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Religion, Values, and Behavioral Constraint

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Political and journalistic discourse these days is filled with talk about values, though most of it amounts to little more than hand-wringing and finger-pointing. Our nation is said to face a crisis of values. Increased rates of divorce, juvenile crime, and teen pregnancy are blamed on the deterioration in family values. Major social institutions – schools, churches, families, the entertainment industry, and government at all levels – find themselves under increasing pressure to do something about values. In such a climate, both rhetoric and reality impel social scientists to enter the fray.

Economists, however, find it difficult to talk about values. Part of this difficulty lies in their relatively precise approach to the study of human behavior; by economic standards, most values talk is hopelessly vague and politicized. But a deeper difficulty concerns the very foundations of economics, specifically the assumption of stable preferences. As Gary Becker (1976:5) observed some twenty years ago, it is the relentless and unflinching use of this assumption, together with the assumptions of maximizing behavior and market equilibrium, that “form[s] the heart of the economic approach” to human behavior.

Becker and others offer three related justifications for the assumption of stable preferences. The first is pragmatic: “*since* economists generally have had little to contribute ... to the understanding of how preference are formed, preferences are assumed not to change substantially over time, nor be very different between wealthy and poor persons, or even between persons in different societies and cultures” (Becker 1976:5, my italics). The problem of preference formation is passed to others (“psychologists? anthropologists? phrenologists? sociobiologists?”) with the insinuation that they will have no more luck than the economists (Stigler and Becker 1977:76). The second justification is more philosophical: tastes really *are* stable; “tastes neither change capriciously nor differ importantly between people ... one does not argue over tastes for the same reason that one does not argue over the Rocky Mountains – both are there, will be there next year, too, and are the same to all men” (Stigler and Becker 1977:76). Finally, it is argued that, insofar as tastes *do* vary, maximizing models of “consumption capital formation” and “rational addiction” suffice to subsume these changes within the standard neoclassical framework (Becker and Murphy 1988; Iannaccone 1986; Stigler and Becker 1977:77-81).

It might seem that these arguments leave little room for value formation. I am more inclined, however, to view them as potentially fruitful constraints to guide one’s analysis. As I see it, no *economic* analysis of values should simply assume that values are easily changed or highly variable.¹ I also think that religion provides an

ideal testing ground for economic models of value formation. For centuries, societies have looked to religious institutions as a primary source of values, morals, and ethics. The religious institutions, in turn, have directed much of their attention and resources toward the explication, justification, and enforcement of moral mandates. Since the 1940s, social scientists have gathered a tremendous amount of data on religious behavior, leaving us in better position to assess the moral impact of religions than that of other institutions. The lack of attention to religion in contemporary research on morality thus strikes me as inefficient (see, for example, Etzioni 1988; Frank 1988; Wilson 1993). When it comes to the economics of values, religion enjoys the dual distinction as the topic most relevant and least studied.²

In speaking of values, I will avoid fine-grained distinctions – “tastes,” “preferences,” “values,” “commitments,” “loyalties,” and “attitudes” will be lumped together in the interest of theoretical and empirical simplicity. Moreover, since values cannot be observed, only inferred, I will focus on the actual behaviors and behavioral admonitions that religions seek to affect. The analysis thus centers on an unobservable (multidimensional) input, R , that enters people’s utility functions so as to shift their demands independent of any change in observable prices, incomes, or endowments. It makes little difference whether one calls R values, consumption capital, or religious commodities, as long as the underlying objective function or “metapreferences” are assumed to remain constant. The following sections address a series of related questions: What types of values and value-related behaviors do religions seek to change? What means do religions employ to shape these values and behaviors? Do religions really affect values? Why do some religions have more impact on their members than do others? And, what do the experiences of religious institutions tell us about the limits to indoctrination and value formation?

Rather than seek universal answers, I will focus on the religious behavior of contemporary Americans, principally Christian and Jews (for whom data are most abundant and my own research is most relevant). In doing so, it will help to recall ancient Biblical precepts shared by all such groups. It helps also to recall that the American “religious market” is highly competitive, strictly voluntary, and largely free of government support, coercion, or regulation. In this market, a religious firm can survive only by offering products and prices that consumers care to “buy.” This need not relegate religion to the moral margins of society; as I have argued elsewhere, sociologists and historians have greatly overstated the vitality, credibility, and impact of state-supported religious monopolies (Iannaccone 1991; Stark and Iannaccone 1994). But religious *laissez faire* does mean that compliance with religious mandates cannot be dismissed as a simple case of coercion or indoctrination.

Religious Mandates

To varying degrees, virtually all institutions work to articulate and instill values – families, firms, schools, political organizations, military units, and even prisons. But none is so dedicated to this enterprise as are religions. Religions constitute the quintessential example of what Etzioni (1975:66) has called “the normative organization.” Other institutions hide their attempts to manipulate people’s preferences; religions proudly proclaim their role in the transformation of hearts and minds. Other institutions direct behavior through coercive force or compensatory payment; religions seek to achieve compliance through appeals to what is good and proper (though their normative appeals are often backed up with bribes and threats). Other institutions acknowledge the limited character of their claim on individuals; religions pronounce demands of unlimited scope and extraordinary detail.

Religions seem willing to view virtually any category of behavior in terms of moral imperatives: diet, dress, and grooming; sexual conduct, procreation, and family life; rest, recreation, and social interactions; education; commerce, political action; and, of course, all manner of specifically religious undertakings, such as prayer, church attendance, tithing, and numerous public and private rituals. Taking the ten commandments as a starting point, the utilitarian rationale for many religious imperatives is clear: “You shall not kill. Neither shall you commit adultery. Neither shall you steal. Neither shall you bear false witness against your neighbor. Neither shall you covet your neighbor’s wife; and you shall not desire your neighbor’s house, his field, ... or anything that is your neighbor’s” (Deut 5:17-21).³ Here, and throughout the Bible (and, indeed, in all sacred texts and traditions), one encounters mandates that discourage malfeasance, reduce transaction costs, establish property rights, and facilitate contracts. Standard efficiency arguments would seem to explain why communities and societies would welcome the collective imposition of such rules.

Other religious mandates yield no direct economic benefits, but clearly serve to sustain the religion itself and/or generate rents for its suppliers: “I am the Lord your God ... You shall have no other gods before me ... you shall not bow down to them or serve them; for I the Lord your God am a jealous God... You shall not take the name of the Lord your God in vain...” (Deut 5:6-11).⁴ Here again, one may appeal to economic efficiency, albeit once-removed, to explain the rule’s emergence, persistence, and content.

The efficiency argument become somewhat strained, however, when dealing with religious rules that seem to reduce efficiency by restricting economic activity or imposing non-productive costs, such as medical and dietary restrictions with no apparent health benefits, burnt offerings and other sacrifices that destroy valued resources, elaborate and time-consuming rituals, distinctive patterns of dress and

grooming that invite social stigma.

Some social scientists, most notably the anthropologist Marvin Harris (1977; 1978), offer clever utilitarian explanations for many of these apparently counterproductive customs. But other scholars remain unconvinced. As Schlicht (1995) points out, to explain a religious rule or rite in terms of its economic efficiency it does not suffice to show that its imposition yields *some* benefits; one must show that it yields *more* benefits than any feasible alternative – a rather high standard of proof. Further, Schlicht reviews a “strange set of religious phenomena which seem to be inefficient, and indeed really harmful: The practices of male and female circumcision in Africa,” These practices are vastly more drastic than Jewish male circumcision, extremely painful, and potentially life-threatening. According to Schlicht, “[w]hatever the functions may be which are ascribed to such practice, it seems that there are better means to achieve the same end. The birth rate may be reduced by other practices, chastity could be enforced by religious and criminal law, and sexual pleasure is certainly not increased by this practice – neither for the mutilated nor for the un mutilated.” It is difficult to verify these assertions, but equally difficult to refute them. Closer to home, one encounters other religious rules (such as Christian Scientists’ rejection of medical treatment and the Jehovah’s Witnesses’ ban on blood transfusions and, for a time, vaccinations) that almost certainly reduce health outcomes. Cross sectional statistics strongly suggest that practicing Christian Scientists experience significantly poorer health and lower life expectancies. A simple efficiency/functionalist approach also has difficulty explaining why religions attach tremendous importance to specific behaviors and rituals (such as being baptized or the wearing certain clothes) that appear to be economically neutral.

In subsequent sections, I will argue that apparently counter-productive religious demands are best viewed as utility maximizing rules that enhance group commitment and reduce free riding (by screening out less committed members and limiting access to competing activities). For the moment, however, it suffices to note that, despite their real or supposed contribution to social welfare, many religious mandates carry substantial costs but few *obvious* benefits for the individual. Faced with such mandates, rational actors are strongly tempted to disobey. Religions must therefore work very hard to achieve compliance.

Compliance and Commitment

How do religion’s obtain compliance and commitment? The short answer is, every way they can. Parents are enlisted from the very beginning of a child’s life. They are admonished first to publicly dedicate their children (through baptism, circumcision, or other rites), next to expose their children to religious observance and teaching in the home (prayer, Bible stories, and the like), and then to enroll them in formal religious instruction (such as Sunday school). The motivation is clear:

“Train up a child in the way he should go, and when he is old he will not depart from it” (Proverbs 22:6). Churches, in turn, devote much of their time and resources to teaching, encouraging, and admonishing their members, both young and old. Indeed, when Adam Smith (1965:740) wrote about churches in *The Wealth of Nations*, he did so under the heading “Of the Expence of the Institutions for the Instruction of People of all Ages.” For its part, the typical church employs numerous methods: formal instruction that conveys specific information about the religion’s doctrines, rituals, and history; testimonials and endorsements designed to assure the listener that the religion’s product delivers on its promises; appeals to history, tradition, and miracles; a regular cycle of activities (including, for example, weekly worship services, special holy days, and social events) designed to reinforce and reward continued involvement and to build social ties between members. The most important ties, of course, are familial. So it is no surprise that religions typically attach great importance to marrying within one’s faith.

Churches monitor the behavior of their members, rewarding high levels of involvement and evidence of commitment with increased status and opportunities to serve in leadership roles. To varying degrees, churches also penalize inappropriate behavior with loss of status, reduced access to religious rewards, and outright exclusion. (In times and places where a particular religion has enjoyed the support of the state, religious leaders have often resorted to more severe sanctions – fines, beatings, banishment, torture, imprisonment, and execution.) Members are expected to encourage, advise, and monitor each other, and (particularly in sectarian groups) to inform church leaders when important strictures are being violated. In contrast to all other institutions, religions place considerable emphasis on *supernatural monitoring* – the promise and threat of all-seeing, divine powers that reward good actions and pure thoughts while punishing their sinful opposites.

Despite their unique characteristics, all these methods of social control share a common underlying feature. They work to raise the net expected benefits associated with good behaviors while increasing the net expected costs associated with bad behaviors (with “good” and “bad” being defined by the religion, and thus not necessarily consistent with the understandings of society in general or some external standard of efficiency). If this seems a bit simplistic, consider Yahweh’s bottom line for Israel: “Behold, I set before you this day a blessing and a curse: the blessing if you obey the commandments of the Lord your God, which I command you this day, and the curse if you do not obey ...” (Deut 11:26-28).

Formally, one might model the impact of religion in terms of a standard Beckerian household utility production problem, in which the individual initially chooses a vector of actions, Y , that determine his production of household commodities, Z . For simplicity’s sake, let Y encompass both purchased goods, X , and the time devoted to activities, L . Absent the influence of religion, the problem is to maximize expected utility, $EU(Z)$, subject to commodity production functions $Z = Z(Y)$ and a full-income constraint $p_Y \cdot Y < w \cdot 1$. Religions alter this problem by

introducing a new source of rewards and punishments, R , which depend upon one's actions, Y , past experiences ("religious human capital"), S , the actions of other members, Y^o , and the quality and quantity of activities, Q , that the religion itself uses to shift perceived costs and benefits (via persuasion, compensation, and coercion). Faith enters this model by altering the probabilities, π , that one assigns to various rewards and punishments associated with one's actions, Y . Survey data, historical narratives, and anecdotal accounts all suggest that faith in a particular religion tends to grow as one accumulates more experience with it and becomes more tightly integrated within its social networks. The rational individual's problem thus becomes:

$$\max EU(Z+R; \pi) \tag{1}$$

subject to production functions:

$$Z = Z(Y) \tag{2}$$

$$R = R(Y, S, Y^o, Q) \tag{3}$$

$$\pi = \pi(S, Q) \tag{4}$$

and a full-income/resource constraint:

$$p_Y \cdot Y < w \cdot 1 \tag{5}$$

In a multi-period context, one must rewrite these equations in terms of their life-cycle counterparts while also specifying the process by which religious capital accumulates:

$$S_t = F(Y_{t-1}, S_{t-1}) \tag{6}$$

In equilibrium, the religion must finance its activities, Q , from the aggregate inputs of members, Y^o :

$$Q = Q(Y^o) \tag{7}$$

The Impact of Religion

It is one thing to preach, another to persuade. Religions deal in claims that exceed the reach of logical proof or empirical verification – "credence goods" whose true value cannot be known before purchase nor, in most cases, even after.⁵ There is no reason simply to *assume* that such claims will be believed, let alone acted upon. On the other hand, the incomparable durability of religions and their institutions (most notably the Catholic Church) strongly suggests that most religions *do* generate credible promises, valued commodities, and lasting commitments.

We can infer something about the perceived value of religion in America simply by noting the time and money resources that people devote to it. More than 40% of Americans claim attend religious services in a typical week – a figure that has remained remarkably stable since the advent of (Gallup) opinion polls in the late-1930's (Greeley 1989). If actual attendance is even half what this figure suggests, Americans spend more hours at religious services than at all other organized public gatherings combined, including movies, concerts, and professional sports events. More than half of all households contribute to religion, far more than give to any other cause, including health (33%), human services (28%), or education (21%). Annual gifts to religion average about \$800 per contributing household, or \$60 billion in total – thus constituting half of all charitable giving and greatly exceeding contributions to health, education, or human services. As with hours of attendance, the percentage of income given to religion has remained relatively stable (around 1% of GNP) for at least forty years.⁶

Survey results and government statistics strongly suggest that people's behaviors are affected by their religious identities, beliefs, and experiences. People with stronger religious identities, more orthodox beliefs, and higher rates of religious participation manifest lower levels of most deviant behaviors, including drug use and criminal activity (Bock and others 1987; Lipford and others 1993; Stark and Bainbridge [in press]). Though children do not always practice what their parents and churches preach, surveys consistently find that youth raised in highly religious homes are less prone to engage in criminal activity, use drugs or alcohol, or engage in premarital sex. These effects are particularly strong when the individual lives in a religiously homogeneous locale, suggesting that a person's faith is more likely to affect his behavior when he lives within (and is monitored by) a "moral community" of like-minded believers (Stark and others 1982).

Religion seems also to benefit mental and physical health. Empirical research consistently finds a positive correlation between individual religiosity and mental health, even in panel studies that control for spurious correlation and reversed causation (Ellison 1993). The members of some religious traditions, most notably Mormons and Seventh Day Adventists, tend to live longer and enjoy greater physical health because of their adherence to strictures against smoking, drinking, drug use, and other unhealthful behaviors.

Mormonism is not the only religion advocating large families or limited use of birth control, but it has had the greatest impact on members' fertility. For at least a century, Mormon families have averaged about one child more than other American families, and thus currently exceed three children per completed family (Heaton 1986; Heaton and Calkins 1983).⁷

Religious affiliation also affects marriage patterns and marital stability (Becker and others 1977). In the most sophisticated analysis to date, Lehrer and Chiswick (1993) find high rates of "religious endogamy" within all denominations (and especially high rates among Jews, Catholics, and Mormons). They also find

much higher rates of divorce when a marriage is religiously mixed (particularly if one or both members come from a sectarian denomination). Thus, Mormons married to non-Mormons are three times more likely to divorce than are Mormons married to other Mormons.⁸

Religious affiliation remains a strong predictor of voting patterns. Jews vote overwhelmingly Democratic, most white evangelical Protestants are now solidly in the Republican camp, and Catholics tend to vote Democratic (Jelen 1989; Wald 1992). Although Catholic voting patterns have become less distinctive over time and evangelical Protestant voting has recently become more distinctive, the overall magnitude of these effects is comparable to those of race, gender, and social class.

People's religious identities correlate with other economically significant behaviors and outcomes. Jews, for example, average significantly higher levels of income and education. Still, religious effects explain a relatively small proportion of the total variance in crime, health, fertility, income, or voting, and many behaviors and attitudes that seem largely unrelated to a person's choice of religion or level of religious commitment.

Consider, for example, economic attitudes concerning income redistribution, private property, free trade, and government regulation. Despite media hype concerning the conservatism of the "Religious Right," opinion polls have consistently found that the economic attitudes of evangelical-fundamentalist Protestants are no more "conservative" than those of other Protestants (Pyle 1993). Indeed, when it comes to income redistribution and aid to the poor, they are significantly less conservative than the average American, even after controlling for their race, income, and education. This is not to say that conservative Protestants are indistinguishable from other Americans, but that their conservatism revolves around a set of theological, moral, and social issues (particularly school prayer, abortion, and sexual conduct) which prove largely independent of their economic attitudes.⁹

Why Some Religions Have More Impact

Religions vary dramatically in their capacity to shape people's behaviors and, it would seem, in their capacity to shape the values related to those behaviors. How does a denomination like the Mormon Church have such profound impact on its members when other denominations, like the Unitarian Church, have scarcely any measurable impact at all? Mormons in good standing attend several hours of church meetings each week, contribute 10% of their income, serve the church in many formal capacities (and are expected to accept any such "calling" that comes their way), have large families, and (if male) serve two-year missions at their own expense. Mormons also refrain from caffeine, alcohol, and tobacco, wear special undergarments, participate in special rituals at (usually distant) temples, and, in the 19th century, practiced polygyny. These behavioral mandates, together with a very

distinctive theology, cause most Americans to view the both the Church and its members with suspicion.

Mormonism is unusual but hardly unique. Jehovah's Witnesses, Seventh Day Adventists, Orthodox Jews, Protestant Fundamentalists many other so-called sects and cults display similar characteristics. Indeed, sociologists have developed elaborate typologies (dating back to Max Weber and perhaps even Adam Smith) that contrast deviant *sects* and mainstream *churches*. The stereotypical sect is characterized by: a distinctive and costly life-style; exclusivity and tension vis-à-vis the broader culture; high rates of involvement; and high levels of commitment. The stereotypical church is in every way the opposite: lax, inclusive, and requiring limited commitment and involvement. Elsewhere, I have formalized this typology and tested its predictions using data on the many Christian and Jewish denominations that array themselves along the church-sect continuum (Iannaccone 1988; 1992). From these results one may begin to construct a theory of religious value formation and behavioral constraint.

Religious Risk: Begin by recalling that religions deal in risky commodities. *Ceteris paribus*, consumers will seek to reduce the risk associated with their religious investments. In order to gain the trust and support of consumers, religious suppliers will in turn adopt institutional arrangements that reduce the risk of fraud and misinformation (or at least the appearance thereof). In terms of the model sketched out at the end of section 3, the arrangements will be chosen to alter the perceived probabilities, \uparrow , that the religion can and will deliver on its promises.

Nearly all denominations, but especially sects, use testimonies to reassure members and demonstrate the efficacy of their claims. These testimonies are more believable when coming from a trusted source, such as a personal acquaintance or a respected figure. They are especially credible when testifiers have relatively little to gain from having their claims heard and believed. The collective character of most religious activities and the congregational structure of most religious organizations may thus reflect the demand for trustworthy religious product endorsements. Fellow members have less incentive to overstate the benefits of the religion than do the clergy, whose livelihood depends on a steady stream of "sales." The clergy, in turn, are more persuasive when they do not benefit materially from their followers' faith or have large sunk costs invested in their reputation.

Many distinctive features of religious institutions are thus reflect efforts to reduce (or at least appear to reduce) the risk of fraud and misinformation. These include: a minimal professional staff whose financial compensation is low and largely independent of customer contributions/payments; use of part-time and volunteer workers (and thus reliance on payments of time and service rather than money); a congregational structure, which limits the need for full-time professionals and provides a source of credible product endorsements; and regular group activities, which provide continuous assurance through the enthusiasm, devotion, conviction, and testimony of fellow members. All these features are more prevalent and

pronounced in conservative/sectarian denominations (such as Mormonism, the Jehovah's Witnesses, and Orthodox Judaism) than in liberal/mainline denominations (such as the Presbyterian, Episcopal, and Reform Jewish denominations).

Free-rider problems: The downside to congregational structure and collective activities is free riding. To understand the temptation to free-ride, consider the situation confronting the typical member of a Protestant church. The pleasure and assurance that he (or she) derives from Sunday services depends not just on his own inputs but also the inputs of others – how many others attend, how warmly they greet him, how well they sing, how enthusiastically they read and pray, how deep their expressed commitment, and so forth. This leads immediately to two related problems. The first is that members with low levels of participation (and perhaps also low levels of faith) are tempted to free ride off those with higher levels, since given the choice they are better off in groups whose average level of participation is greater than their own. The second is that even in a homogeneous group, opportunistic behavior leads to an inefficient equilibrium with suboptimal participation, since individuals maximize personal welfare by ignoring the external benefits of their participation.

The sectarian solution: Costly demands offer a solution to free-rider problems. These costs are not the standard costs associated with the production or purchase of secular commodities. Rather, they are apparently gratuitous costs – sacrifice and stigma – foreign to most secular contexts: burnt offerings, which destroy valued resources; distinctive dress and grooming that invite ridicule or scorn; dietary and sexual prohibitions that limit opportunities for pleasure; restrictions on the use of modern medicine or technology. Sacrifice and stigma discourage free-riding by prohibiting or penalizing activities (such as interaction with nonmembers) that otherwise compete for members' resources. In heterogeneous populations, sacrifice and stigma tends to screen out the less committed members. And even in homogeneous populations, it induces a substitution effect that can raise average levels of group participation and group utility. (For a formal analysis and empirical evidence, see (Iannaccone 1992).)

Deviant norms thus mitigate the externality problems faced by religious groups. Distinctive diet, dress, grooming, and social customs constrain and often stigmatize members, making participation in alternative activities more costly. Potential members are forced to choose: participate fully or not at all. The seductive middle ground of free-riding and low participation is eliminated. Paradoxically, those who remain find their welfare increased. It follows that perfectly rational people can be drawn to decidedly unconventional groups. It also follows that *any* collectively-oriented religion will benefit from *some* level of sacrifice and stigma, although the optimal level declines as the average member's income and education rise.

General Principles

The foregoing analysis helps clarify how religions shape values and behavior. We began by observing that religions benefit both individuals and groups through the production and distribution of teachings, mandates, and assurances that constrain people's behavior. The benefits range widely; religions offer individual members the promise of earthly blessings, the hope of a heavenly reward, and an overall philosophy of life; they help parents indoctrinate their children in matters of family loyalty and personal morality); and they seek to maintain honesty, altruism, property rights, and social insurance throughout whole communities. But a religion cannot generate these benefits unless a significant fraction of its members accept its inherently risky supernatural claims. A religion can reduce apparent (and perhaps real) riskiness of its products through the techniques described in the previous section. It can deliver its product and product testimonials in a club-like setting, characterized by limited professionalization, group activities, extensive social interaction, and long-term relationships. Distinctive, costly, and seemingly unproductive demands can make such clubs more viable by screening out uncommitted members and increasing participation rates among those who remain.

Highly sectarian groups like the Mormons fit this description most closely, and it therefore comes as no surprise that they enjoy the most success shaping the beliefs and behaviors of their members. Theologically liberal, "mainline" churches demand and offer less, average much lower rates of participation, and according to virtually all empirical studies have much less impact on their members behavior. On the other hand, even the least sectarian denominations, such as the Episcopal Church or Reform Judaism, fit the description above better than do most nonreligious organizations (including most voluntary associations, business firms, schools, hospitals, unions, and political organizations). This is no coincidence. A religion's capacity to shape normative beliefs and behavior is grounded in the techniques described above. With the exception of military units (which operate in a very coercive environment), few other organizations make extensive use of these techniques, and few, except the military, have as much impact on members' values.

Though I have not formalized the process by which the previously described institutional features lead to the formation of values, I will comment briefly on the kind of model that I have in mind. First, religions shape behaviors directly, often without changing underlying values. They do so simply by rewarding certain behaviors (with public praise, increased status, and some material benefits) while penalizing others (with condemnation, reduced status, and possible exclusion). Studies of new religious movements consistently find that the typical recruit joins the group and adopts its behavioral standards *before* accepting the truth of the group's teachings (Robbins 1988). In terms of the optimization framework (1) - (7), such people are altering their actions, Y, simply to acquire the religious commodities, R, that the group offers contingent upon membership and compliance.

Over time, however, a second effect becomes important. Extended involvement with the group, participation in its activities, and compliance with its strictures, generates a stock of religious capital, S_t (the product of Y_{t-1} , Y_{t-2} , ...), that increases the marginal product of current participation, Y_t . Religious behavior is, in this sense, habit forming. For example, Sunday worship service are more comprehensible and enjoyable for those who know the songs, can anticipate the order of the service, and are familiar with the scriptures that form the basis for the sermon. Attendance and membership is far more gratifying for people who know many fellow members and have developed close friendships with several. Indeed, survey research consistently finds that friendship ties provide a major incentive for religious participation (Hoge 1981). Though it is more difficult to measure, it seems that faith (measured as \dagger) also grows through repeated exposure to and participation in the religion. All these effects work to bind members more closely to their religion and its teachings. Finally, insofar as the religion succeeds in maintaining high average levels of involvement, Y^o , it generates a social climate and stock of resources, Q , that can be used to attract new members (though evangelism and other marketing efforts), produce a more attractive and compelling product (e.g., through more elaborate worship services), and do a better job monitoring, rewarding, and sanctioning members. I have emphasized that sectarian organizations do particularly well on these counts. Formally, the effects enter the model through the effect that Y^o and Q have on the overall levels of religious production, R , and the perceived probabilities, π – see equations (3), (4), and (7).

If the model is correct then it should not only identify the mechanisms by which religions shape normative behavior, it should also identify the types of religions that are likely to have the greatest impact. This it does, for it clearly distinguishes high-impact conservative/sectarian groups from their lower-impact liberal/mainline counterparts. Indeed, one may extend this test further still. There are many small religious firms in the U.S. that employ virtually none of the techniques described above. Most of these come under the heading of New Age religion. I have discussed these religions elsewhere (Iannaccone 1995b:291) arguing that their fundamental institutional characteristic is a lack of exclusivity. This permits consumers to accumulate diversified *portfolios* of products numerous competing sources (which, in fact, the typical New Age client does). Diversification addresses the problem of religious risk, but does so in a manner that is incompatible with the beliefs and demands of virtually all major American denominations. Within New Age religions, group identity is weak or absent, membership is largely meaningless, and collective production gives way to private, buyer/seller transactions. Because free riding undermines any efforts to create collective goods, New Age religions are forced to specialize in the production of goods and services (such as books, crystals, and individualized therapeutic services) that a practitioner can sell directly to individual clients. This leads to an important prediction, which appears consistent with all the empirical research on New Age religions: nonexclusive religions have little power to influence moral values, group identity, and behavioral constraints. The prediction holds for other nonexclusive faiths as

well, including the pagan religions of the Roman Empire and Shinto and Buddhism in modern Japan (Iannaccone 1995b).

The Limits to Indoctrination

Having described how religions, and especially sectarian religions, *do* shape the beliefs and behavior of their members, I nevertheless remind the reader that “success” (from the religion’s standpoint) is far from assured. Throughout the late 1970’s and early 1980’s psychologists, the media, and even many courts seriously entertained the notion that Moonies, Krishnas, the Children of God, the Way, and many other “cults” were “brainwashing” hundreds thousands of college-aged youths, taking control of their resources, and depriving them of their capacity for rational thought (Robbins 1988:72).¹⁰ This led to lurid accusations, sensationalized news stories, and numerous court battles (as parents sued for conservatorship of their supposedly brainwashed adult children, anti-cult movements brought damage suits against cults and their leaders, and the cult leaders and members sued parents and “deprogrammers” for kidnapping and violation of First Amendment rights). In the end, however, it became apparent to virtually all researchers and legal experts that these cults were no better at “brainwashing” than any other religion, that they were much smaller and much less rapidly growing than had been claimed (the most successful groups never attracted more than a few thousand members), and that the putatively-brainwashed converts dropped out of the groups as rapidly as they dropped in. Eileen Barker’s (1984:147) comprehensive study of the Moonies in England, which Robbins (1988:77) calls “an empirical and theoretical tour de force,” proved that “from the number of those who get as far as visiting a [Moonie] Unification center, a generous estimate suggests that no more than 0.005 percent will be associated with the movement two years later.”

Three important caveats emerge from the large sociological literature on new and deviant religious movements. First, it takes a great deal of individual and organizational effort to make converts. Second, inducing a temporary change in a person’s behavior is much easier than altering a person’s underlying beliefs. And third, to influence beliefs and behavior, religions make heavy use of familiar techniques such as credible product endorsements, collective monitoring, rewards and punishments, repeated exposure to the product, and strong social networks.

Conclusion

Do religions shape values? Insofar as any institutions do, the answer is yes. Indeed, relative to other institutions, religions seem to enjoy a substantial comparative advantage in the creation and maintenance of values. Stronger religious institutions and higher rates of personal religiosity, do correlate with reduced rates

of crime, delinquency, divorce, and many other socially problematic behaviors. These correlations persist in aggregate data, suggesting that the correlation cannot be a mere artifact of selection bias (unless one is prepared to assert that entire regions, most notably Utah, produce populations with higher-than-normal innate moral standards). Contrasting the expressed beliefs and observed behavior of religious and nonreligious people (or of church attenders and non-attenders), these effects seem relatively modest, but they work in the anticipated direction and are both statistically and substantively significant.

To varying degrees, nearly all (Jewish, Christian, and Islamic) religious denominations employ a wide range of techniques to attract members, influence behaviors, and shape values. But sectarian religions embrace these techniques more fully, and consequently exert much greater impact on their members' beliefs and behavior. At the opposite extreme, nonexclusive, New Age religions sell products and promises with no strings attached and, as a consequence, have little or no moral impact.

Collective activities, a distinctive identity, and costly demands seem to lie at the heart of religious commitment and constraint. Mormons, Jehovah's Witnesses, Seventh-Day Adventists, Orthodox Jews, Protestant Fundamentalists, and Pentecostal Church members seem to grasp this intuitively. Constraints on opportunistic impulses are most effectively nurtured in distinctive, identifiable moral communities. To shape beliefs and behaviors takes sustained effort at many levels: the moral/behavioral message must be clear and coherent (and perhaps proves most compelling when premised upon supernatural assumptions); the message must be reinforced through repeated exposure; regular collective activities are important to foster group identity and intra-group friendships; members must be enlisted to monitor each other's behavior; behavioral mandates must be encouraged through a system of rewards and punishments. Within religious organizations, apparently unproductive costs – sacrifice and stigma – seem necessary to discourage free riding and maintain high levels of participation. Secular liberals may recoil at these last conclusions, but I find no evidence of impact when the mandates are vague, the standards lax, the social pressures small, and group boundaries diffuse.

My analysis has downplayed the unique characteristics of religion, specifically its reliance upon the presumed existence of a supernatural realm. Apart from emphasizing the risk associated with religious assurances and the religious institutions that arise to reduce risk or increase faith, I have modeled religious activity in ways that carry over to secular institutions. Doing so, may be all to the good, however, since it invites applications of the argument to nonreligious organizations. For example, a school's (limited) capacity to shape behavior and instill values is probably grounded in its (limited) access to the methods described above. Likewise, it is no coincidence that military organizations are powerful instruments of socialization and indoctrination – they utilize nearly every technique described above. Following this line of argument, economic models of religion may

eventually provide a foundation for the study of values in *all* social contexts.

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Notes

1. Whether to call rational addiction an example of taste change or an alternative to it is largely a matter of semantics. Empirically, there is little to distinguish them.
2. For a review of work on the economics of religion see Iannaccone (1995a). Some early contributions include Smith (1965:740-766), Azzi and Ehrenberg (1975), Iannaccone (1984), and Posner (1987:9-12).
3. All Biblical quotations in this paper are taken from the Revised Standard Version.
4. For a fascinating legal-economic analysis of ancient Judaism's innovative insistence on exclusive monotheism, see Raskovich (1995).
5. See Darby and Karni (1973) for definitions and analysis of "search," "experience," and "credence" goods.
6. See Weber (1991) for details on religious giving. Surveyed religious beliefs have proved no less stable than church attendance and giving. For decades, about 95% of American have professed belief in "the existence of God or a universal spirit" and a large fraction continue to believe in life after death, heaven, and hell (Greeley 1989).
7. In contrast, the vast majority of American Catholics have for decades refused to obey their church's ban on artificial birth control, and Catholic family size equals the national average.
8. Based on data from the 1987-88 National Survey of Families and Households, Lehrer and Chiswick find that the probability of divorce varies widely depending on the couple's religions. The probability of divorce (within five years of marriage) is .13 when both are Mormon, about .20 when both are Catholic, conservative Protestant, or liberal Protestant, .27 when both are Jewish, and .36 when both have no religion. In religiously mixed marriages, the corresponding probabilities range between .31 and .42.
9. Max Weber's famous "Protestant Ethic" thesis notwithstanding, an analogous result holds for regions and ethnic groups. Across regions and over time, there appears to be very little correlation between Protestantism and the spread of capitalism (Samuelsson, 1993; Delacroix, 1992).
10. Despite their Asia roots, the Unification Church (known as "the Moonies")

and the Society for Krishna Consciousness impose demands that are much more like those of a fundamentalist sect than a (nonexclusive) New Age religion.