

Can Neoclassical Economics Handle a Scriptural View of Forgiveness?*

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This article assesses whether traditional economic models are capable of sufficiently representing the phenomenon of forgiveness in a meaningful manner. We employ the Holy Scriptures of the Christian faith, as well as writings of both Jewish and Christian authors, to consider carefully what features a model of forgiveness should contain and whether traditional economic modeling can accommodate such features. That is, we ask whether the conventional methods of economics are broad enough and robust enough to “handle” the phenomenon of forgiveness. We find that economics can indeed handle a scriptural view of forgiveness, and we also suggest that such a view *must* be incorporated in any economic model of forgiveness. This article makes significant contributions to the literature of forgiveness. We define and differentiate both strong and weak forms of forgiveness. We also present a heuristic model of how injury, apology, and forgiveness can transpire between two parties. We are aware of no other model of forgiveness present in any discipline that incorporates the strong form of forgiveness.

Introduction

Current mainstream economics makes very specific assumptions concerning the nature of economic man. These assumptions appear to many outside of the profession to be incongruous with the view of man held by many Christians—especially if the individual has been saved. Andrew Britton reviews key areas of apparent incongruity between the view of man held by economists and the view of redeemed man held by most Christians.¹ We consider two here.

First, economists assume that economic man—*homo economicus*—is a rational decision-maker, capable of comparing the marginal benefits and marginal opportunity costs of any activity that could enhance his personal utility. Hence, many outside the profession have criticized the current economic paradigm as one bereft of possibilities for behaving charitably, considering issues of calling, pursuing vocation, loving genuinely, or forgiving without expecting something in return. If economic man really is a utility-maximizing, rationally calculating automaton, critics argue, then economics has no room for a charitable human—much less a redeemed one.

Most Christian economists resent this criticism of their profession. Christian economists assert, and correctly so, that such a characterization unfairly limits the view of economic man to one wherein each individual is motivated by sheer selfishness. As John Lunn and Robin Klay point out, the rational choice model is a powerful predictor of how human beings behave and assumes that individuals act to make themselves better off in *whatever terms* better off *means to them*.² Accordingly, the model of rational choice can be applied equally well to the behavior of Abraham Lincoln, Martin Luther King, Jr., Mother Teresa, and Ted Turner.

On a second and related point, critics of mainstream economics charge that economists are so focused upon the utility-maximization problem of the individual that they ignore any consideration of the ways in which agents might interact in order to promote greater societal well-being or community. Therefore, critics charge, economics as conventionally practiced affords no view of community as given in Scripture, especially as depicted within the early church.

Critics are correct in their assertion that economists have achieved relatively little, thus far, in their study of human interaction and caring outside the context of a market setting—where exchanges are motivated primarily by self-interest. For example, Zhiqi Chen and Frances Wooley present a model of family decision-making wherein each spouse is presumed to care about the other. Nevertheless, in the same work, the authors model the interaction of the caring spouses in a game-theoretic framework where the spouses use the Cournot-Nash equilibrium as a “threat point in a bargaining game.”³

Obviously, the critics find more solid footing on this point. There is indeed regrettably little in the literature of conventional economics that resembles Christian love, caring, or forgiveness. Of course, this does not mean that economists are unconcerned with these phenomena. In our view, economists have achieved little in this area because the very nature of Christ’s teachings for humanity lies at odds with the motivations of most humans living under origi-

nal sin. Hence, modeling a true spirit of Christian compassion or forgiveness challenges the existing techniques of economists, whether applied or theoretical—but especially theoretical.

This article assesses whether traditional economic models are capable of sufficiently representing the phenomenon of forgiveness in a meaningful manner. We employ Holy Scripture to consider carefully what features a model of forgiveness should contain and whether traditional economic modeling can accommodate such features. That is, we ask whether the conventional methods of economics are broad enough and robust enough to handle the phenomenon of forgiveness.

Gregory Jones emphasizes the important role that Christians must play in all scholarly inquiry and, in particular, the study of forgiveness:

Christians are called to learn and to discern more deeply and more richly what is the precise nature, purpose, and scope of Christian forgiveness.... [T]here *ought* to be a difference between how Christian philosophers investigate the issues, from within the doctrine of a Triune God, and how philosophers who inhabit other (religious or nonreligious) traditions do so.... Philosophical investigations, as well as psychological, social, political, and other forms of inquiry, are crucial to our craft of continually clarifying and deepening our understandings and practices of forgiveness.... The problem with too many modern discussions ... is that they have increasingly diverged from such a theological context.⁴

Our analysis proceeds as follows. We begin by reviewing the related existing literature in economics. Next, we examine what forgiveness is—and is not—from a scriptural perspective in an effort to discern the essential assumptions and features of an economic model of forgiveness. We consult primarily Old and New Testament texts but also consider the writings of Jewish and Christian authors on the subject. Finally, we present a simple heuristic model of forgiveness that illustrates how mainstream economics might accommodate such assumptions and features in a model of forgiveness. We are especially wary of modeling something that we call “forgiveness” if it is not consistent with the ideas of forgiveness contained in Scripture.

Literature Review

If the self-interest model articulated by economists suggests that rational economic agents should never be observed to forgive each other in any meaningful sense, then why do we observe forgiving? Why do we forgive when economics indicates that we should not?

Speaking generally, one possibility is that economists overlook important microfoundations of behavior that are well known to social scientists working in other disciplines. For example, Jean Tirole suggests that the economic model of self-interest oversimplifies in the interest of parsimony. We observe what appear to be “anomalous” outcomes simply because our models do not incorporate factors that are well-known in psychology to influence decision-making. Such factors include emotions, others’ consumption, and how much one has now relative to what one has had in the past.⁵

In the view of Ernst Fehr and Armin Falk,⁶ as well as Ernst Fehr and Urs Fischbacher,⁷ economists ignore what we can learn from other disciplines. Accordingly, these authors posit that economic agents are, in fact, more heterogeneous than the self-interest model permits. They argue that agents may be of two types. The first type is the self-interested type assumed in much of economics. The second type, a reciprocal type, cooperates voluntarily if treated kindly by the other agent—and retaliates when treated unkindly.

Indeed, Alvin Gouldner delineates a norm of reciprocity, indicating that it forms the basis of stable social relationships.⁸ Michael McCullough and Charlotte Witvliet describe the tendency to reciprocate as being ingrained through biological, psychological, and cultural channels.⁹ Fehr and Falk, and Fehr and Fishbacher, provide extensive empirical evidence of cooperation when agents are of the reciprocal type.¹⁰

As the preceding discussion indicates, economists have achieved regrettably little in their pursuit of explaining elusive behaviors such as forgiveness. In the next section, we consider the features and assumptions that any economic model of forgiveness would require in order to be faithful to a scriptural view of forgiveness.

A Scriptural View of Forgiveness

Lewis Smedes identifies the circumstances in which forgiveness may be required. Forgiveness is occasioned when the hurts experienced by a victim are personal, unfair, and deep.¹¹

In this section, we elaborate upon what forgiveness is—and is not—from the perspective of Holy Scripture. Our outline proceeds in the following way. First, for the sake of clarity in the analysis that follows, we define what we will mean by forgiveness in the remainder of this article; we identify both a strong form and a weak form of forgiveness. Next, we discuss the environment in which we live and form our personal relationships. Finally, we describe the

essential attributes of both the strong and weak forms of interpersonal forgiveness from a scriptural perspective.

Two Forms of Forgiveness

Developing a working definition of forgiveness revolves around whether one is speaking of giving or receiving forgiveness. Unquestionably, one can offer forgiveness (or unconditional love) to someone, whether they receive it or not. That is a one-way transaction. God has done that for us in Christ; thus, the amazing statement, “God was in Christ, reconciling himself to us.” So, from God’s perspective, we are forgiven.

There are times when all of us have to do that in our personal relationships, but in a real sense, that forgiveness has to do with only the victim. It removes a roadblock in the way of a forgiver’s further personal growth and development. Smedes deals exclusively with this view.¹² This is the form of forgiveness that we denote as the *weak form of forgiveness* (WF).

Much of the literature in psychology takes this weak-form view of forgiveness. For example, Everett Worthington and Jack Berry assume that one may forgive another without necessarily seeking to restore the relationship to its pretransgression state. Moreover, an apology by the victimizer is not a precondition for forgiveness to be granted by the victim. Thus, Worthington and Berry see forgiveness in its weak form as intrapersonal; in their view, one has forgiven another once the offended party no longer holds negative feelings toward the transgressor and is motivated to seek reconciliation with the transgressor. However, this weak form of forgiveness does not presume any change of heart on the part of the victimizer.¹³

Hence, in the weak form of forgiveness, it is indeed possible, where human relationships are concerned, for an injured party to forgive another—regardless of whether the victimizer is repentant. Ultimately, however, forgiveness is intended to be a two-way street. If forgiveness is to be received (and not just extended), so that the ultimate goal of two-way reconciliation is to be achieved, there has to be the price of repentance (a classic verse is 2 Chronicles 7:14) on the part of the offender.

Consider the Jewish tradition. According to Elliot Dorff, for example, “People may reconcile without forgiving.”¹⁴ In this tradition, there is an obligation for a victim to forgive only if the person inflicting harm goes through the process of “return.” In this view, then, forgiveness is something that cannot be merely granted by the victim; forgiveness must be earned by the transgressor. Jones illustrates the Jewish tradition of return using Ezekiel 18:25–32,

Leviticus 6:1–7, and Numbers 5:5–7.¹⁵ In all of these instances, forgiveness is conditioned upon turning from one’s sins, as well as upon making restitution to the injured party.

Thus, while it may be of psychological value to us to forgive those who have wronged us but who do not repent (turn around), the Bible clearly makes repentance a precondition to *receiving* forgiveness. This language is not limited to the Old Testament. In Luke 17:3–4, for example, we see that we are to forgive as many times as an offender repents. Moreover, in Matthew 18:15–20, Jesus even more strongly makes the case that forgiveness requires repentance.

Therefore, we denote this second form of forgiveness, the one that follows repentance by the offender, as the *strong form of forgiveness* (SF). This strong form follows the biblical view that forgiveness cannot be granted unless the victimizer has repented. Apology is a necessary, but not sufficient, condition for the strong form of forgiveness. Further, only the strong form holds the possibility of reconciliation. There can be no reconciliation without apology.

Environmental Assumptions

A Triune God

For Christians, the ultimate source and model of forgiveness is God. Throughout the Old Testament, we see evidences of a creator God who is saddened by our misdeeds but who can nevertheless forgive. For example, in Genesis 6, we observe how much grief our fallen actions can inflict upon our Creator. “[T]he Lord was sorry he had ever made them. It broke his heart” (v. 5).¹⁶

Thankfully, God is also merciful, and able to forgive our sinful actions. God models forgiving.¹⁷ In Exodus 34, the Lord says, “I am ... the merciful and gracious God. I am slow to anger and rich in unfailing love and faithfulness. I show this unfailing love to many thousands by forgiving every kind of sin and rebellion” (vv. 6–7).

Similarly, the Psalms remind us of the forgiveness that God makes available to us. In Psalm 51, David rejoices in the forgiveness that God provides, saying “Forgive me for shedding blood, O God who saves; then I will joyfully sing of your forgiveness” (v. 14). Again, in Psalm 103, David praises the forgiving God: “He forgives all my sins and heals all my diseases.... He has removed our rebellious acts as far away from us as the east is from the west” (vv. 3, 12).

While God is merciful and forgiving, he is also just. There is no room in God’s plan for the cheap grace so often denounced by Dietrich Bonhoeffer.

Sinners must confess their transgressions and be prepared to face the consequences of their actions. Confession is required, whether one has sinned against God or against a neighbor. In Proverbs, we are told that, “[p]eople who cover their sins will not prosper. But if they confess and forsake them, they will find mercy” (28:13). Further, according to Numbers 5, all who harm another “must confess their sin and make full restitution for what they have done” (v. 7).

Therefore, we may also infer that transgressors face real consequences of their actions. This point is most acutely illustrated in Numbers 14, where we see that, “[The Lord] does not leave sin unpunished, but he punishes the children for the sins of their parents to the third and fourth generations” (v. 18).

Thus, we see that God the Father, the creator of the universe, is a just and loving God. He cares for us, feels pain when we sin against him or others, and affords both forgiveness and justice for the wrongs we commit.

Having considered the nature of God the Father as the ultimate source of all forgiveness, let us now turn to the other persons of the Holy Trinity. Jones conducts a Christian theological analysis of forgiveness, pointing out that any Christian theology of forgiveness is not complete in the absence of a full trinitarian perspective.¹⁸ For an accurate perspective of forgiveness, one must understand the role of Christ as our redeemer, as well as his teachings. Further, one must consider the role of the Holy Spirit in the conduct of our daily lives, including our interactions with others—whether those others profess Christianity or not. We briefly consider each in turn.

Jesus Christ, the only Son of God, died in order to provide once-and-for-all atonement for all the sins of humanity throughout all time. In Hebrews, we are reminded of Christ’s atonement: “Without the shedding of blood, there is no forgiveness of sins” (9:22). Thus, with Christ’s death and resurrection, all of our sins may be forgiven.

Christ confirms his ability to forgive the sins of all. In Matthew 9, when Jesus heals a paralytic, he tells the man, “Take heart, son! Your sins are forgiven” (v. 2). Even from the cross itself, Christ forgives those who crucify him.

Through Christ, we receive the free and glorious gift of redemption, but receiving Christ’s forgiveness and redemption requires our repentance. In the second chapter of Acts, Peter tells those gathered, “Each of you must turn from your sins and turn to God, and be baptized in the name of Jesus Christ for the forgiveness of your sins” (v. 38).

Further, Christ calls us to forgive those who wrong us personally. We are to follow his example. Moreover, inasmuch as we ourselves have experienced Christ’s forgiveness, we are free to offer forgiveness to others when they harm us.

Turning to the third person of the trinity, Jones conveys the essential role played by the Holy Spirit when Christians forgive.¹⁹ While Christ makes forgiveness a possibility, the indwelling of the Holy Spirit enables each of us to make it a reality. The Spirit creates in each of us a heart to forgive. We see this most clearly in John 20, where Christ enjoins forgiveness with the power of the Holy Spirit. Following his resurrection, Christ tells his disciples, “Receive the Holy Spirit. If you forgive anyone’s sins, they are forgiven” (vv. 22–23).

Recent Christian authors acknowledge our dependence upon the Spirit in order to forgive. Marilyn McCord Adams suggests that Christians may pray for the will to forgive others.²⁰ Smedes also suggests that Christians may pray for a forgiving heart.²¹

A Fallen World

All of us live under original sin—whether we are redeemed or not. Hence, a sinful nature is always with us. First John 1:8 reminds us that we have all sinned.

Further, not all of the individuals with whom we interact are Christians. Nor may we assume that most of those with whom we have relationships share the same values espoused by the Jewish or Christian traditions. While Desmond Tutu reminds us that we are all children of God, created in his image,²² we are nevertheless constantly subject to the relationship problems occasioned by the Fall. Thus, there are always circumstances in which humans will need to offer forgiveness to one another.

However, this does not mean that Christians must sin every day in thought, deed, and word. First John 3:5–6 says that since Christ died to take away sin, if we continue to live in him we will not sin. This is not to suggest that any humans can function at the level of God’s moral perfection. It is to say that, on the conscious level, Christians may live lives that are in complete conformity to God’s will.

A Free Gift

Thankfully, even though man is fallen, God is a forgiving God. Salvation is a gift made available to all. However, the salvation made available to us by God is not granted unconditionally. Instead, repentance is required.²³

A Call to Forgive

As forgiven ones, Christians are called to forgive others as Christ has forgiven us. We forgive by following the example of Christ given above. We also respond by forgiving others as an expression of thankfulness for the forgive-

ness that has been extended to us. The parable of the forgiven debtor (Matthew 18:21–35) reminds us of the obligation that the forgiven have to forgive others.

Other scriptural passages remind us of the duty of Christians to forgive. For example, Ephesians 4 calls us to be “forgiving one another, just as God through Christ has forgiven [us]” (4:32). Moreover, the Lord’s Prayer contains only one verb referring to the action of the person saying the prayer: “just as we have forgiven those who have sinned against us” (Matthew 6:12).

Essential Features of an Interpersonal Forgiveness Model

We begin by envisioning a two-person social relationship. We perceive that the essence of the nature of transgression and forgiveness is most relevant and pressing at the level of the individual. Further, we all deal daily with issues of forgiveness in our relationships with others at the individual level.²⁴

The Nature of Injury

Smedes describes the nature of injurious acts that necessitate forgiveness by an injured party. According to Smedes, any act may require forgiveness by the injured party if the harm caused is personal, painful, and unfair.²⁵

Smedes is careful to note that such harm may or may not be caused intentionally. Injuries requiring forgiveness may be as simple as a careless remark that causes pain to the other individual. Similarly, physical harm caused to someone through the failure of another to exercise due care would occasion a need to forgive on the part of the injured person.

The Consequences of Injury

An injurious act damages the nature of the relationship held in common between the two individuals. That is, an injurious act destroys more than just the personal well-being of the victim. The act also depletes the communal bond that existed between the two parties prior to the transgression.

Jones, in his theological analysis of forgiveness, provides a detailed discussion of the consequences that an injurious act holds for the community in which the act takes place. In Jones’s view, the Holy Spirit plays a crucial role in maintaining and renewing communal relationships.²⁶ Through the Spirit, forgiveness becomes possible, and community can be preserved, even through painful circumstances.

The Role of Apology

Michael O’Malley and Jerald Greenberg have demonstrated in a clinical setting that an apology and demonstration of remorse by an offender may be

viewed as a down payment toward the restoration of justice. According to O'Malley and Greenberg, the down payment comes through the psychological costs incurred by the offenders in the possible forms of guilt or remorse.²⁷ Similarly, Tutu claims that South Africa could not have moved forward following apartheid had there been no public forum for individuals to confess their past misdeeds.²⁸

Worthington and Berry see the trend among corporations facing litigation to apologize and settle, rather than fight, as anecdotal evidence of this phenomenon.²⁹ In some legal cases, the offer of a lenient sentence may require not only a guilty plea but also may be conditioned upon a full allocation of the facts by the accused, or even an explicit apology to the victim or her family.

Therefore, a fundamental feature of any model of forgiveness must be the accommodation of apology. If one does not apologize, it is hard indeed to imagine that any relationship damaged by a transgression may ever be restored. Alternatively, if one does indeed apologize, then the apology could certainly be viewed as a step toward restoring the relationship to its pretransgression level, especially because the strong form of forgiveness may be accomplished.

While confession or apology are preconditions for the strong form of forgiveness, they need not be preconditions for the weak form that we define above. Hence, while Tutu calls the offending party to confess his deeds, he also makes the point that the weak form is yet available even when others do not repent.³⁰ Smedes, in his examination of the parable of the lost son, asserts that the prodigal's father had forgiven the prodigal even before his return.³¹ Perhaps the father had already resigned himself to the possibility that his son would never, ever return—repentant or otherwise.

The Propensity to Forgive

Our main contention in this section is that any model that attempts to describe the phenomenon of forgiveness must allow for genuine forgiving behaviour on the part of any victim. We believe that a model in which “forgiving” someone is a way to further one's own narrowly defined self-interest is not consistent with what Scripture calls us to do when we forgive.

What, then, can motivate forgiving attitudes and behaviors, even when it is not in our natures to forgive—when it does not lie in our own, narrowly defined, self-interest? We would like to suggest that each individual, Christian or otherwise, possesses some specific propensity to forgive. For some, forgiveness may come easily. For others, finding a way to forgive may prove impossible, or nearly so. Hence, we believe that any model of forgiveness must necessarily include a parameter reflecting an individual's propensity to

forgive. Otherwise, there is no way to imagine that any self-interested individual would forgive—except for some ulterior motive.

We also contend that such a parameter need not remain static for any individual. Instead, we envision that such a parameter may evolve in its value over time for several reasons. First, we imagine that salvation might occasion an initial increase in value of the propensity to forgive from its default value. As mentioned above, Christians are called to forgive others, even as they have been forgiven themselves through Christ. Hence, the new Christian, having experienced Christ's forgiveness, is free to forgive others.

Second, both Smedes³² and Adams³³ have discussed the possibility of praying for the ability and desire to forgive. That is, Christians, called to forgive others, can pray for a genuine desire to forgive, even when forgiving proves difficult. If it is possible for Christians to call upon a power greater than themselves for a heart to forgive, then certainly forgiveness becomes easier to explain in a fallen world.

Third, Jones envisions a role for the Holy Spirit in our lives: one that helps us grow in our abilities to forgive throughout our Christian walk and experience.³⁴ In this, Jones compares this unfolding over time of our abilities to forgive to one's personal development in any craft or trade. No carpenter begins his career at the level of master. Instead, he must begin his career in carpentry at the apprentice level. With experience, practice, and the careful guidance of a more advanced, more skillful mentor, he may achieve the level of journeyman in the trade. At the pinnacle of his development, and with much practice, he may eventually rise to the level of master carpenter—one for whom the practice of the craft becomes second nature.

For Jones, we develop our craft as forgivers in a similar fashion. Forgiving does not come easily to the novice. Forgiving feels uncomfortable, and we go about it awkwardly. However, with time, patience, and the guidance of a Master Forgiver, we are able to grow in our abilities to forgive others as we ourselves have been forgiven. Forgiving can become cheerful and can become a possible avenue to restore relationships that might remain broken otherwise. As Tutu puts it, there is “no future” for relationships without forgiveness.³⁵

A Simple Economic Model of Forgiveness

In the preceding section of this article, we defined two forms of forgiveness: strong and weak. While both are theoretically meaningful, repentance on the part of the offender is a necessary condition for the strong form. The strong form of forgiveness is the one that best represents the scriptural view of

forgiveness. Jones speaks primarily of this form.³⁶ The strong form holds the possibility of rebuilding the relationship following a transgression.

In the absence of any repentance or apology, though, the only remaining forgiveness option available to the injured party is forgiveness in its weak form. Here, a victim will find a way to cope with the pain she has incurred. Primarily therapeutic in nature, the weak form is not a sufficient condition for restoring the relationship. In fact, the weak form rarely leads to restoration because there is no apology offered on the part of the offender. Smedes deals mainly with this weak form of forgiveness.³⁷

In the remainder of this article, we develop a simple, heuristic model of forgiveness in both forms—strong and weak. Our discussion is organized around the specific possible natures of the damage caused by a transgression. Starting with each possible nature of damage, we then trace out the interactions of the two parties that may lead to forgiveness in its strong form, forgiveness in its weak form, or no forgiveness at all. As we will demonstrate, the strong form is possible only following an apology by the offender. In the absence of such an apology, the only remaining form of forgiveness available to the injured party is the weak form.

Damage Caused Accidentally

Sometimes we harm another accidentally. The court system sometimes refers to such injuries as those resulting from a failure to exercise due care. Here, one inflicts pain upon another; she did not intend to do it, but she is fully aware of the damage that she has caused. We illustrate the resulting chain of possible outcomes beginning on the left side of Figure 1.

In such an instance, the offender can choose either to apologize or to not do so. In a more elaborate model of forgiveness, we envision a parameter on the part of the offender that represents her propensity to apologize. Such a parameter need not be static in value. Instead, the parameter may be influenced by such factors as experience, the inner workings of the Holy Spirit, or the perceived *ex ante* nature of the relationship; that is, if the *ex ante* relationship was perceived by the offender to be of high value, an apology may follow quickly, lest the relationship fall apart in the wake of the incident.

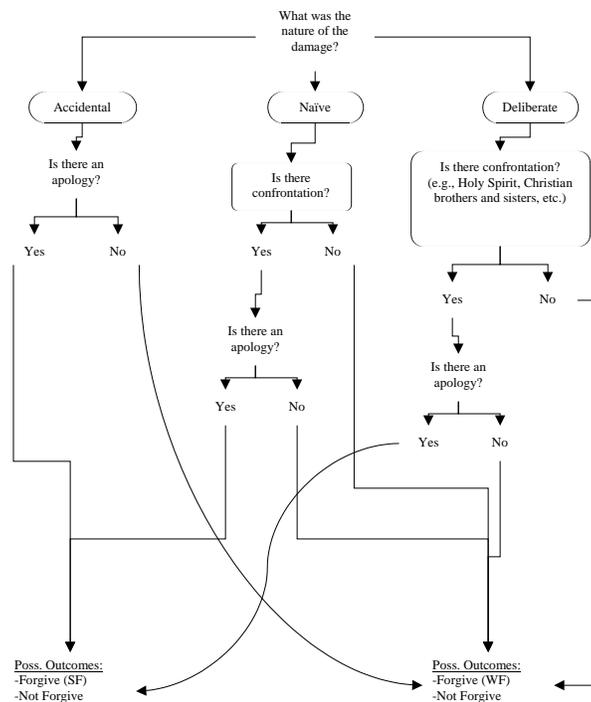
If the offender apologizes, then the strong form of forgiveness becomes an available option to the injured party. Nevertheless, an apology is only a necessary condition for forgiveness—not a sufficient one. The injured party must decide whether to accept the apology and extend forgiveness in its strong form. Here, the aforementioned propensity to forgive will drive the outcome following apology. If the victim possesses a relatively strong propensity to forgive

(perhaps through prayer, experience, or the work of the Spirit), then he will offer the strong form of forgiveness. However, if the victim has difficulty accepting the apology, he may nevertheless—though not biblically—choose not to respond to repentance with forgiveness.

Alternatively, the offender may simply choose not to apologize. Without apology, the victim cannot offer the strong form of forgiveness. Instead, either he may choose not to forgive his offender, or he may forgive her in the weak, therapeutic sense of Smedes.³⁸ Again, the victim’s propensity to forgive will drive the eventual outcome here.

Figure 1

A Diagrammatic Exposition of Forgiveness



Damage Caused Naively

Sometimes we injure others naively. That is, we hurt them by accident, and we remain ignorant regarding the damage we have caused. Here, the offender can never voluntarily apologize because she will be unaware of the pain she has caused. One example of such an injury could be the damage inflicted upon another through some careless remark. The offender meant no harm and has no idea she has caused any. We trace the steps toward forgiveness beginning in the center section of Figure 1.

In this case, the strong-form result is impossible unless the victim confronts the offender and informs her of the damage she has inflicted. Failing this, the weak form of forgiveness is the only one that remains because the offender will never be able to apologize; she has no idea she has done anything wrong. Therefore, if the victim does not confront the offender, he will either choose to forgive her (weak form) or not forgive her, depending upon his propensity to forgive.

If, instead, the victim chooses to inform his victimizer of his pain, then the door to the strong form of forgiveness opens. Now aware of the injury, the offender is faced with, as in the accidental case described in the preceding section, a choice of whether or not to apologize. As in the accidental case, the victim can choose, again according to his propensity to forgive, whether or not to accept the apology and extend forgiveness in its strong form.

Damage Caused Intentionally

Too often, one human hurts another deliberately. Even in such instances, Scripture indicates that the strong form of forgiveness may nevertheless be attained. However, the strong form of forgiveness demands an apology on the part of the offender. Here, conventional economics finds itself in deep trouble. Why would a rational, utility-maximizing individual deliberately hurt someone one minute, then turn around and apologize the next? Economists who ignore Scripture cannot explain this phenomenon. We trace our scripturally informed route to the strong and weak forms of forgiveness, following a deliberate injury, beginning on the right side of Figure 1.

Apology following a deliberately harmful act requires a change of heart on the part of the victimizer. Unfortunately, conventional economics makes no room for contrition (with the one possible exception of extreme myopia on the part of the offender). Fortunately, Scripture offers a more reasonable solution to this problem than does conventional economics. This is not to say that conventional economic techniques cannot accommodate such a scriptural view.

Instead, we are saying that Scripture can inform the work of economists in the area of forgiveness.

Suppose that someone has deliberately harmed another. Unless the offender comes to appreciate the wrongfulness of her actions and is led to apologize, the strong form of forgiveness is not available. Hence, with no change of heart, there will be no apology. With no apology, the victim can choose either not to forgive, or to find solace in the weak form of forgiveness only. The relationship will never be repaired.

Under what circumstances might such an offender become repentant? In Christianity, the answer is straightforward. The victimizer must be confronted with the full import of the harm she has caused. In Christianity, an offender might experience a change of heart through the inner workings of the Holy Spirit. Alternatively, her brothers and sisters in Christ could confront her with the wrongfulness of her actions and encourage her to apologize to her victim. Therefore, even an intentional act may be followed by an apology, as long as there is an avenue, through confrontation, for the offender to experience a change of heart.

Confronted with the wrongfulness of her actions, the offender is still able to choose whether or not to apologize. As before, should she opt not to apologize, then the strong form of forgiveness will never be available. With no apology, the victim's only options are either not to forgive, or to extend forgiveness in its weak form. Again, the relationship will never be repaired.

On the other hand, once confronted by other Christians or the Spirit, the offender may apologize for the harm she has caused. With apology, the strong form of forgiveness becomes possible. As before, the victim may then choose either to extend the strong form of forgiveness, or to hold a grudge and never forgive, according to his propensity to forgive.

Conclusion

This article has addressed whether traditional economic models are capable of sufficiently representing the phenomenon of forgiveness in a meaningful manner. We have employed Holy Scripture, as well as the writings of both Jewish and Christian authors, to consider carefully what features a model of forgiveness should contain and whether traditional economic modeling can accommodate such features.

Our article has (1) reviewed the existing related literature in economics, (2) examined what forgiveness is—and is not—from a scriptural perspective, and (3) developed an heuristic model of the phenomenon of forgiveness. Not only

do we find that economics can indeed handle a scriptural view of forgiveness, but we also suggest that a scriptural view of forgiveness *must* be incorporated in any economic model of forgiveness. Without such an addition, there is no way to explain, for example, why someone who has deliberately hurt another would then turn around and apologize.

In our view, this article makes three significant contributions to the literature of forgiveness. First, we define and differentiate the strong and weak forms of forgiveness. We are not aware of any other source, in any discipline, that distinguishes the two aspects of forgiveness in this precise way. Second, we present a heuristic model of how injury, apology, and forgiveness can transpire between two parties. We are aware of no other model of forgiveness present in any discipline that incorporates the strong form of forgiveness. Finally, we point out that Scripture provides a unique avenue to explain how the strong form of forgiveness may be attained, even in the wake of a deliberately harmful action.

Therefore, we believe that conventional economics is indeed robust enough to handle the strong form of forgiveness, provided that it is willing to accept the Christian view that offenders may be confronted by external factors, such as the Spirit or their brothers and sisters in Christ, along the way to experiencing a true change of heart regarding the harm they have caused. In fact, any attempt to model forgiveness in any sense other than a scriptural one is doomed to fail. Our approach exemplifies Donald Hay's admonition for Christians to enrich conventional economics by adding insights that might go unconsidered otherwise.³⁹ Just as economic models of trust do not really get at the heart of what we normally mean when we speak of trust, economic models of forgiveness cannot get at the heart of what we mean by the strong form of forgiveness, unless we turn to Scripture to see what it is that forgiveness really means, especially in its strong form.

Therefore, modern economists interested in modeling forgiveness must let Scripture inform their modeling. Unless they do, there will be no models of forgiveness—at least, not ones that satisfy.

Notes

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