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# Advancing Behaviorism in a Judeo-Christian Culture

## SUGGESTIONS FOR FINDING COMMON GROUND

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The relationship between science and religion has been described as warfare (Draper, 1874/1897; White, 1896/1960). This characterization is undoubtedly too strong. Indeed, Gould (1999) has argued that it is false, fueled more by political agendas than historical fact. Nevertheless, it is undeniable that conflicts between science and religion have occurred, and often have been well publicized. The trial of Galileo in 1633 is perhaps the prime example of the persecution of science by a dogmatic theology. Three centuries later, opposition to Darwinian thought resulted in the media circus surrounding the *Scopes vs. Tennessee* (1925) trial. Today, fundamentalist Christians in some parts of the United States continue to oppose the teaching of evolution in public schools, and new conflicts are emerging where science has outpaced the current system of ethics, such as in the case of human cloning.

Skirmishes aside, at the dawn of a new millennium science and religion coexist. Gould (1999) has conceptualized science and religion as occupying *nonoverlapping magisteria* (abbreviated NOMA). According to NOMA, science defines the natural world although ultimate questions about existence lie within the domain of religion. NOMA claims that science should not interfere within the domain of religion and vice-versa.

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NOMA can be seen in practice. The world's major religions have, for the most part, yielded authority to science on matters pertaining to the natural world. This was dramatically illustrated by the Roman Catholic Church's acceptance of evolution as factual in 1996. At the same time, many scientists are devoutly religious and from this vantage examine moral issues that are vital in promoting the well being of society. With respect to cloning, for example, religion cedes to science that it may be possible to clone a human, but science cannot decide if it is ethical to do so.

A practical problem with Gould's (1999) conceptualization of science and religion is that only deistic religions are compatible with NOMA. Deism purports that a supernatural deity (hereafter God) created the universe and set it in motion. Thereafter, God does not intervene in its workings (for an overview of deism, see Gould). Deism is incompatible with religions that assert the existence of a personal, intervening God. This incompatibility often is overlooked when discussing the nonconflicting subject matter of science and religion and will be discussed later in this chapter. This incompatibility notwithstanding, science and religion do coexist in areas of traditional science. For example, those of religious faith do not object to the laws of physics because they are deterministic and preclude supernatural intervention.

The debate between science and religion intensifies when studying people, however, precisely because science and religion appear to claim domain over the same subject matter. The resistance that biology faced when evolution was applied to humans is well known. Less chronicled is the debate between psychology and religion. It has been argued, for instance, that human behavior is not lawful, and therefore is not an appropriate subject matter for science (for analyses of such arguments see Chiesa, 1994; Grunbaum, 1953). Within psychology, the philosophy of behaviorism seems most at odds with the religious thought of the Judeo-Christian worldview.[1] Behaviorism often is seen as robbing humans of their special place in the universe, denying the existence of free will and moral responsibility, and rejecting notions of an intervening God. Perhaps because the behaviorist conceptualization of people runs counter to a culture dominated by Judeo-Christian thought, some have reacted to it negatively, using emotionally charged terms. For example, one critic labeled *Beyond*

[1] The scope of this chapter is limited to Judeo-Christianity because the Judeo-Christian faith is the most common religion in the Western culture, and seems to be the most relevant to this discussion. Many of the arguments apply generically to any religion espousing belief in a personal God. Many divisions exist within the broad theistic framework of Judeo-Christianity, rendering some of my arguments more or less relevant based on one's religious affiliation.

*Freedom and Dignity* (Skinner, 1971) as "the theory and practice of hell" (Rubenstein, 1971).[2]

The problems with acceptance by the Judeo-Christian culture might be viewed by some behaviorists as establishing the need to assert their arguments in favor of science. Behaviorists might be more effective in communicating in the culture at large, however, if they emphasized similarities between behaviorism and Judeo-Christianity. Gould (1999) provided several examples of how a mutual respect forged by honest intellectual debate has been productive for both science and religion. Within the science of behavior, Sidman (1960) has argued that science matures more so by emphasizing similarities than dissimilarities among divergent areas of research.

Consistent with this view, this chapter seeks commonalities between the philosophy of behaviorism and Judeo-Christianity. The common theme is pragmatic: Both behaviorists and Judeo-Christians have a common goal of solving socially significant problems. As part of this, they both spend considerable resources working with disadvantaged populations. Behaviorists have developed effective methods for addressing some of these social problems. The religious community has developed particularly effective means of mobilizing people to work on social issues. By combining these strengths, both Judeo-Christians and behaviorists may be more effective in minimizing societal problems. To obtain such cooperation, however, requires examining the issues that have kept it from occurring to this point. Several key issues including free will, moral responsibility, ethics, and the status of an intervening God will be examined. Philosophical differences undoubtedly exist, and will be briefly described emphasizing their practical implications. Although behaviorists and theists ultimately disagree on several metaphysical issues, it may be profitable to "agree to disagree" and move on to more pragmatic questions. As such, in the final section of the chapter the focus will shift from the relation between the philosophy of behaviorism and Judeo-Christianity to the role that a science of behavior (behavior analysis) could play in a Judeo-Christian culture.

## Free Will and Determinism

The term *free will* is defined traditionally as the partial freedom of the agent, in acts of conscious choice, from environmental and phylogenic determinants (Durant, 1926/1960). The concept of free will is at the heart of

[2] For examples of negative reactions to *Beyond Freedom and Dignity* (Skinner, 1971), see Chein (1972) and Wheeler (1973). For a review of these reactions and a behaviorist reply, see Dinsmoor (1992).

Western philosophy and religion.[3] St. Irenaeus (125–202 A.D.) wrote, "Man is rational and therefore like God; he is created with free will and master over his acts" (*Catechism of the Catholic Church*, 1994, p. 481). Free will seems to be required within the Judeo-Christian worldview for at least three reasons. First, God created people in God's own image, granting them mastery over nature and all the animals (Genesis 1: 26–29; New International Version).[4] Second, God bestowed on humankind free will so they would be free to choose to love and worship God (*Catechism of the Catholic Church*, 1994, p. 481). Finally, free will is required within the Judeo-Christian system of ethics. For example, a just God could not condemn the sinful to eternal damnation if those people were not free to choose evil over good (Drange, 1998).

The philosophy of behaviorism posits that behavior is the product of the environment and phylogeny of the organism. Thus, behaviorism denies the existence of free will and aligns itself with the physical sciences in assuming a deterministic worldview. As Skinner (1953) argued:

> Science is more than the mere description of events as they occur. It is an attempt to discover order, to show that certain events stand in lawful relation to other events. . . . If we are to use the methods of science in the field of human affairs, we must assume that behavior is lawful and determined. (p. 6)

According to *metaphysical determinism*, every event that occurs in the universe is the necessary outcome of antecedent conditions (Slife, Yanchar, & Williams, 1999). One consequence of metaphysical determinism is that if all the relevant antecedents were known, human behavior could be predicted with perfect accuracy and the notion of free will could be disproved. Perfect prediction, of course, has eluded science. Within a metaphysical deterministic framework, the inability to make perfect predictions arises from two sources. The first is ignorance of the controlling variables (Baum, 1994; Sidman, 1960). As knowledge of the controlling variables increases, predictions become more refined. Second, predictions may be constrained due to limitations in measurement. Within physics, Heisenberg (1958) discovered that it is physically impossible to measure both the exact position and exact momentum of an atomic particle at any given time. Because it is impossible to measure the exact state of a

[3] Although free will is a fundamental assumption of most Judeo-Christian religions, there are several exceptions. Luther, for example, stated that the will was not free when it came to spiritual matters, referred to as the "bondage of the will" (Plass, 1959). Calvin denied the existence of free will altogether, espousing a religion based on predetermination. For the purposes of the present analysis, however, the assumption is that most people of the Judeo-Christian faith embrace traditional notions of free will.

[4] All biblical citations refer to the *New International Version Bible*.

physical system, it may be impossible to predict the future of that system with perfect accuracy.

Some behaviorists have abandoned metaphysical determinism in favor of *metaphysical probabilism* or *probabilistic determinism* (Slife et al., 1999; see Marr, this volume; Neuringer, this volume). This philosophical position stems from viewing behavior as a stochastic system incorporating random events. In practice, both metaphysical determinism and probabilistic determinism can only couch predictions in terms of probability. Because of this, some theorists have attempted to insert free will as a source of behavioral variability (Howard, 1994; Rockwell, 1994; Rychlak, 1992; for a review, see Slife et al., 1999). This insertion is incompatible with behaviorism. Echoing the metaphysical determinist stance, Baum (1994) labeled free will as "an illusion based on ignorance of the factors determining behavior" (p. 15). Moreover, Slife et al. (1999) argued that lawful processes determine the random variation viewed as inherent in stochastic models of behavior, leaving no room for an autonomous agent. Because both metaphysical and probabilistic determinism reject traditional notions of free will, the term determinism will be used generically throughout the rest of this chapter.

Within philosophy, workers have been attempting to integrate free will and determinism for hundreds of years. *Compatibilist* arguments attempt to incorporate free will into a deterministic account of behavior. The early Judeo-Christian leaders initially desired such arguments to reconcile the discrepancy between human free will and God's apparent foreknowledge of their actions.[5] Later, the success of Newtonian mechanism compelled many theistic philosophers, such as Kant, to posit compatibilist accounts of determinism and free will. Whereas a recounting of compatibilist arguments is beyond the scope of this chapter, many define free will in such a way so as to be compatible with behaviorism. Dennet (1984), for example, defined free will as deliberation before action. As Baum (1994) noted, deliberation is a class of behaviors (thinking, feeling, etc.) that ultimately is determined by genetic and environmental factors. Because deliberating itself is a determined event, Dennet's definition of free will does not pose a conceptual problem for behaviorism. Thus, one way to diffuse the free will/determinism controversy would be to adopt a compatibilist viewpoint. Unfortunately, most compatibilist arguments that are consistent with behaviorism define free will in such a limited way as to be incompatible with Judeo-Christian views of free will (Baum, 1994).

[5] For several dozen examples of God's foreknowledge of human actions, see Drange (1998, p. 323) and McKinsey (1995, pp. 322–328).

These arguments illustrate some of the futility both behaviorists and theists have encountered when engaging in philosophical debate over the free-will/determinism issue. Rather than find a position compatible to each, it may be wise to "agree to disagree" on metaphysical issues and adopt a more methodological position on the subject of determinism. In doing so, determinism is used in its simplest form to examine whether one or more events influence another event. Invoking determinism, thus, is not necessarily a reflection of any fundamental truth regarding the ultimate status of universe (Gazda & Corsini, 1980; Mazur, 1994; Slife et al., 1999; Vorsteg, 1974), but rather a tactical decision. Behaviorists thus avoid many points of contention with the Judeo-Christian culture. As Mazur (1994) wrote:

> Is it necessary to be a determinist to pursue the sort of scientific analysis that is described in this book? Certainly not. Regardless of your religious beliefs or your philosophical convictions, you can profit from reading this book as long as you are willing to observe that there is some regularity and predictability in the behaviors of both humans and nonhumans. . . . We can proceed in this fashion without taking any particular position on the free-will/determinism controversy. (p. 17)

## Meanings of Freedom

By adopting a methodological approach to determinism, behaviorists and theists can begin to address more practical issues, such as the types of freedoms valued by each worldview. A search for the words "free" and "freedom" in the New International Version of the Bible revealed 72 verses with respect to freedom from slavery, captivity, imprisonment, bondage, or servitude. In addition, another 28 verses referred to freedom from other aversive events, such as disease, pain, fear, and violence. Thus, the most common biblical interpretation of freedom involves freedom from aversive control (accounting for over 60% of all references to "free" and "freedom").

Freedom from aversive control is a value shared by behaviorists (Baum, 1994; Sidman 1989; Skinner, 1971) and theists alike, and is evident in many of Skinner's writings, particularly *Beyond Freedom and Dignity*. It is important to note that conceptualizations of freedom are largely independent of the free will/determinism controversy. The similarities between the Judeo-Christian and behaviorist conceptualization of freedom—and the importance each attaches to the concept—should be emphasized.

In most religions embracing the notion of free will, freedom from aversive control is only the first step in achieving a more complete freedom.

The biblical view of freedom also is associated with choosing one course of action over another. This is the type of freedom most commonly associated with free will and its implications with respect to moral responsibility and ethics will be discussed in subsequent sections.

Another use of the word "freedom" is in the context of *spiritual freedom*. On one level, spiritual freedom refers to the freedom to love and worship God. There are 25 verses in the Bible that refer to "freewill offerings" in which people offer prayers and sacrifices to God. Functionally, this interpretation of spiritual freedom is the same as that associated with choice. Baum (1994), however, defined spiritual freedom as freedom from worldly wants and desires. Thus conceived, spiritual freedom refers to escape from or avoidance of events that others find to be positive reinforcers. The Bible refers to freedom from various types of sin, for example the love of money (Hebrews 13: 5). St. Paul agonized over the conflicting repertoires of wanting to serve the Lord and the (potentially) sinful nature of satisfying worldly desires (Romans 7: 7–25). Interestingly, many of these worldly desires may have deleterious long-term effects (Baum, 1994). For example, behaving "greedily" may lead to many short-term consequences (e.g., new cars, vacations, lavish homes), but ultimately may hurt interpersonal relationships. In many respects, spiritual freedom resembles the self-control paradigm of behavioral research; that is, choosing a larger delayed reinforcer over a smaller immediate reinforcer. Behaviorists recognize the importance of such a freedom and are in a unique position to offer insight into how it can be obtained. Indeed, Platt (1973) argued that the pragmatic resolution of St. Paul's dilemma potentially afforded by a science of behavior "may be the most important contribution to ethical practice in 2000 years" (p. 48).

In specifying the instances in which the Judeo-Christian culture uses the word "free," it becomes obvious that behaviorists strive for many of the same freedoms valued by most religions. Far from wanting to strip people of their freedom and dignity, behaviorists value the types of freedom that improve the quality of life. In a discussion about marketing applied behavior analysis in educational settings, for example, Bailey (1991) concluded, "Instead of trying to sell determinism . . . we need to promote the view that behavioral technology gives children dignity and cultivates freedom" (p. 447).

## Moral Responsibility

Free will often is viewed as a prerequisite for moral responsibility. People are not held morally responsible for their actions if it is impossible for

them to behave otherwise, as in the examples of coercion or mental illness. Moral responsibility plays a prominent role in Judeo-Christian theology. People are held accountable for their actions. Ultimately, good deeds result in eternal happiness in heaven whereas evil deeds lead to eternal suffering in hell. Within the behaviorist framework, however, people never are truly responsible for their actions because their choices are determined by previous conditions such that they could not act otherwise. At first blush, it appears that in denying that people are morally responsible for their actions, behaviorism is fundamentally incompatible with a Judeo-Christian worldview, not to mention a threat to the validity of current legal and political systems.

This is not necessarily the case. Far from having no use for the concept, behaviorists take a practical viewpoint on moral responsibility. Holding someone responsible, Baum (1994) stated, "comes down to a decision on whether to impose consequences" (p. 169). This decision is determined by evaluating the behavior in context and predicting the likelihood that consequences would be effective in punishing undesirable behavior or reinforcing desirable behavior. To this end, Schnaitter (1977) argued that a person is morally responsible for an event if the likelihood of the person again causing the event can be modified by contingencies of reinforcement or punishment.

In some ways, the actual practice of assigning moral responsibility is similar to Judeo-Christian practices. A culture that places the cause of behavior outside the individual still has pragmatic grounds for punishing those who break the law; although in such a culture the stigma associated with committing a crime might decrease. This is consistent with the Judeo-Christian ideals of forgiveness and compassion. If anything, behaviorism emphasizes the use of positive reinforcement and rehabilitation, and promotes a more tolerant justice system using punishers selected for their function in reducing undesirable behavior (see Chiesa, this volume). This is consistent with the move from the "eye for an eye" philosophy of the Old Testament to Christ's teachings in the New Testament.

Although practical problems of assigning moral responsibility may be resolved, there remains a fundamental philosophical conflict between behaviorism and Judeo-Christianity over the nature of moral responsibility. As mentioned above, if people are not truly responsible for their actions, the idea that some people are eternally punished for their actions seems inconsistent with the notion of a just God. As in the case of the free will debate, it may be best for behaviorists and those of the Judeo-Christian faith to focus on the practical issue of assigning moral responsibility (where commonalities exist).

## Ethics

I have argued that behaviorists and theists share common commitments to values such as freedom, dignity, forgiveness, and compassion. Despite the philosophical differences between the two positions, is it possible that behaviorists and Judeo-Christians share a common system of ethics? The existence of such an ethical system would facilitate the integration of behaviorism and Judeo-Christian culture.

On the surface, it appears as if the search for a common ethical system is misguided. The basis for the system of ethics in the Judeo-Christian culture ultimately is derived from the Word of God or the teachings of Christ, as codified in the Bible. Biblical literalists believe these revelations are absolute, unchanging across time and place. Although religious nonliteralists may modify their beliefs based on contextual variables or scientific findings, they too generally believe in moral absolutes: the endpoints represented in Judeo-Christian teachings by the workings of God and Satan. On the other hand, behaviorists take a more pragmatic approach to ethics (see Chiesa, this volume; Lattal & Laipple, this volume; Staddon, this volume). Skinner (1971) defined *values* in terms of contingencies of reinforcement. Things that function as positive reinforcers usually are labeled "good," whereas things that function as negative reinforcers are labeled "bad." At the level of the individual, Skinner's conceptualization of values, however, does not lead to a reasonable ethical system. For example, if stolen goods function as positive reinforcers, then stealing is good. As can be seen, this line of reasoning leads to a moral relativism devoid of universal values and is diametrically opposed to the morality of the Judeo-Christian faith.

That behaviorism implies an extreme moral relativism is, however, unfounded. Skinner's analysis of ethics also included the use of a selectionist framework at the level of the culture (Baum, 1994; Day, 1977; Zuriff, 1987). Behaviors that have been beneficial to the survival of the culture tend to be selected, and over time, becomes codified into laws and ethical systems. Ethical systems derived in this manner are known as natural laws or natural ethics because they were derived through natural or cultural selection (see Staddon, this volume, for additional discussion of natural ethics).

The religious community often is unlikely to accept this conceptualization of ethics because of the conspicuous absence of a divine influence. St. Thomas Aquinas (trans. 1963), however, provided roles for both natural ethics and divine law within one ethical system. In his *Summa Theologica* (trans. 1963), Aquinas distinguished between natural moral laws and

divine laws. Divine laws concerned matters of supernatural significance, such as the afterlife, and could become known only through divine revelation and religious belief. All other ethical laws were classified as natural moral laws, established through a process akin to cultural selection. From this view, natural moral laws also had divine origins, but no religious belief was necessary to obtain knowledge of these laws or to behave morally (Arnhart, 1998).

Aquinas's position on the natural law contains several similarities to Skinner's treatment of natural ethics. Aquinas referenced Ulpian[6] as describing the natural law as "what nature has taught all animals" (Sigmund, 1988, p. 50). Moreover, Aquinas stressed the role of consequences and social desirability as measures of the relative "goodness" of an action. Consider the following quote from the *Summa Theologica* (trans. 1963): "An action is called good because it is conducive to a good effect; in this way an action's bearing on an effect is the measure of its goodness" (p. 13). This conceptualization of natural ethics and divine law is quite compatible with the behaviorists' views. First, it relegates divine law to the realm of the metaphysical, where behaviorists and theists need not quarrel over its ultimate status. Second, all other ethical systems are the result of cultural selection that may or may not have been divinely inspired (depending on one's beliefs).

Given the arguments above, it would seem that Skinner's ethical system could be integrated within a Judeo-Christian worldview. Skinner's ethical system, however, is not limited to an analysis of the conditions under which people report that behavior is good or bad. Skinner (1971) went further, and argued that a science of behavior could determine what people *ought* to do. People ought to behave in ways that support the long-term survival of the culture. As Skinner stated:

> Questions of this sort seem to point toward the future, to be concerned not with man's origins but with his destiny. They are said, of course, to involve "value judgments"—to raise questions not about facts, not about what a man *can* do but about what he *ought* to do. It is usually implied that the answers are out of the reach of science. . . . It would be a mistake for the behavioral scientist to agree. (p. 102)

Skinner's ethical system thus attempts to usurp the authority of what he called the traditional view of ethics based, in the Western culture, on Judeo-Christian teachings (Day, 1977). Skinner's system can be objected to on several grounds. First, Skinner committed the *naturalist*

[6] Ulpian was a Roman jurist, d. 228.

*fallacy*, that is, attempting to derive an *ought* statement from an *is* statement. This premise is universally regarded as a logical fallacy and even has been criticized from within the behaviorist camp (Staddon, 2001, this volume; Zuriff, 1987). Second, even if the naturalist premise is accepted, Skinner's ethical system provides little guidance as to how behaviorists should go about making ethical decisions, as the survivability criterion seems to require foreknowledge (Staddon, 2001). Moral dilemmas exist precisely because people disagree as to what is in the long-term best interests of society. Finally, Skinner's conceptualization of ethics is in violation of NOMA. Behaviorists must be careful not to use the factual authority of science to make moral claims (Gould, 1999). To be sure, behavior analysis can shed light on many ethical issues, but so can traditional religious teachings. In some respects the two are complementary and examine ethics in different ways. Begelman (1977) provided an appropriate analogy:

> . . . the way in which a taxidermist views a zebra contrasts markedly with the way the animal is viewed by a zoologist, physiologist, or interior decorator. But none of these separate outlooks competes with others, nor is aimed at supplanting them. It appears that the same is true for moral philosophy and functional analysis. (p. 25)

## The Status of an Intervening God

In discussing the above issues, debate often emerges over the very existence of God. It is important to note that there is nothing within the behaviorist philosophy that requires a nonbelief in God. Behaviorism, however, does seem to limit God's ability to intervene in people's daily lives. Behaviorism posits that all behavior is the product of genetic and environmental determinants, leaving no room for God to intervene as a causal entity in human affairs. A science of behavior cannot exist if behavior is subject to the influences of supernatural forces.

The concept of an intervening God lies at the heart of the Judeo-Christian faith. It is the stuff of miracles and the reason for prayer. Behaviorists will find it futile attempting to convince those of faith that God is powerless to intervene in their lives. Rather, it is essential to examine exactly what it means to speak of divine interventions. I will discuss two possible meanings: Miraculous interventions and interventions mediated via the natural world.

Gould (1999) defined *miracle* as "a unique and temporary suspension of natural law to reorder the facts of nature by divine fiat" (p. 85). By

definition, miracles cannot be attributed to natural sources. The Roman Catholic Church, for example, employs skeptics to investigate claims of miracles. Only when no natural causes are discovered is a phenomenon classified as a miracle. Miraculous interventions are not only incompatible with behaviorism; they are incompatible with the philosophy of science (Gould).

A second conceptualization of divine intervention states that although God may be the ultimate cause of some event, God chooses to work through the natural world. This is probably how Judeo-Christians would characterize most workings of God. Even devout theists usually can identify physical causes associated with an apparent divine intervention. For example, the parents of a gravely ill child may pray to God that the doctors are blessed with the skills needed to save the child's life. If the child recovers, the parents may credit both the doctors (proximally) and God (ultimately) as determinants of the child's improved health.[7]

In an intervention mediated by the natural world, God need not suspend the laws of nature to accomplish God's will. Rather, the workings of God may be predetermined. With perfect foresight, God created the laws of nature such that prayers would be answered, and the sick child in the above example would recover. This interpretation of God is deistic, and advocates of an intervening (in the miraculous sense) God may reject such an interpretation. Gould (1999) countered, echoing the views of philosopher and theologian Thomas Burnett:

> Do we not have greater admiration for a machine that performs all its appointed tasks (both regular and catastrophic) by natural laws operating on a set of initial parts, than for a device that putters along well enough in a basic mode, but requires a special visit from its inventor for anything more complex. (p. 23)

I conclude this section by noting that some behaviorists may wish to reject even the second conceptualization of divine intervention (and for that matter, perhaps the existence of God altogether) on the basis of several philosophical grounds including parsimony, burden of proof, and Sagan's balance (the idea that extraordinary claims call for extraordinary evidence). They are free to do this. While cooperating with those of the Judeo-Christian faith to achieve societal change, however, it may be more profitable not to challenge this conceptualization of God's workings, as it does not necessarily conflict with behaviorism.

[7] Notable exceptions to this example include those of the Christian Science faith.

## Behavior Analysis and Judeo-Christianity

The purpose of this chapter has been to seek commonalities between the philosophy of behaviorism and Judeo-Christianity. Commonalities were found in the kinds of freedoms valued by behaviorists and theists, the practical methods for establishing moral responsibility, and commitments to values such as freedom, dignity, forgiveness, and compassion. Moreover, the chapter argues that there is nothing within a behaviorist philosophy that requires nonbelief in God. A final commonality is that both are intervention-oriented, committed to eradicating many of the problems that face society today. Theologians often speak of a moral decay in the fabric of society, pointing to a loss in spirituality as the major controlling variable. Although behaviorists may disagree with the causes of such a moral decay, there is no doubt that the religious community is identifying something real. Issues such as poverty, violent crime, terrorism, AIDS, and the failures of the educational system continue to plague society. Ideally, a science of behavior should be in the position to engage the Judeo-Christian community in productive discourse, united by a common goal of minimizing these societal problems.

In interactions with those of the Judeo-Christian faith, it is important for behaviorists to remember that science and religion ask different questions about human behavior. Behavior analysis identifies functional relations between behavior and environment. Religion seeks to answer more ultimate questions about human behavior, such as questions associated with morality and the afterlife. Although the philosophy of behaviorism and Judeo-Christianity may differ on metaphysical grounds, these differences need not prevent a productive working relationship, as the domains of behavior analysis and religion are independent of one another.

Science and religion *can* work together to solve problems of social importance. For example, in my community a number of churches of different faiths cooperated with a local hospital to sponsor two babies from Ethiopia in need of life-saving surgery. The hospital provided the necessary medical care while the churches provided homes for the families to live in while the babies recovered. Together, the churches and the hospital saved two lives. It is doubtful that similar results would have been achieved if the churches and the hospital had decided instead to focus their energy on debating the ethics of modern medical science.

Behavior analysts provide products and services in a culture dominated by the ideals of religion and free will. Providing these products and services probably is hindered by a heavy-handed pitch for determinism. The terms used in technical communication such as "control,"

"manipulate," "intervene," and "subjects" can be abandoned when communicating with the public (Bailey, 1991). This is not to imply that behaviorists abandon their behavioral data language in the laboratory or the classroom (Hineline, 1980). Communication within a discipline is a different class of behavior than communication outside of the discipline. To this end, Geller (1995a, 1995b) has advocated an "actively caring" model of community based treatment and environmental protection. In this model, behavioral principles are used to modify humanistic goals, such as increasing self-esteem, decreasing depression, and achieving socially desirable outcomes such as environmental protection. Such an approach ultimately advances communication between behavior analysts and others because more individuals are able come into contact with behavioral-based interventions.

Changing the way behaviorists interact with potential consumers of their services is only the first step in increasing the role a science of behavior can play in solving societal problems. The influence of a science of behavior will increase as more behavior analysts become active in their communities, schools, and hospitals. Often this will involve working with people who do not share their philosophical convictions in order to accomplish a common goal. These relationships will be more likely to endure if they are grounded in the principles of NOMA. Theists need not accept the philosophical tenets of behaviorism to endorse the practices of behavior analysis. Behavior analysts need not challenge the domain of religion in addressing ultimate questions of human existence. In this way, behavior analysts can begin to engage the Judeo-Christian community in a mutually reinforcing relationship.

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