First, a victim can invest even more effort in retaliation than she would have otherwise. Second, and relatedly, she can reveal the transgressor’s statement to third parties in an effort to further damage the transgressor’s reputation.¹⁶⁶ After all, prior to the insincere apology, the

162. Thus, the best deceivers are self-deceivers because they are less likely to show the behavioral and physiological cues if they are not conscious of their deceptive intent. *See id.*

163. TAVUCHIS, *supra* note 16, at 7 (quoting AMBROSE BIERCE, *THE DEVILS’ DICTIONARY* 12 (1958)).

164. Leda Cosmides, *The Logic of Social Exchange: Has Natural Selection Shaped How Humans Reason? Studies with the Wason Selection Task*, 31 *COGNITION* 187 (1989).

165. *See generally* Bella DePaulo, Miron Zuckerman & Robert Rosenthal, *Humans as Lie Detectors*, 30 *J. COMMUNICATIONS* 129 (Spring 1980); Miron Zuckerman, Bella DePaulo, & Robert Rosenthal, *Verbal and Nonverbal Communication of Deception*, 14 *ADVANCES EXPERIMENTAL & SOC. PSYCHOL.* 1 (1981); Linda Mealey et al., *Enhanced Memory for Faces of Cheaters*, 17 *ETHOLOGY AND SOCIOBIOL.* 119 (1996).

166. Sometimes a person wants an apology from the transgressor primarily to avoid reputational harm from third parties. Suppose, for example, that two contracting parties agree to cooperate to construct a building that collapses in a strong wind. Others know that someone likely made a

victim had only her word to draw out others' scorn, but after the insincere apology, the victim often is armed with the transgressor's own admission of guilt. Reputational harm can have the effect of getting others to punish the transgressor. That said, individual abilities to deceive and to detect deception will vary, so some but not all insincere apologies will be discouraged.

4. *The Costs Of Signaling*

The problem of deception and discernment is at the heart of communication and signaling. In addition to kin selection and reciprocity, communication and signaling induce cooperative behavior. In the absence of kinship, prior interaction, or reputation, potential cooperators may rely on some form of communication or signal¹⁶⁷ that is a sufficiently reliable indicator of future performance to warrant present performance in return. Unfortunately for cooperators, it is adaptive for cheaters to develop signals that fraudulently induce performance. How can potential cooperators rely on signals? Biologists think the solution lies in the "handicap principle," whereby the costliness of the signal is a measure of its reliability.¹⁶⁸ The investment in signals is similar to "handicaps" imposed on stronger contestants in a game. A handicap proves that the victor's win is due to mastery, not chance. Thus, the peacock's tail or massive antlers are not waste or disabilities, but rather handicaps in this sense, which allow an individual animal to demonstrate its quality.¹⁶⁹ The handicap principle derives from models of asymmetric information that have long been used in economics and law to distinguish sorting equilibria. In those models, cooperators and cheaters

mistake, but it may be difficult to discern from afar which party was at fault. The non-faulty party may demand an apology from the faulty party in order to show others that he is free from blame. In these situations, the non-faulty party will not likely be concerned with the sincerity of the apology.

167. "Signals" are traits whose value to the signaler is that they convey information to those that receive them. ZAHAVI & ZAHAVI, *supra* note 114, at 58–59.

168. *Id.* With respect to signaling and costs, see generally Rufus A. Johnstone, *Game Theory and Communication*, in *GAME THEORY AND ANIMAL BEHAVIOR* 94 (Lee Alan Dugatkin & Hudson Kern Reeve eds., 1998); John Maynard Smith, *Honest Signalling: The Philip Sidney Game*, 42 *ANIMAL BEHAV.* 1034 (1991).

169. ZAHAVI & ZAHAVI, *supra* note 114, at xiv. By managing to find food and avoid predators despite the burden of its tail, the peacock proves he is a high quality mate. By wasting precious escape time and energy by drawing attention to itself through stotting and exposing its conspicuous rump, the gazelle displays its confidence that it can outrun the predator, saving both from an unnecessary expenditure of energy.

are separated with differentially costly signals, and pooling equilibria, where the signals are not reliable indicators of performance or quality.¹⁷⁰

A reliable signal must make cheating or faking unprofitable—the signaler must invest more in the signal than it would gain by conveying phony information:

[T]he investment in the signal is a reasonable one for a truthful suitor to make, but prohibitive or unprofitable for a cheater. The more the suitor stands to gain, and the bigger the loss to one who accepts a false suitor, the more the signaler must invest in the signal in order to reliably demonstrate his superiority.¹⁷¹

The ability to observe and understand signals is adaptive—an individual that pays attention to unreliable signals will be less successful and have fewer descendants than one who only pays attention to reliable signals.

Changes in the environment may lessen or increase the cost of providing the signal:

If . . . the cost of a signal is reduced to the extent that every individual can use it equally well, then the signal can no longer reveal differences in the quality or motivation of individuals. In such a case, the signal loses its value . . . [it] is no longer useful and will disappear.¹⁷²

One of many examples of a loss of signal value in nature involves the behavior of the male satin bowerbird. These birds favor blue objects, a color not readily found in their natural environment. They compete by stealing blue objects from one another and destroying each other's bowers. When the birds live near picnic areas where blue objects have become more abundant, however, the birds put less effort into stealing the objects and more effort into destroying each other's bowers.¹⁷³ In the

170. For treatments of signaling in economics and law, *see, e.g.*, ERIC RASMUSSEN, GAMES AND INFORMATION: AN INTRODUCTION TO GAME THEORY 249–71 (2d ed. 1994); *see generally* ERIC A. POSNER, LAW AND SOCIAL NORMS (2000); Michael Spence, *Job Market Signaling*, 87 Q.J. ECON. 355 (1973); Eric A. Posner, *Law and Social Norms: The Case of Tax Compliance*, 86 VA. L. REV. 1781 (2000); Claudio Signorotti, *Efficiency of Legal Restrictions on Contracts in the Presence of Two Signals*, 20 INT'L REV. L. & ECON. 511 (2000); Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161 (1981).

171. ZAHAVI & ZAHAVI, *supra* note 114, at 27.

172. *Id.* at 59 (emphasis in original).

173. *Id.* at 60.

evolution of signals—signal selection—cost is the fundamental variable.¹⁷⁴

Apology serves a signaling function. After transgressing a norm, the transgressor can use an apology to induce the victim to take the risk of reestablishing cooperative behavior. Recall that apology entails an explicit or implicit promise of future non-offending performance and assurance that the offense was not indicative of the offender's character, i.e., "I really am a Dove even though I acted as a Hawk last time." Under the handicap principle, however, the credibility of an apology is judged in part by its perceived cost to the apologizer. The more costly the apology appears to be, the more reliable it tends to be, and the less costly, the less reliable it is. Cost can make apologies reliable, but they can also reduce the likelihood of an apology. If the environment in which apology takes place changes so as to increase or reduce the cost of that signal, then both its incidence and its value as a reliable indicator of future cooperation adjusts accordingly.

5. *Incorporating Evolutionary Biology Into Economics*

Law and economics has been quite influential over the past three decades because the tools of economics enable lawyers to think more rigorously about how law can affect behavior. Economic models help to predict behavior by assuming people will behave rationally in pursuit of their interests. Although not all individuals will behave rationally all the time, economic models are nevertheless quite helpful in predicting whether more or fewer people in the population will behave in a particular manner if legal reforms are introduced.

Nonetheless, law and economics has its weaknesses. Economists remain agnostic when it comes to defining or ascertaining the contents of individual utility functions, which in turn determine people's "self interest."¹⁷⁵ Preferences, which make up utility, are left for exploration

174. As opposed to the evolution of other adaptations in which the cost is simply a side effect. *Id.*

175. See Jack Hirshleifer, *Economics From a Biological Viewpoint*, 20 *J.L. & ECON.* 1, 17 (1977) ("Modern neoclassical economics has foresworn any attempt to study the source and content of preferences, that is, the goals that motivate men's actions. It has regarded itself as the logic of choice under conditions of 'given tastes'"); Robert C. Ellickson, *Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics*, 65 *CHI.-KENT L. REV.* 23, 44 (1989) ("mainstream economic theory takes tastes as exogenous givens"); Amy L. Wax, *Against Nature—On Robert Wright's The Moral Animal*, 63 *U. CHI. L. REV.* 307, 307–08 (1996).

by psychologists.¹⁷⁶ In the meantime, economists make assumptions about individual preferences, and models work more effectively where the assumed preferences are clear, or at least not hopelessly vague, and quantifiable. In the spirit of simple modeling, law and economic scholars typically assume that people desire money, or wealth, to the exclusion of their tastes for other things. Most law and economic scholars will readily admit that human preferences extend beyond material wealth, but reductionist models can generate testable predications about behavior that cannot be garnered from more realistic analysis.

Evolutionary biology is proving to be tremendously valuable to economists because it helps them identify people's non-material desires while providing a rigorous method of analysis.¹⁷⁷ Stated differently, biology enables economists to see that seemingly "irrational" behavior is indeed quite rational.¹⁷⁸ More importantly, economists can use evolutionary biology to better predict behavior. Our supposition is that biological insights regarding apology and forgiveness can improve, in important ways, the law and economics models of suit and settlement. Before we address that topic, however, we need to further explore one economist's use of evolutionary biology to explain (and model) altruistic behavior.

Economist Robert Frank has developed an evolutionary framework to explain that altruistic or moral acts can fit comfortably within a broadly conceived rational choice paradigm for behavior.¹⁷⁹ Frank begins by noting that we often observe people confer benefits on others even when the beneficiaries have no immediate self-interest in doing so. People tip cab drivers and waiters in towns they will never return to.¹⁸⁰ In experimental settings, subjects often cooperate even in one-shot Prisoner's Dilemma contexts.¹⁸¹ Wallets are returned with the money.¹⁸²

176. See Ulrich Witt, *Economics, Sociobiology, and Behavioral Psychology on Preferences*, 12 J. ECON. PSYCHOL. 557, 562 (1991) (explaining failure of economics to develop hypotheses about human tastes).

177. See Hirshleifer, *supra* note 175, at 17–26 (discussing biology's important advances in identifying scientifically analyzable human tastes and preferences).

178. See generally 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) (arguing that behavior that is irrational in a modern environment may have been rational in ancestral environments) [hereinafter *Time-Shifted Rationality*].

179. FRANK, *supra* note 69.

180. *Id.* at 17–18.

181. *Id.* at 140.

182. See *id.* at 214 (describing experiment in New York City where 45% of "lost" wallets were returned to the "owner").

Charities collect generous donations.¹⁸³ Selfish behavior is also abundantly observable, however. Spouses leave each other for greater sexual gratification elsewhere. Partners take money and property from the business. Kitty Genovese was murdered after a gruesome and prolonged attack that was overheard by at least thirty-eight neighbors, none of whom attempted to intervene or call police.¹⁸⁴ At the extreme, sociopaths seem utterly incapable of caring about their fellow citizens.¹⁸⁵

Selfish behaviors and our efforts to avoid harmfully selfish individuals are somewhat ubiquitous, but we provide a single experimental example here. One of us runs a game in which several law students sit at a table with \$.50 in the middle. According to the instructions, if all of the students can wait for two minutes without taking the money on the table, each will get a dollar, but if one of them takes the two quarters off the table before the time expires, the taker can keep the \$.50, but each of the other students receives nothing. Invariably, someone will take the money shortly before the two minutes expires. The taker, although often somewhat apologetic, typically attempts to justify his behavior on the grounds of self-defense. More specifically, the student typically reasons that someone else would have taken the money if he hadn't. In those circumstances, the student feels justified in taking the money first to prevent exploitation. When played once between naive players (those that have no knowledge or experience with each other), this selfish strategy is optimal in response to the probable strategies of the other players.¹⁸⁶ It places the player in the least worst position in any circumstance. Curiously, when the other players are asked why they didn't take the money sooner, losing students often state that they prefer cooperation even when the risk of receiving nothing is high. If the class is asked to choose those students with which they would like to negotiate, none choose the player who took the money.

Frank asserts that altruism and selfishness can co-exist in a stable society. He states that altruists can survive and thrive, but only if the altruists are able to identify one another. Defectors will take advantage of cooperators if they can, but if cooperators can tell which people are defectors, then the cooperators can avoid being preyed upon. When cooperators can find each other, they thrive compared to defectors.¹⁸⁷ In

183. See FRANK, *supra* note 69, at 222 (discussing charitable contributions in the United States).

184. *Id.* at 43.

185. *Id.* at 42.

186. This condition, known as the Nash equilibrium, is discussed *supra* at note 149 and accompanying text.

187. FRANK, *supra* note 69, at 57–60.

the long run, the individual who can precommit to avoid behaving selfishly may fare better because others are more likely to deal with him. In deciding whom to contract with, whom to hire, whom to marry, etc., we look for signs that the other is trustworthy.¹⁸⁸ In general, then, we hope to find people who will not defect, or cheat, or steal, or shirk—even when we are not looking. Altruists seek altruists for cooperative gains. Defectors seek altruists for exploitation. In either case, altruism, or cooperation is desirable, but the challenge, for the altruists, is to identify defectors and punish or avoid them. Because punishment is itself costly, it can be viewed as its own form of altruism.

Frank asserts that altruists commit themselves to cooperate, and to retaliate, with their emotions:

Certain of the emotions—anger, contempt, disgust, envy, greed, shame and guilt—were described by Adam Smith as moral sentiments. The reward theory of behavior tells us that these sentiments, like feelings of hunger, can and do compete with the feelings that spring from rational calculations about material payoffs. For exactly this reason, they can help people solve the commitment problem.¹⁸⁹

Honesty can make one feel good inside, but the material payoff comes from being able to cooperate with other honest individuals.¹⁹⁰ The capacity to feel a strong bond of love leaves one feeling warm and fuzzy, but the payoff comes from marrying a person who is similarly inclined.¹⁹¹ And, the impulse to seek revenge only materially benefits the person who can deter opportunism against her by reliably signaling that she has such an impulse.¹⁹² To succeed, the cooperators must devise a signal of their cooperative natures that is difficult for defectors to mimic. Because signaling in this context is both costly and imperfect, the population will retain a mix of cooperators and defectors. The higher the costs of

188. Trustworthiness also may be discernible from honorable behavior. For a discussion of the duel as a historic mechanism for men to signal their honor, see generally Warren F. Schwartz, Keith Baxter & David Ryan, *The Duel: Can These Gentlemen Be Acting Efficiently*, 13 J. LEGAL STUD. 321 (1984).

189. See FRANK, *supra* note 69, at 53; see also Jack Hirshleifer, *On the Emotions as Guarantors of Threats and Promises*, in THE LATEST ON THE BEST: ESSAYS IN EVOLUTION AND OPTIMALITY 307, 311–21 (John Dupre ed., 1987) (presenting models that indicate emotions can have strategic value); VICTOR S. JOHNSTON, WHY WE FEEL: THE SCIENCE OF HUMAN EMOTIONS 167–80 (1999) (in repeating Prisoner's Dilemma and other situations, emotions are evolutionarily valuable).

190. FRANK, *supra* note 69, at 54.

191. *Id.*

192. *Id.*

scrutiny, the higher the proportion of defectors who can thrive in the population.

Cooperators can, in fact, signal their predisposition to cooperate in two ways. First, physical symptoms help to reveal others' emotions, and these emotional reactions help people commit themselves to cooperative behaviors. Turning red when one gets angry, blanching and looking awkward when one feels guilty, and smiling gleefully when one feels good about helping others, are all ways that people expose their sentiments. Because these physical signals come from automatic nervous system responses to emotional arousal, through pulse, blood pressure, and muscle tightening in the vocal cords, facial muscles, and elsewhere, these physical signals are costly, though not impossible,¹⁹³ to fake.¹⁹⁴

Reputation, already familiar to economics and law,¹⁹⁵ is the second means by which cooperators signal their natures. In comparison,

193. As Frank acknowledges:

We now know, of course, that there are virtually no nerve pathways that are not at least partly subject to conscious manipulation. The accomplished yogi, for example, can regulate body temperature, pulse rate, blood pressure, and other metabolic processes that in most people are well beyond purposeful control. Even untrained people, with effort, are often able to suppress deeply habituated movements and actions. Yet there remains a clear hierarchy among pathways in the nervous system, with some much more susceptible to conscious control than others.

Id. at 118–19.

194. Charles Darwin described the same general phenomenon through three principles for the expression of emotion. The first, his “principle of serviceable associated habits,” suggests that instinctive rather than conscious patterned physiological responses to situations often best serve the needs of the animal:

Certain complex actions are of direct or indirect service under certain states of the mind, in order to relieve or gratify certain sensations, desires, etc.; and whenever the same state of mind is introduced, however feebly, there is a tendency through the force of habit and association for the same movements to be performed, though they may not then be of the least use.

CHARLES DARWIN, *THE EXPRESSION OF THE EMOTIONS IN MAN AND ANIMALS* 28 (1872). Darwin's second, “antithesis principle,” asserts that opposite emotional situations tend to lead to strikingly opposite physiological responses, as with the attack versus affectionate postures in dogs. *Id.* at 50–53. Darwin's third, the “principle of direct action of the nervous system,” suggests that when aroused, animals will devote this excess energy in predictable, if not entirely useful ways. *Id.* at 66.

195. See generally, Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981); David M. Kreps & Robert Wilson, *Reputation and Imperfect Information*, 27 J. ECON. THEORY 253 (1982); Lewis A. Kornhauser, *Reliance, Reputation, and Breach of Contract*, 26 J.L. & ECON. 691 (1983); Thomas J. Miceli & Metin M. Cosgel, *Reputation and Judicial Decision-Making*, 23 J. ECON. BEHAV. & ORG. 31 (1994); Robert E. Scott, *A Relational Theory of Default Rules for Commercial Contracts*, 19 J. LEGAL STUD. 597 (1990); Eric A. Posner, *Symbols, Signals and Social Norms in Politics and the Law*, 27 J. LEGAL STUD. 765 (1998); Ronald J. Gilson & Robert H. Mnookin, *Sharing Among the Human Capitalists: An Economic Inquiry into the Corporate Law Firm and How Partners Split Profits*, 37 STAN. L. REV. 313 (1985); Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Cooperation Through Rules, Norm's and Institutions*, 99 MICH. L. REV. 1724 (2001).

defectors are eventually found out through their non-cooperative actions, and negative gossip spreads the word. Of course, reputation is an imperfect signal. One can spread negative lies about another. One can fail to perform through no fault of his own. And, in reality, even people who generally reciprocate can eventually encounter a temptation to defect that is so great it overcomes even a strong emotional predisposition to cooperate.¹⁹⁶

Returning to apology, part of its purpose is for a transgressor to signal that she is basically a good person who has fallen from grace but promises to behave better in the future. The apologist hopes to avoid the transgressor's ostracism by signaling that she is in fact a cooperator. The apologist often hopes to repair the damage to her reputation that occurs when third parties witness or hear about her transgression. But the focus on reputation is only part of the story of apology and forgiveness. Effective apologies and forgivenesses, are those that seem compelled by emotional forces that transcend. Such apologies indeed often interfere with momentary rational calculations about reputation. Apologies can have the effect of further exposing a transgressor, and forgiveness can be accompanied by statements or actions that are unflattering to the victim.

We suggest that the emotional components to apology and forgiveness help to signal a deeper individual commitment to cooperation than is possible with the issue of the words alone. Put differently, the nuances of apology, discussed earlier, help the victim discern whether the transgressor is basically a cooperator, one driven by emotions (rather than conscious calculation) to behave in general according to basic moral principles, or instead a defector in disguise. Like Frank, we believe that the powerful emotions apparent in sincere apologies and forgivenesses actually help to serve the long-term reputational interests of cooperators even though they can interfere with short-term strategic reputational considerations.

III. THE EFFECT OF LITIGATION ON APOLOGETIC BEHAVIOR

In Part II we argued that apology and forgiveness can be analyzed and better understood from an evolutionary economic perspective. Behavioral biologists have long understood that cooperation and spite are adaptive, and that societies that can successfully create mechanisms to

196. This general idea lies behind the entrapment defense in criminal law. Police efforts to induce defendant to commit a crime with sympathy or friendship, offers of inordinate gain, or by other means that create strong temptation can enable defendant to avoid conviction. See WAYNE R. LAFAVE, *CRIMINAL LAW* 449–66 (3d ed. 2000).

facilitate both cooperation and retribution are likely to thrive relative to other societies. Recently, economists have focused on the importance of trust to any system of exchange.¹⁹⁷ Such trust must come from some sense of confidence that cooperators are abundant and defection is discouraged. Accidents and lapses of judgment inevitably occur, however, and retributivists who can temper their spite with forgiveness in appropriate circumstances can conserve valuable resources and gain an advantage relative to those who cannot. Recognizing this, transgressors sometimes have an incentive to apologize, provided that they can convince their victims of their sincerity.

In this Part, we consider the effect that the law has on apologetic behavior. The insights from our evolutionary economic perspective are incorporated into an informal game theoretic model to generate implications lacking in previous treatments of apology. Section A briefly describes the evidentiary issue that is currently debated by legal scholars and state legislators. Section B presents an informal strategic framework that considers the costs and benefits of apology and forgiveness and the effect of the evidentiary rules on those incentives. In section C, we return to the apology debate to elaborate on the policy implications of viewing apology from an evolutionary economic perspective.

A. *A Summary Of The Problem And Currently Proposed Solution*

Legal commentators argue that apologetic behavior in the United States is not encouraged and, at worst, is inhibited by the rules of evidence in litigation. Although the precise effect of such an admission on proving guilt or wrongdoing is debated,¹⁹⁸ all seem to agree that apologies increase the risk that a transgressor will be held liable for harms.

197. See generally Oliver E. Williamson, *Calculativeness, Trust, and Economic Organization*, 36 J. LAW & ECON. 453 (1993); Joyce Berg, John Dickhaut & Kevin McCabe, *Trust, Reciprocity and Social History*, 10 GAMES & ECON. BEHAV. 122 (1995); Paul J. Zak & Stephen Knack, *Trust and Growth* (1998), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=136961 (last visited Oct. 16, 2002); Margaret M. Blair & Lynn A. Stout, *Trust, Trustworthiness and the Behavioral Foundations of Corporate Law*, 149 U. PA. L. REV. 1735 (2001).

198. For one side of the debate, see Wagatsuma & Rosett, *supra* note 16, at 479 (noting that the current law of evidence treats an apology as a “queen of proof,” which can be used to prove the claim”); Orenstein, *supra* note 17, at 248 (stating that “evidence law treats . . . naked apologies . . . as admissions.”). For the other side of the debate, see Rehm & Beatty, *supra* note 10, at 121–22 (discussing the non-dispositive nature of apology evidence in medical malpractice and attorney discipline litigation, especially in cases where there is no other evidence of negligence).

Under the Federal Rules of Evidence and most state evidence rules, admissions by party opponents are admissible at trial.¹⁹⁹ Because apologies include admissions of fault, evidence of apology is admissible under Rule 801(d)(2) of the Federal Rules of Evidence.²⁰⁰ Several exceptions to this rule exist to partially protect apologies. For example, Rule 408 makes inadmissible offers to compromise and statements made during compromise negotiations.²⁰¹ In addition to this protection of statements made during settlement negotiations, many state statutes provide for strong protection of mediation confidentiality.²⁰² Nebraska law, as applied to the state's Parenting Act, provides an example:

[n]o records, notes, or other documentation, written or electronic, of the mediation process, except the contents of a final agreement between the parties, shall be examined in any judicial or administrative proceeding. Any communications made confidential by the act which become subject to judicial or administrative process requiring the disclosure of such communications shall not be disclosed.²⁰³

Third parties can, in conjunction with mediation or otherwise, enter a confidentiality agreement to prevent disclosure of statements the parties have made to one another.²⁰⁴ Finally, parties can seek a judicial order prohibiting the disclosure of statements made during settlement negotiations, including evidence of defendant's apology.²⁰⁵

199. MCCORMICK ON EVIDENCE § 254 (John W. Strong ed., 4th ed. 1992) (admission of a party opponent).

200. *See supra* note 3.

201. FED R. EVID. 408 states:

Evidence of (1) furnishing or offering or promising to furnish, or (2) accepting or offering or promising to accept, a valuable consideration in compromising or attempting to compromise a claim which was disputed as to either validity or amount, is not admissible to prove liability for or invalidity of the claim or its amount. Evidence of conduct or statements made in compromise negotiations is likewise not admissible. This rule does not require the exclusion of any evidence otherwise discoverable merely because it is presented in the course of compromise negotiations. This rule also does not require exclusion when the evidence is offered for another purpose, such as proving bias or prejudice of a witness, negating a contention of undue delay, or proving an effort to obstruct a criminal investigation or prosecution.

202. *See Advising Clients, supra* note 7, at 1036 n.93; Pamela A. Kentra, *Hear No Evil, See No Evil, Speak No Evil: The Intolerable Conflict for Attorney-Mediators Between the Duty to Maintain Mediation Confidentiality and the Duty to Report Fellow Attorney Misconduct*, 1997 B.Y.U. L. REV. 715, 733 (reviewing state mediation confidentiality statutes).

203. NEB. REV. STAT. § 43-2908.

204. *Advising Clients, supra* note 7, at 1039-1040.

205. *Id.* at 1040-41.

While potentially useful in certain circumstances, apology advocates claim that these safe harbors do not go far enough in protecting, and thereby encouraging, apologies. Most importantly, for any of these protections to apply, settlement negotiations or mediation is necessary.²⁰⁶ To the extent an effective apology precedes the formalization of the dispute, that apology would remain unprotected. Furthermore, Rule 408, by its own terms, provides only qualified protection. Evidence may be “offered for another purpose, such as providing bias or prejudice of a witness, negating a contention of undue delay, or proving an effort to obstruct a criminal investigation or prosecution.”²⁰⁷ And, although one party cannot use statements made during settlement negotiations against the other party, it is not at all clear that the statements are inadmissible by other plaintiffs or defendants. Further, complications can arise if defendant is subject to both criminal and civil proceedings.²⁰⁸ The protection afforded by mediation, although strong in some states, varies dramatically from state to state,²⁰⁹ and choice-of-law principles rarely even clarify which state’s law applies in multistate disputes.²¹⁰ Finally, confidentiality agreements that purport to mandate the exclusion of evidence are typically disregarded on public policy grounds.²¹¹

The incomplete protection of apology has been criticized by legal scholars. A number of state legislatures have responded by considering an expansion of the safe harbors for both expressions of sympathy and apology.²¹² The apology advocates all desire to encourage apologies by protecting transgressors from the legal consequences of their apologies. In contrast, Lee Taft has argued that the current system is superior because protecting apologies cheapens them and takes away their

206. *Id.* at 1035 (“[o]ften an offender will want to apologize immediately after the injury; however, F.R.E. 408 may not cover such an apology”); *see id.* at 1038 (“parties typically go to mediation only *after* the dispute has escalated, but, from a relational viewpoint, making an apology very soon after the injury may be most helpful”) (emphasis in the original); *see id.* at 1040 (“obtaining a judicial order, if it comes at all, usually comes quite ‘late in the game,’ after litigation is well under way”).

207. MCCORMICK, *supra* note 200, at 467.

208. *Advising Clients*, *supra* note 7, at 1035; *Carney v. Santa Cruz Women Against Rape*, 271 Cal. Rptr. 30 (6th Dist. 1990) (letter of apology from female accuser admissible by falsely accused man to prove liability of third party); *United States v. Gonzales*, 748 F.2d 74, 78 (2d. Cir. 1984) (defendant’s admission of forgery during settlement negotiations in civil suit admissible against defendants in criminal case).

209. *Advising Clients*, *supra* note 7, at 1036–37.

210. *Id.* at 1037–38 n.98.

211. *Id.* at 1039.

212. *See* Taft, *supra* note 18.

essential moral character.²¹³ Just as one proves oneself a hero by facing enormous risks, one proves oneself moral by apologizing in the face of all possible costs.²¹⁴ Taft is concerned that cheap apologies become commodified, especially in the hands of lawyers.

Using tools of game theory, we explore the potential for the strategic use of apologies. We agree with Taft that one must worry about the types of apologies we encourage with our rules of evidence. Apologies entail real costs and benefits to the parties even when they play no formal role in litigation. In some sense, then, apologies are strategic tools before they are treated legally. Taft is surely correct that using the law to increase the cost of apology (by admitting them at trial) reduces the strategic proffering of apologies. But, if we take that notion seriously, we would simultaneously forbid the fact finder from considering the presence of apology in determining damages. After all, when a transgressor apologizes, fact finders typically impose less severe sanctions than they would if they did not hear about the transgressor's apology.²¹⁵ However, if states eliminated consideration of apology in determining damages, victims would have less incentive to forgive and more incentive to bring the apology to the courthouse. In short, by using the law to make apologies costly, opportunism by victims threatens to cheapen forgiveness. Once the law treats apology at all, apologies have more

213. *Id.*

214. *Id.* at 1156 ("When an offender says, 'I'm sorry,' he must be willing to accept all of the consequences—legal and otherwise—that flow from his violation. If a person is truly repentant, he will not seek to distance himself from the consequences that attach to his action; rather, he will accept them as a part of the performance of a moral act and the authentic expression of contrition.").

215. Some states expressly allow consideration of apology evidence as a mitigating factor when determining damages in defamation cases. See FLA. STAT. ANN. § 770.02 (West 1999) ("If it appears upon the trial that . . . a full and fair correction, apology, or retraction was [published or broadcast] . . . then the plaintiff in such case shall recover only actual damages."); MISS. CODE ANN. § 95-1-5 (1999) (same); N.C. GEN. STAT. § 99- 2 (1999) (same); TENN. CODE ANN. § 29-24-103 (1999) (same); TEX. CIV. PRAC. & REM. CODE ANN. § 73.003(a)(3) (West 1999) ("To determine the extent and source of actual damages and to mitigate exemplary damages, the defendant in a libel action may give evidence of . . . any public apology, correction, or retraction of the libelous matter made and published by the defendant."); VA. CODE ANN. § 8.01-48 (Michie 1999) ("In any civil action . . . for libel or defamation . . . the defendant, whether punitive damages be sought or not, may introduce in evidence in mitigation of general and punitive damages, or either . . . that apology or retraction, if any, was made . . ."); W. VA. CODE § 57-2-4 (1999) ("[T]he defendant . . . may give in evidence in mitigation of damages that he made or offered an apology to the plaintiff for such defamation before the commencement of the action, or as soon afterwards as he had an opportunity of doing so . . ."); see also Wagatsuma & Rosett, *supra* note 16, at 479–81 (discussing retraction and apology at common law and stating that at least thirty states' statutes have incorporated consideration of retractions and corrections).

In addition, the sanctions imposed in attorney discipline hearings seem to be lower in those cases where the attorney has shown remorse. Rehm & Beatty, *supra* note 10, at 122–28.

strategic value to both parties than they might otherwise. At best, the evidence rules can be crafted to temper opportunism, but strategic considerations cannot be eliminated altogether.

B. A Strategic Framework

In this Section, we present a framework designed to detail the costs and benefits of apology while at the same time remaining faithful to our conclusion in Part II that some people, through emotional precommitments, will not fully internalize the strategic considerations associated with their behavior. No doubt individuals' propensities to cooperate even when it is costly lie along a continuum. For simplicity of exposition, however, we utilize Frank's classification of people into one of two categories: good types, or cooperators, and bad types, or defectors. Cooperators have the capacity to develop, and do in fact develop, conscientious, morally good sentiments. They strive to keep their promises, comply with shared norms, and refrain from harming others. Cooperators' actions are influenced by both their preferences and emotions that make these people more likely to behave well. They are therefore less than fully responsive to the immediate external costs and benefits of their behavior than are defectors. Defectors behave much more like the stereotypical, purely rational actor: they respond only to the external costs and benefits of the situation at hand.²¹⁶

Suppose that a transgressor has done wrong in the sense that he has violated a norm of responsible behavior that is shared between him and another. The other, the victim, has been harmed in some way by the transgression. Both know that the transgressor has violated this norm and both know that the victim has suffered consequent harm. The transgressor must decide whether to apologize to the victim. In response, the victim must decide whether to pursue (or to continue to pursue) a legal remedy. If cooperator transgressors apologize, they do so at least in part because they feel an emotional need to correct a moral wrong. In contrast, defector apologists act only out of a desire to benefit financially and reputationally from the victim's sense of forgiveness. Thus, the costs and benefits of such apology and forgiveness depend on the legal treatment of the apology. We consider first a legal rule under which

216. Of course, good economists know better than to make such a claim. Economists assume that people maximize their own utility, which depends on their preferences. Incorporating a preference for good or moral behavior is by no means inconsistent with economic modeling. Thus, the real distinction between cooperators and defectors in this article turns on whether this preference exists.

evidence of apology is never admissible in a court of law and then consider the effect of introducing apology into the courtroom.

1. *No Apology Evidence Admitted In Court*

Suppose a state took the advice of apology advocates and forbade evidence of apology in the courtroom. In a world without legal considerations, the costs and benefits of apology would depend on a number of factors. We consider the costs and benefits to transgressors of offering an apology, and then consider the costs and benefits to victims of forgiving the transgressor. These costs and benefits may be expressed as functions of several variables that are defined throughout this subsection.

A. *Costs And Benefits To Transgressors*

Assume that the subjective benefits to the transgressor of an apology include the following:

F = expected value of enhanced future benefits from the relationship.

The transgressor may hope to continue in the relationship, and forgiveness presumably enhances the future benefits that are obtainable, given the transgression. We assume that an apology has the potential to repair the relationship better and faster than a failure to apologize, because the apology communicates to the victim that the transgressor does care about his relationship with the victim. If the transgressor has no hope of continuing this relationship, then $F = 0$.

R = expected value of reputational enhancement from third parties.

The apology may have the potential to enhance the transgressor's reputation with third parties even if the transgressor has no hope of continuing his relationship with the victim.²¹⁷ Admittedly, the sign of this variable will not always be positive, because sometimes an apology can actually harm a transgressor's reputation. On the one hand, the fact that the transgressor has apologized can signal that the transgressor is basically a cooperator, which may enhance his reputation. On the other hand, an apology does involve an admission of wrongdoing, which can negatively affect one's reputation. Since an effective apology requires that the transgressor at least temporarily place himself in a position of relative powerlessness, the apologizer can be perceived as somewhat

217. See *supra* notes 73–79 and accompanying text (discussing social psychological theories grounding apologies in transgressor's reputational concerns).

weak. The reputational effect of an apology will depend on the factual context, the previous reputation of the transgressor, and the individual third parties involved.²¹⁸ Moreover, the perceived sign of the effect on reputation may vary according to the gender of the transgressor.²¹⁹

A = expected reduction/elimination of litigation costs.

As mentioned earlier, apology can diffuse the victim's hostility and pave the way for the parties to resolve their difficulties on their own. The longer a dispute drags out, the more costly it can be for the defendant transgressor, who (at least in the United States) is stuck paying his own legal expenses as they accrue. For those lawsuits where losing defendants are liable for successful plaintiffs' attorney fees, apologies can, by inducing settlement, reduce the transgressor's total litigation costs even further.

D = expected value of reduced damages and liability.

An effective apology can have the effect of turning a wrong into a mere misfortune of life. Although effective apologies entail an implied or explicit reparation offer, forgiveness can include setting aside a claimed right to compensation. Victims sometimes demand at least partial compensation even when they accept apologies. Moreover, the less likely their relationship will continue into the future, the more compensation that is likely to be demanded. For example, spouses rarely demand explicit compensation when they resolve their differences, but a mere apology is unlikely sufficient for the uninsured driver rear-ended by a careless stranger. In all cases, however, the transgressor imposes two types of harm. First, the transgression causes some physical damage, monetary expense, or simply consumes the victim's time. Second, the transgression communicates a certain lack of respect for the dignity or value of the victim and his time and possessions. Although the apology cannot undo the first type of harm, it can mitigate the second type.²²⁰ Thus, the compensation demanded even by victims who are strangers can

218. Gang members, for example, may perceive apology as a sign of weakness, whereas teachers, mediators and counselors may more favorably interpret apologies.

219. See *supra* notes 91–96 and accompanying text (discussing potential sex differences in apologetic behavior).

220. Of course, the costs associated with the second type of harm turn on the severity of the transgression, which in turn depends on the state of mind of the transgressor. Intentional or reckless transgressions may produce more emotional harm than merely negligent transgressions. Moreover, the more the victim values her relationship with the transgressor, the greater this second harm is likely to be. Strangers can impose emotional harms, no doubt, but we are more vulnerable to those we care about.

be lower after an apology because the victim's perceived harm is lower—at a minimum, the apology can “subtract insult from injury.”²²¹

G = subjective value of relief of guilty feelings.

To the extent that one harbors guilt by failing to apologize, the act of apology can be cathartic for the transgressor. An apology typically shifts the moral burden (and hence at least part of the associated guilt feelings) from transgressor to victim to either forgive or justify a refusal to do so.²²²

Assuming initially that an apology plays no formal role in litigation, the costs to the transgressor of an apology include:

H = subjective cost associated with humiliation and shame.

Although we have focused on human tastes for apology after wrongdoing, some transgressors would choose not to apologize even in the absence of legal consequences. Because apologies require a focus on the transgression and an admission of wrongdoing, the apologist inevitably experiences shame and humiliation.²²³ Stated differently, apology entails emotional costs and benefits that seem to vary across individuals.

We assume that cooperator apologists differ from defector apologizers in that the defector simply weighs the costs and benefits to apology while cooperator apologizers' moral sentiments cause them to, in effect, mute the costs of apology. As a consequence, defector decisions to apologize are purely strategic. Given our assumptions, the defector apologizes if:

$$FD + RD + D + A > HD.$$

In contrast, the cooperator apologizes if:

$$FC + RC + D + A + G > HC \cdot C, \text{ where } 0 \leq C < 1.$$

Here we assume that the cooperator discounts the costs to apology by some muting factor C , which takes some value between zero and one. This muting factor is incorporated to reflect the idea that although the cooperator takes costs of apology into account the cooperator, by assumption, fails to fully internalize those costs. The lower is C , the greater the costs to apology must be before the transgressor is willing to be deterred from apologizing. We have assumed that the cooperator has the biological capacity to develop moral sentiments that keep C relatively low, but note that societies often work hard to provide environmental

221. *Advising Clients*, *supra* note 7, at 1019.

222. Orenstein, *supra* note 17, at 244 (noting that person who receives apology bears social responsibility to the offender to forgive).

223. *See supra* note 99 (discussing difficulty of apologizing).

factors that help to lower C for these individuals. Parents teach their children the importance of apology. Religions teach their members the importance of asking for forgiveness, as well as the importance of forgiving. Finally, schools, civic groups, and mass media all focus in varying degrees on the development of moral sentiments. Moral sentiments can have the effect of enhancing G while lowering C, and, in both cases, increasing the likelihood that a cooperator transgressor will apologize for his wrongdoing.

There are other potentially relevant differences between cooperator and defector transgressors. We anticipate that a defector is more likely to transgress in the future than is a cooperator. Therefore, the value of future benefits from the relationship are probably greater for the cooperator than they are for the defector:²²⁴ $FC > FD$.

Moreover, for similar reasons, the reputational enhancement for cooperators is likely greater than it is for defectors, who have had previous, or will have future, cause for transgression: $RC > RD$.

Finally, although the cooperator mutes the costs of apology, those costs, in terms of humiliation and shameful feelings, are greater for cooperators than they are for defectors. In other words, the strategic apologizer is less affected by humiliation and shame than is the apologizer who responds to emotional influences: $HC > HD$.

Given the framework, we cannot conclude that cooperators are necessarily more likely to apologize than are defectors. The benefits to apology seem to be clearly greater for cooperators than they are for defectors, but the cost components for apology may run in conflicting directions. Put differently, the emotional components that make up the cognitive dissonance for transgressors—shame and humiliation on the one hand and relief from guilty feelings on the other—are all stronger for cooperators than for defectors. On balance, the greater benefits to apology and the muting of costs lead us to believe that cooperators are, in fact, more likely to apologize. It is theoretically possible, however, that a cooperator transgressor's increased feelings of shame and humiliation could outweigh the other factors, making the cooperator less likely to apologize. It does appear, though, that cooperators' decisions whether to apologize are differently motivated than are defector decisions.

224. Indeed, if we only take the value of the future of the relationship into account, defectors may have no incentive to apologize, at least to the extent that the function of apology is limited to bonding oneself to future cooperation with the victim.

B. Costs And Benefits To Victim

If the victim receives an apology, he must decide whether to forgive the transgressor. We assume here that if the victim perceives that the transgressor's apology was insincere or strategically rather than emotionally motivated, then the victim chooses to sue the transgressor.²²⁵ In other words, we assume that moralistic aggression causes victims to behave out of spite if they think that the apology was motivated by a desire to obtain yet another benefit from the victim. We assume further that in the event that a victim chooses to forgive the transgressor, he is willing to accept less than full compensation for his injury.

We do not assume, however, that the victim necessarily forgives the transgressor once he receives an apology that he perceives to be sincere. We assume that victims, as well as transgressors, can be cooperators or defectors. The intuition that a victim could opportunistically use an apology to her advantage underlies the apology advocates' calls to exclude evidence of apology at trial. Even if the apology cannot be introduced at trial, it can be used to prove fault to third-party observers. The defector victim forgives only if the present tangible benefits exceed their costs. The cooperator victim mutes these costs because he experiences guilt if he fails to forgive.

Given a perceived sincere apology, the victim's subjective benefits to forgiveness include:

FV = victim's expected value of future benefits from relationship.

Although it is not necessary to forgiveness that the victim desire to continue her relationship with the transgressor, we assume that the more the victim values her relationship with the transgressor, the more likely that she will forgive him. Of course, these future benefits may turn on the nature of the present offense, given that there is always some chance that the transgression will repeat itself, even when the transgressor sincerely apologizes. If the victim perceives no future benefits to continuing her relationship with the transgressor, then $FV = 0$.

RV = expected value of reputational enhancement with third parties.

As with apology, the reputational effect of forgiveness may be ambiguous. Apology may enhance the victim's reputation because it is in general virtuous to be seen as a forgiving person. On the other hand, the victim who forgives easily may be seen as a "chump" or a "pushover"

225. Bartels, *supra* note 18, at 150; Bolstad, *supra* note 16, at 550.

and may become the recipient of more strategically motivated apologies in the future. Mob bosses may suffer negative reputational consequences to forgiving, but priests likely suffer negative consequences for failing to forgive. As with the apologizer's reputational effect, the sign and magnitude of this variable will turn on the particulars of the situation, the victim, and the third parties involved.

AV = expected reduction/elimination of costs of suit.

To the extent that the victim can avoid a lawsuit, he benefits by the amount of time and other resources he would have devoted to litigation.²²⁶

SV = relief of angry, spiteful feelings.

Moralistic aggression is both psychologically and physiologically costly. Resentment and anger crowd out more pleasant thoughts and experiences, and produce all the negative physical side effects that stress produces.²²⁷ Because we assume that cooperators and defectors differ with respect to whether they respond to emotionally-based incentives, we assume here that $SV = 0$ for defectors.

The costs of forgiveness include, by previous assumption:

D = expected value of reduced damages/liability.

The defector victim forgives the transgressor if:

$$FVD + RVD + AV > D,$$

whereas the cooperator victim forgives if:

$$FVC + RVC + AV + SV > C \cdot D, 0 \leq C < 1.$$

Here we assume that the cooperator discounts the costs to forgiveness by some muting factor C , which takes some value between zero and one. The lower is C , the greater the costs to forgiveness must be before the victim is deterred from forgiving. Moreover, because defector victims are more likely to both strategically refuse to forgive and themselves transgress in the future than are cooperator victims, we anticipate that

$$FVC > FVD.$$

226. If the victim hires a lawyer, AV is, of course, smaller when the lawyer is paid by contingency fee than when the lawyer is paid on a per hour basis.

227. For scientific evidence that stress produces harmful physiological effects in the brain, see Robert Sapolsky, *Why Stress is Bad for Your Brain*, SCIENCE, Aug. 9, 1996, at 749. The release of anger and spite constitute the essence of forgiveness. See Symposium, *The Role of Forgiveness in the Law*, 27 FORDHAM URB. L.J. 1351, 1355 (2000) (remarks of Jeffrey Murphy) (describing forgiveness as "the overcoming, on moral grounds, of . . . the vindictive passions of resentment, anger, hatred, and the desire for revenge . . .").

Furthermore, because defector victims are more likely to use forgiveness strategically in the future, we anticipate that

$$RVC > RVD.$$

The basic idea is that one's reputation for being forgiving signals that one is a cooperator, but defectors will eventually erode some of the potential reputational gain from forgiving. Thus, on average we can expect that, all else equal, a cooperator gets more reputational value from forgiving than does a defector. If these assumptions are reasonable, then cooperator victims can be expected to forgive more readily in the face of a perceived sincere apology than will defector victims because the benefits are uniformly larger and the costs uniformly smaller.

2. *Apology Evidence Admitted To Establish Liability*

So far we have assumed that apology plays no formal role at trial. Suppose instead, as is often the case in the U.S., that evidence of a transgressor's apology is admissible at trial to establish the transgressor's liability. We consider here the effect of admissibility on the incidence of apology.

A. *Costs And Benefits To Transgressor*

As recognized by the apology advocates, apologies become more costly to transgressors when they can be introduced at trial to establish fault. The evidentiary rule increases the expected value of the trial award by increasing the probability that the victim will win his case. Building on the framework, we must add to the costs of apology:

L = enhanced expected value of trial award.

The defector now apologizes only if:

$$FD + RD + D + A > L + HD.$$

The cooperator's apology now requires that:

$$FC + RC + D + A + G > (L + Hc) \cdot C$$

Notice that although the costs of apology rise for both cooperators and defectors, defector apologies are relatively more discouraged than are cooperator apologies, where the costs are muted. In other words, overall both strategic and sincere apologies can be discouraged, but on the margin, more strategic apology will be discouraged than sincere apologies. Whether introduction of apology at trial is good or bad ultimately turns on an assessment of the relative importance of sincere

and insincere apologies. In the end, we must determine whether we care more about overdetering a few sincere apologies by admitting apology evidence or underdetering more insincere apologies by excluding them. This judgment turns in part on which category we care more about. The apology advocates appear to care more about encouraging the sincere apologies, whereas Taft is more concerned with discouraging the strategic ones. However, a more complete analysis of the effect of the evidence rule includes consideration of victim behavior as well.

B. Costs And Benefits To Victim

Although introduction of apology at trial can temper the use of strategic apologies, it enhances the opportunistic use of apology by victims. Prior to its admissibility, an apology could be disclosed to third parties, but, with admissibility, an apology also can be brought to trial to enhance the expected award. Thus, we must add L to the cost of forgiveness as well as the cost of apology because forgiveness now requires the victim to forgo this larger expected damage award. Thus, the defector victim forgives if:

$$FVD + RVD + AV > D + L,$$

and the cooperator victim forgives if:

$$FVC + RVC + AV + SV > (D + L) \cdot C.$$

The effect of the evidence rule on forgiveness is relatively greater for defectors. Although it is possible that the increased damages award is so large that even a cooperator victim will choose to sue rather than forgive, it is much more likely that the defector victim will decline to forgive.

In sum, the introduction of apology at trial ultimately discourages opportunistic apologies, but only at the cost of increasing opportunistic lawsuits. At the same time, both sincere apologies and cooperator forgiveness are less likely, though by how much (if at all) they are actually discouraged we cannot say.

3. Apology Evidence Admitted To Mitigate Damages

Although largely ignored in the evidentiary debate, apology evidence sometimes may be introduced at the damages phase of trial. At the liability phase the victim introduces apology to prove the transgressor's fault, but here the transgressor introduces his apology to reduce or

eliminate punitive damages or other liability.²²⁸ How does introduction of this evidence at the damages phase affect apology and forgiveness? We will initially assume that the evidence is not also admissible at the liability phase.

Here we must add to the original list of transgressor benefits to apology:

P = decreased expected value of trial award.

Without reproducing the equations set forth in the previous section, it seems fairly intuitive that when evidence of apology is admissible to mitigate damages but not to establish liability, a marginal increase in apologies can be expected. Some of this apology is purely strategic, which means that victims may respond to this increased use of strategic apologies with increased suspicion regarding the sincerity of the apology. However, to the extent that an apology is still perceived as sincere, the likelihood of forgiveness increases because its costs are reduced by P. In other words, failing to forgive yields victims less under this evidentiary rule than it would if apology evidence were entirely inadmissible. Opportunistic victim behavior is tempered when the apology is introduced at the damages phase, but only at the cost of increased opportunistic apologies.

4. *Apology Evidence Admitted At Both Liability And Damages Phase*

Finally, consider an evidence rule that allows the introduction of apology at both the liability and damages phases of trial. As mentioned earlier,²²⁹ some state statutes specifically permit evidence of an apology to be considered when determining damages. More importantly, to the extent that a trial is not bifurcated, and relatively few are, then nothing stops the fact finder from considering the apology evidence submitted at trial in determining the appropriate damages amount. Under a rule where apology evidence can be considered in determining fault as well as damages in a non-bifurcated trial, we combine the two evidence rules discussed above. Consequently, we add P to the benefits of apology while adding L to its costs. Similarly, we add L to the costs of forgiveness while subtracting P. Thus, the cooperator transgressor apologizes if:

$$FC + RC + D + A + G + P > (L + Hc) \cdot C.$$

228. See *supra* note 215.

229. See *supra* note 215 and accompanying text.

The defector transgressor apologizes if:

$$FD + RD + D + A + P > L + HD.$$

The cooperator victim forgives if:

$$FVC + RVC + AV + SV > (D + L - P) \cdot C.$$

And, the defector victim forgives if:

$$FVD + RVD + AV > D + L - P.$$

At first blush it may seem that introducing apology evidence at both phases of litigation is optimal. Introducing apology at the liability phase reduces strategic apologies and introducing it at the damages phase reduces opportunistic refusals to forgive. Notice, however, that in all four of these equations, L and P (the effects of introducing apology at the liability and damages phases respectively) are offsetting each other. If they are equivalent, then introducing apology at both phases is indistinguishable, in terms of the incentives it creates, from a world where apology evidence is entirely inadmissible in court (the first scenario we considered). Even if they are not exactly equivalent, the fact that they offset one another leads us to conclude that in general, party incentives likely differ little between a regime where apology evidence is entirely inadmissible in court and one where apology evidence can be considered by the fact finder to determine both fault and damages.

Our conclusion requires a caveat. We have so far assumed that L (the increase in expected damages associated with increasing the probability of being found liable) and P (the decrease in expected damages associated with the use of apology to mitigate blameworthiness) are more or less the same. However, in some cases the parties care much more about being found liable and in others they care much more about being found blameworthy. Consider, for example, a suit that involves a contract with a liquidated damages provision. An apology can affect L because it helps prove that defendant breached the contract. Because the damages in the event of breach are predetermined, however, $P = 0$. Conversely, consider a convicted criminal seeking parole. If the parole board considers the fact that the criminal apologized to his victim, the criminal may receive a lighter sentence by being paroled. At that point, however, the apology has no effect on the likelihood of conviction, which occurred much earlier. In both of these examples, considering apology evidence to establish both fault and blameworthiness results in adding to the net strategic incentives of one of the parties.

C. The Apology Debate Reconsidered

We can draw a few normative conclusions about the admissibility of apology evidence. First, because both parties have the potential to use apology strategically at trial, introduction of apology at one phase should, where possible, be counterbalanced with introduction of apology evidence at the other phase as well. Otherwise, opportunistic behavior by one party or the other becomes a problem. When the evidence is admissible only to establish liability, then victim opportunism becomes costly. When the evidence is admissible only to reduce damages, then transgressor opportunism becomes costly on balance.

Second, in choosing between the two remaining evidence rules—one where apology evidence is entirely inadmissible and one where it can be admitted at both the damages and liability phases—consideration of the incentives these rules create for the parties appears largely unhelpful. It seemed intuitively obvious that admitting apology evidence to establish liability would discourage apologies. Nevertheless, the apology analysts have neglected to adequately consider the fact that apology evidence also might be used in court to mitigate damages, and that this admission can encourage apologies. For both apology and forgiveness, the incentives created by admitting apology evidence at the liability phase are offset by the incentives created when the evidence is also considered by the fact finder at the damages phase. Except for the caveat we mentioned earlier, any differences in apologetic or forgiving behavior between these two remaining rules are likely too trivial to warrant much attention from policy makers.

Notice that the strength of Taft's argument, compelling as it seemed at first glance, also dissipates upon closer scrutiny. To Taft, reforming the evidentiary rules threatens to undermine the essential moral value of apology.²³⁰ Recall that to Taft, it is the very costliness of an apology that makes it worthwhile as a method of dispute resolution.²³¹ However, once we consider the legal and practical reality that apology evidence can be used by the fact finder in determining both fault and damages, the admissibility of apology evidence makes the apology neither systematically more nor less costly than the legal regime that Taft argues so strenuously against. Because the incentives to apologize are unlikely to differ much under either rule, his commodification argument is ultimately unconvincing.

230. *Supra* note 213 and accompanying text.

231. *Supra* note 213 and accompanying text.

Indeed, Taft seems to think that transgressors have no reason to use apology strategically in the absence of the participation of lawyers. Once apology and forgiveness are viewed in an evolutionary economic perspective, however, it becomes clear that their strategic value existed long before the introduction of lawyers into dispute resolution. Apology and forgiveness have the potential to facilitate the continuation of the parties' relationship, enable the transgressor to avoid compensation, and enhance the reputations of both parties in the community. These pragmatic considerations can never be completely separated from the moral nature of the activities. Moreover, the relative importance of the strategic considerations likely has much more to do with the essential character of the individuals as cooperators or defectors than it does with the presence of lawyers.

The apology scholars have likewise ignored the fact that the formal legal system is not structured to help people preserve and continue their relationships. Instead, courts are much better equipped to assist those who have decided to dissolve their relationships. One essential role of the courts is to ensure that people part company on terms that are fair to both, and to do so in a manner that helps to create incentives by others to reasonably cooperate. To the extent that apology evidence assists the court in discerning truth, determining fault, and ascertaining culpability, it tends to serve these objectives. But note that these are fundamentally different reasons to admit evidence of apology than the ones proffered by the apology advocates.

An evolutionary economic analysis may offer useful insights into other legal or ethical treatments of apology. First, as several scholars have noted, corporate and other business structures can encourage a party to act rationally. If emotional and other cognitive biases prevent individuals from behaving rationally, businesses can sometimes organize themselves in a manner that enables the individuals collectively to make more efficient decisions.²³² In general, this organization is beneficial because more efficient decision making enables society to maximize the value of scarce resources. However, in the context of apology, the organization can be problematic because decision making that

232. See generally CHIP HEATH ET AL., *Cognitive Repairs: How Organizational Practices Can Compensate for Individual Shortcomings*, in 20 RESEARCH IN ORGANIZATIONAL BEHAV. 1 (1998); Robert K. Rasmussen, *Behavioral Economics, The Economic Analysis of Bankruptcy Law and the Pricing of Credit*, 51 VAND. L. REV. 1679, 1688-90 (1998) (discussing fact that some but not all cognitive biases may be corrected in the institutional context); Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Misperceive Stock Market Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101 (1997) (discussing positive and negative effects of cognitive bias toward optimism that seems to survive within organizations).

approaches or resembles rational calculation in the context of apology also approaches the decision making of defectors. Put differently, apology can be used as a tool for organizations to strategically take advantage of individual victims' instincts to forgive in the face of apology.

To elaborate, behavioral biologists emphasize the fact that our brains are a product of our evolution, and that they tend to be better equipped to handle situations commonly encountered in the environment of evolutionary adaptation (EEA) than more modern changes in our environments.²³³ As pointed out earlier,²³⁴ our sophisticated cognitive capacities help us mitigate the negative effects of using our evolved predispositions in our more modern era, but those predispositions can be expected to cause us to behave less than purely rationally at times.²³⁵ Scientists believe that in the EEA, people banded together and interacted in small groups.²³⁶ Because of the social structure in the EEA, virtually all of our interactions were repeat interactions, which means that a predisposition to cooperate would be adaptive for some portion of the population. In the context of transgressions, cooperation entails a propensity to forgive in the face of a perceived heartfelt apology. To some extent, this predisposition to forgive promotes conflict resolution even for strangers. The evolutionary perspective suggests that we are predisposed to treat our interactions as iterative, even when they are not. Thus people are more likely to cooperate in one-shot Prisoner's Dilemma context than economists would predict.²³⁷ If so, then the strategic framework presented in Section B, although presupposing the potential for the continuation of a relationship, is largely applicable to dispute resolution among strangers.

An organization—whether government, corporation, or other association—can take advantage of victims' predisposition to forgive in order to minimize its liabilities. No doubt victims might be more suspicious of apologies proffered by organizations. However, deception

233. See Leda Cosmides, *The Logic of Social Exchange: Has Natural Selection Shaped How Humans Reason?*, 31 *COGNITION* 187 (1989); Jones, *Time-Shifted Rationality*, *supra* note 178, at 1167.

234. *Supra* note 119 and accompanying text.

235. *Supra* note 120 and accompanying text.

236. See Jones, *Time-Shifted Rationality*, *supra* note 178, at 1176–77 (discussing evolutionary processes and their likely effect on cooperative behavior).

237. See Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Sciences: Removing the Rationality Assumption From Law and Economics*, 88 *CAL. L. REV.* 1051, 1128 (1994) (using tipping behavior as example); FRANK, *supra* note 69, at 140. *Cf.* Berg, et. al, *supra* note 197 (finding surprisingly large degree of cooperation in experiments with extended form game).

and discernment might be an arms race at which the organization, through specialization of individual employee tasks, can excel. After all, formal organizations presumably did not exist in the EEA. As a result, we may be predisposed to think of dispute resolution in the dyadic, individual-to-individual context and prone (although by no means guaranteed) to ignore the institutional nature of the transgressor. An institution that wishes to exploit victims' cognitive and emotional structures will send its most empathic employee or member to apologize to the victim. Although the organization may be using the apology strategically, the individual who is sent credibly may convey a sense of heartfelt remorse for harming the victim. Some, though perhaps not all, victims will respond to the individual rather than the organization and agree to settle their claims.

As an ethical matter then, we might wish to rethink Jonathan Cohen's argument that lawyers should encourage hospitals to offer apologies as a means to lower liability costs.²³⁸ The apology takes advantage of individual predispositions to forgive, and, it may deflect hostilities towards those blameworthy individuals who may not be able to take advantage of specialization within an organizational structure, namely doctors. In addition, plaintiffs' attorneys can serve an important role in discouraging their clients from waiving their rights to compensation in the face of apology. The attorney can help her clients overcome their cognitive and emotional biases,²³⁹ but many victims never get to the point of hiring legal counsel. We therefore suggest rethinking the enforceability of liability releases that are signed by victims who received no independent legal counsel.

The analysis above also suggests that apology and forgiveness have greater implications for the conduct of mediation than they have for formal litigation. Protected by special confidentiality rules and evidentiary exclusion rules,²⁴⁰ most mediations today already serve as safe harbors for apology.²⁴¹ The special protections afforded to communications in mediation offset any incentives that are created by the evidentiary rules in litigation discussed above.²⁴² The predominant activity that occurs in mediation is negotiation. Effective negotiation

238. See Cohen, *supra* note 9.

239. See generally Korobkin & Guthrie, *supra* note 11.

240. See NANCY H. ROGERS & CRAIG A. MCEWEN, *MEDIATION: LAW, POLICY & PRACTICE* (1989).

241. *Advising Clients*, *supra* note 7, at 1036–40 (discussing the pros and cons of mediation as a legally-protected forum for making “safe” apologies).

242. See *supra* Part III.B.1.

requires some cooperation, and cooperation requires a certain degree of trust. After a transgression, the victim is less likely to trust the transgressor and the transgressor has reason to distrust the victim who might respond with moralistic aggression. Apology and forgiveness help establish trust after a defection thereby creating the possibility of further cooperation and even reconciliation. Apology might help the transgressor reestablish himself as a cooperator in the perception of the victim, and forgiveness might reassure him that the victim will not retaliate with a transgression of his own. Mediation is thus a forum that enables each party to explore whether the other is a defector or cooperator, and apology can help facilitate the process.

Not surprisingly, several commentators have promoted apology in the context of mediation.²⁴³ Most mediations are referred by the courts or submitted by the disputants because the parties are at an impasse in their negotiations. If distrust is at the root of the impasse, apology seems a good place for the mediator to start. Of course, the delay between a transgression and mediation can doom an effective apology.²⁴⁴ Moreover, some conjecture that not all mediation styles are conducive to apology.²⁴⁵ Nevertheless, because most seasoned mediators are flexible,²⁴⁶ as a practical matter good mediators would advocate or certainly not discourage apology if they saw some potential in its promoting the goal(s) of the mediation.²⁴⁷

243. See, e.g., STEPHEN GOLDBERG ET AL., *DISPUTE RESOLUTION* 159–62 (3d ed. 1999) (commenting on the potential for apology in mediation); Marshall H. Tanick & Teresa J. Ayling, *Alternative Dispute Resolution by Apology: Settlement by Saying "I'm Sorry,"* HENNEPIN LAWYER, July–Aug. 1996, at 22 (arguing for proactive use of apology in mediation); Levi, *supra* note 10 (attempting to ferret out the best situations, factors to maximize beneficial use of apology in mediation); and, Latif, *supra* note 19 (promoting partial and safe apologies both in and out of mediation as serving other desirable purposes).

244. *Advising Clients*, *supra* note 7, at 1038 (noting that the time lag between the onset of the dispute and mediation allows for the conflict to escalate).

245. Levi, *supra* note 10, at 1192–93.

246. See generally Dwight Golann, *Variations in Mediation: How—and Why—Legal Mediators Change Styles in the Course of a Case*, 2000 J. DISP. RESOL. 41 (2000) (discussing the flexibility of experienced mediators).

247. Different mediators and disputants may come to the forum with different goals. Settlement of the lawsuit is the goal of most lawyer-mediators because caseload is largely referred by the courts. Other mediators may promote other goals such as reconciliation or recognition and empowerment. Our model assumes that the parties as well as outside observers agree that one party has violated a shared norm in some manner that has harmed the other party. When the fact of a transgression is not so clear, however, mediation can be a mechanism for the parties to discuss the facts and state their positions so as to eventually determine whether a shared norm has been violated.

However, some commentators have cautioned strongly against the unreflective use of apology in mediation.²⁴⁸ Stressing again the likely cheapening of the moral value of the apologetic act, Taft seems particularly incensed by the suggestion that lawyers and mediators advise parties to issue partial apologies in mediations.²⁴⁹ Here, we agree with Taft that proponents of partial apology both within and outside of the protected environment of mediation misunderstand the effect of such apologies on dispute resolution.²⁵⁰ However, our agreement does not rest on the subjective moral principles enunciated by Taft, but rather on principles of evolutionary biology.

From the evolutionary economic analysis discussed above, the apologetic interchange is essentially an exchange of signals that each party attempts to decipher and interpret. An effective apology must be a reliable signal. If apology is a signal to induce the victim to risk reestablishing cooperative behavior, then under the handicap principle, its cost to the apologizer must be sufficient to assure the victim of its credibility. Partial apologies and apologies made in mediation are insulated from the monetary risks and public exposure that surround apologies revealed in litigation. When an apology is cheap, and therefore, an unreliable indicator of the transgressor's cooperative stance, the victim is more likely to require that the transgressor incur additional costs in the form of compensation.²⁵¹ More importantly, although partial apologies could produce some cathartic effect,²⁵² in general such protected apologies will be less likely to induce cooperation and reconciliation. As a mediator, one of us has experienced the negative reaction when, for example, an insurance adjuster begins a mediation with a costless partial apology by saying to the plaintiff, "I'm sorry you were hurt, but I'm only authorized to offer you the same amount previously offered." Limiting exposure in this manner is self-defeating.

248. Taft, *supra* note 18, at 1148–50 (attacking the use of partial apologies and safe apologies made in mediation); Levi, *supra* note 10, at 1180–81, 1188 (generally warning that "happy-ending" apologies are rare and that partial and coerced apologies are less effective); *Advising Clients*, *supra* note 9, at 1018 (advising against coercion of apologies).

249. Taft, *supra* note 18, at 1148–50.

250. *Id.*

251. Mark Bennett & Christopher Dewberry, "I've Said I'm Sorry, Haven't I?" *A Study of the Identity Implications and Constraints That Apologies Create for Their Recipients*, 13 *CURRENT PSYCHOL.* 10, 17–18 (1994) (victims feel constrained to accept proffered apologies but may impose additional conditions when the apology is unconvincing).

252. See generally Latif, *supra* note 19, at 311–19 (praising the possible positive effects of coerced, partial, and safe apologies). The Truth and Reconciliation Commission experience in South Africa suggests a cathartic effect on a national scale but has also led to concerns over justice and has arguably not promoted true reconciliation. Gibson, *supra* note 2.

Negotiation in mediation can backfire with partial apologies, and full apologies offered by credible deceivers and organizations can be exploitative. These difficulties can be compounded by the intervention of apology-advocating third-party mediators. Mediators specialize in finding ways to eliminate lawsuits, but especially because they tend not to know the parties well, they are particularly ill suited to judge the credibility of an apology. A party who is pressured to apologize may do so with less sincerity than if his conscience would have led him to act. The pressured victim, in turn, who is more likely to detect the insincerity, may leave the table feeling bitter, frustrated, and under-compensated.

The issue of consciously strategic apology deserves much more attention than we give it here. It seems, at first glance, that apology advocacy and coaching by attorneys and mediators can cause harm both because these third parties may misinterpret the parties' signals and because these third parties can end up distorting those signals. When a transgressor is coached to offer an apology, that coaching can help to make the apology appear to the victim to be more sincere than it actually is. Moreover, the mediator or attorney who encourages the victim to accept an apology may make separate representations about the transgressor's remorse. Both the coaching and the representations can, in many contexts, be very helpful to the genuinely remorseful but reserved transgressor. Without coaching the reserved transgressor would fail to send the intended signals. Unfortunately, however, coaching can deceive the victim into believing that she has received a sincere full apology when in fact a strategic partial apology had been proffered. In these latter circumstances, coaching and representations could result in the acceptance of a fundamentally unfair, grossly inequitable, or even unrealistic and inoperable settlement. Such potentially abusive outcomes tend to cast suspicion on sincere apologies in subsequent mediations. Moreover, they potentially undermine the integrity of the mediation process itself.

In sum, the proponents of partial and protected apologies in mediation recognize the deeply ingrained power of apology and forgiveness and understand how mediation provides a unique forum within which to facilitate them. The critics fear their abuse. An economic evolutionary perspective begins to uncover why apology is so powerful and is so susceptible to abuse in the context of mediation.

CONCLUSION

Three goals motivated this Article. First, we hoped to show that insights from evolutionary biology can help us to better understand some, if not all, of the powerful emotions that underlie apology and forgiveness. Second, we hoped to convince scholars in law and economics that the strategic dispute resolution models can and should incorporate apology and forgiveness, at least informally. Finally, we hoped to incorporate the results of our strategic framework into an analysis of the evidence rules surrounding apologies—a topic of significant current scholarly and legislative interest.

Our framework helped to focus attention on party opportunism and the effect that the evidence rules have on the strategic behavior of both transgressors and victims. Once we recognize that evidence of apology can be introduced either to establish liability or to mitigate damages, it becomes clear that mutual opportunism is possible. To counteract strategic considerations of both parties, we conclude that in general evidence of apology should be considered either at both or at neither phase of the trial. The choice between the two ultimately turns on considerations other than either the incidence or essential morality of apology. Moreover, because courts are notoriously unsuited to encourage parties to get along with one another, they instead focus their attention on determining the truth of the allegations and establishing just parting terms for the parties. With these goals in mind, evidence of apology at both the liability phase (to help determine truth and fault) and at the damages phase (to determine culpability) seems quite useful.

The evolutionary economic perspective indicates that some but not all people should feel an emotional urge to forgive in the face of a heartfelt apology. Moreover, some will be predisposed to forgive even strangers and organizations. Organizations can exploit victims' predispositions, raising important ethical considerations for the lawyers involved. In addition, mediators need to think more carefully about the circumstances under which they encourage apology and the manner in which they facilitate the offering and acceptance of apologies.

Apology and forgiveness have important implications for our criminal justice system and for public discourse. Ideally, we would apply our analytic framework to all aspects of apology and forgiveness in conflict resolution. Even the more limited initial undertaking in this Article was, in important ways, much too broad for us to believe that we have definitively resolved any one of the three issues this Article did address. Further work to refine the biological analysis and to formalize the

economic model of apology and forgiveness is in order. Either of these exercises ultimately could affect our analysis of apology in the courts. Nevertheless, we believe that this Article has made a significant contribution toward consilience—linking evolutionary theory to economic theory in ways that prove valuable to lawyers seeking more effective theories and explanations of human behavior.[†]

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