

**PDFlib PLOP: PDF Linearization, Optimization, Protection**

**Page inserted by evaluation version**  
**[www.pdflib.com](http://www.pdflib.com) – [sales@pdflib.com](mailto:sales@pdflib.com)**

# Micro Foundations of Religion: A Revised Theory\*

RODNEY STARK

*University of Washington*

*In a major revision of my earlier theoretical work on religion, I attempt to identify and connect the basic micro elements and processes underlying religious expression. I show that all primary aspects of religion—belief, emotion, ritual, prayer, sacrifice, mysticism, and miracle—can be understood on the basis of exchange relations between humans and supernatural beings. Although I utilize a cognitive definition of religion, this new version of the theory is especially concerned with the emotional and expressive aspects of religion. Along the way I also clarify the difference between religion and magic and this sets the stage for explaining the conditions under which religion (but not magic) can require extended and exclusive exchange relations between humans and the gods, thus enabling some religions to sustain stable organizations based on a lay membership.*

The origins of religion are not to be found through historical or archaeological research. As William J. Goode (1951:22) remarked, “how, under what conditions, [humans] began to believe in divine beings nearly a million years ago must remain sheer speculation” for “the data are irrevocably gone” (ibid.:230). Consequently, the only feasible way to discover the fundamental sources of religious expression is not to seek data on early humans, but to examine elementary *theoretical principles* about what humans are like and how their aspirations exceed their opportunities.

In previous work with William Sims Bainbridge I developed a lengthy deductive theory of religion (Stark and Bainbridge, 1980a; 1985; [1987]1996). In that first version, the micro foundations are a mixture of cognitive and interactional (social exchange) elements and processes. Unfortunately, too little explicit attention was given to the emotional and expressive components of religion, nor was sufficient scope given to the typical elements of religious practice such as ritual, sacrifice, prayer, and the like. Indeed, I failed to address the question of why these aspects of religion *are* typical. With the luxury of hindsight, I have greatly extended my approach to the micro foundations of religion and this time, in addition to improving the clarity of the cognitive aspects of the theory, I have paid close attention to emotional and expressive aspects of what is a particularly emotional and expressive phenomenon—to in some measure capture the sense of “religion as poetry” (Greeley 1995). Specific provision is made for religious emotions, and for ritual, prayer, sacrifice, miracle, mystical experiences, for bargaining with the gods, and even for religious procrastination. My aim is to construct a theory in which both phenomenologists and rational choice theorists can take comfort.

\*Direct correspondence to the author at the Department of Sociology, Box 353340, University of Washington, Seattle, WA 98195 (socstark@aol.com). Many colleagues gave me valuable suggestions that have been incorporated into the final version of this essay: Randall Collins, Roger Finke, Andrew Greeley, Sara Horsfall, Laurence Iannaccone, Alan Miller, Darren Sherkat, John Simpson, and Lawrence Young.

With four exceptions, I have only added to the theory, not made significant changes in the original. First, I have dispensed with the concept of religious compensators, having discovered that an adequate understanding of otherworldly rewards was sufficient.<sup>1</sup> Second, consistent with dropping the concept of compensators, it was necessary to remove that term from the definition of religion, with results that will be clear in the new definition (#5). Third, parallel to the revised definition of religion, I have redefined magic to permit a far more efficient distinction between the two. Finally, I discarded the very “thin” formulation of rational choice, replacing it with a far more “sociological” version, as is discussed at length in a subsequent section.

It often is claimed (mostly incorrectly) that because sociology began as an effort to understand modernization, its theories are largely inapplicable to premodern societies; or to non-Western societies; or, in the case of religion, to societies other than the United States (cf. Carroll 1996; Bruce 1995; Murphy 1994). Consequently, I shall be careful to show that my propositions are entirely consistent with the anthropological record—that the propositions apply as appropriately to the beliefs of Buddhists in the Burmese highlands, to pig sacrifices among the Tsembaga in New Guinea, as to Catholic prayers in Rome or concerts by the Mormon Tabernacle Choir. However, as the title indicates, I will mostly ignore the more macro aspects of religion, and will only theorize to the point that I can explain why religion generates organizations. I begin with the assumption that people make religious choices in the same way that they make other choices, by weighing the costs against the benefits. But what are the benefits; why do people want religion at all? They want it because religion is the *only plausible source* of certain rewards for which there is a general and inexhaustible demand. Since the realization of some of the most valuable of these rewards is deferred to the afterlife or to other nonempirical contexts, religion entails a high level of risk of nonfulfillment. Consequently, I will demonstrate how some of the most common religious activities serve to sustain confidence in the validity of religious promises of rewards to come.<sup>2</sup>

## ON RATIONALITY

All leading approaches to social theory share a common first premise or proposition. It has been stated in a great many ways, but each variant asserts the same insight: when faced with choices, humans try to select the most rational or reasonable option. Some advocates of Rational Choice Theory, especially economists, limit their definition of rationality to the elegantly simple proposition that *humans attempt to maximize*—to gain the most at the least cost (cf. Becker 1976, 1996; Iannaccone 1995). One of the virtues of this version is that it lends itself so well to inclusion in mathematical models. This virtue may also be its primary shortcoming—in their daily lives humans often fall well short of its fulfillment. Consequently, I prefer a more typically sociological formulation of the rationality axiom that softens and expands the maximization assumption. Just as those working in the area of artificial intelligence have turned to models based on what they call “fuzzy logic” (Kosko 1992), I acknowledge human reasoning often is somewhat unsystematic and “intuitive,” and that maximization is often only partial and somewhat half-hearted. Indeed, aspects of

<sup>1</sup>In previous formulations, I identified explanations for obtaining rewards in nonverifiable contexts as “compensators.” I always disliked using that term as it implies unmeant negative connotations about the validity of religious promises. As I reworked the theory it became evident that there is no need to distinguish these kinds of explanations by use of a special term. It suffices to analyze aspects of the religious means of fulfillment of such explanations and the issues of risk and plausibility entailed therein.

<sup>2</sup>For the sake of clarity, I state the most important steps in the theory as formal propositions and definitions. I have not attempted to present a fully deductive theoretical system, but I am confident that I could do so and, in any event, the logical connections among the propositions are evident.

laziness must be considered in the calculation of maximization. In any event, I will adopt the more subjective and bounded conception of rationality, the one John Ferejohn (1991) identified as the “thick” model, which has sustained a substantial sociological theoretical literature going back at least as far as Max Weber (Simon 1957; March 1978, 1988; Boudon 1993; Hechter and Kanazawa, 1997).

As summed up by Raymond Boudon (1993:10), the concept of *subjective rationality* applies to all human actions that are based on what *appear to the actor* to be “good reasons,” reasons being “good” to the extent to which they “rest upon plausible conjectures.” This approach to rationality is entirely consistent with the axiom of symbolic interactionism that in order to understand behavior we must know how an actor defines the situation (Mead 1934; Blumer 1969), for only from “inside” can we assess the rationality—that is, the reasonableness—of a choice. As James S. Coleman (1990:18) put it: “much of what is ordinarily described as nonrational or irrational is merely so because observers have not discovered the point of view of the actor, from which the action *is* rational.” Hence, actions are not irrational simply because the actor has inadequate or faulty information or has miscalculated—intention is everything. Thus, an effort to increase wealth by investing in commodities is rational even if the deal goes bad. The same applies to many efforts to obtain rewards through religious means. It would be irrational for Canadians to seek manufactured goods by means of the religious methods developed by cargo cultists, because Canadians know how such goods really are made and obtained. But, as I. C. Jarvie (1970:61) demonstrated so clearly, it is not irrational for the South Seas islanders to construct crude docks or landing strips in order to “attract” ships and planes loaded with cargo. *Given* their explanations of the source and distribution of “cargo,” they are doing the reasonable thing—it appeared to them that this was how allied forces obtained cargo during World War II. Jarvie brilliantly makes the point that rationality and ignorance are independent, and that the cargo cultists are “just as rational” within their “ignorance” as the observing anthropologists are (hopefully) within their greater knowledge.

I begin theorizing with this formulation of the rationality proposition:

1. *Within the limits of their information and understanding, restricted by available options, guided by their preferences and tastes, humans attempt to make rational choices.*

## REWARDS AND EXPLANATIONS

However, even this “thick” definition of rationality assumes that decision-making usually involves to some extent the *subjective weighing of anticipated rewards and costs, however casual and imprecise this process often may be*. Consequently, I must note that rewards and costs are complementary, in that a lost or foregone reward is a cost (the latter often is referred to as an opportunity cost), while an avoided cost is a reward. Rewards and costs vary in kind, value, and generality. A reward or cost is more general to the extent that it includes other rewards or costs. Happiness is a more general reward than having a nice day. Poor health is a more general cost than having the flu.

I shall not attempt to characterize rewards (or costs) as to kind, although obviously they include psychic and even intellectual as well as material “commodities.” As will be obvious throughout, I assume that culture and socialization do substantially account for taste, culture providing the general outlines of what people seek (and seek to avoid), and socialization filling in many of the details. Nevertheless, all normal individuals in all societies retain a substantial leeway for idiosyncrasy, innovation, and deviance. Specifically, reli-

gious doctrines and practices *do* change<sup>3</sup> and irreligion *is* common,<sup>4</sup> not only in modern societies, but in traditional and preliterate societies as well.

It is implicit in the rationality proposition that humans attempt to *understand* their circumstances. Hence:

2. *Humans are conscious beings having memory and intelligence, who are able to formulate **explanations** about how rewards can be gained and costs avoided.*

Definition 1: **Explanations** are *conceptual simplifications or models of reality that often provide plans designed to guide action.*

Because explanations help humans to maximize, in and of themselves explanations constitute rewards and will be sought by humans.

Explanations differ on a number of dimensions. First, they differ in the value and generality of the rewards they aim to produce. Second, they differ in their expected ratio of costs to benefits; that is, there usually are many ways by which a particular reward could be obtained, some of them more efficient than others. Third, explanations vary in the duration required for them to yield the desired rewards. Finally, and most importantly, explanations differ in terms of their apparent adequacy—their reliability or fallibility.

3. *Humans will attempt to **evaluate** explanations on the basis of results, **retaining** those that seem to work most efficiently.*

Humans persist in efforts to find ways to gain rewards, to find procedures or implements that will achieve the desired results. Those that don't seem to work will be discarded; those that appear to work or those that work better than some others will be preserved. As a result of this process, humans *accumulate culture*. Other things being equal, through the process of evaluation, over time the explanations retained by a group will become more effective. It also must be recognized that it is far more difficult to evaluate some explanations than others and that this also may change as culture becomes more complex. Not only were the ancient Greeks, for example, unable to evaluate many explanations we know to be false today, they also could not evaluate many we take to be true. More important, we possess many more, and more general, explanations than did the ancient Greeks.

4. *Rewards are always limited in supply, including some that simply **do not exist** in the observable world.*

People always want more rewards than they have and the supply of any given reward (to the extent that it is available at all) will vary by time and place. In addition to variations in the supply of rewards, there exist substantial differences in the relative ability of individuals to gain rewards—some will have much while others have little. That is, *stratification* is a given and those with less always will seek means to obtain more.

If that weren't enough, some of the most intensely desired rewards are *unavailable*, here and now, to *anyone*. The most obvious of these is the desire to overcome death. In addition, people generally seem to want their existence to have meaning, for there to be reasons behind reality. No such reasons can be fully verified in this life.

<sup>3</sup>In a classic essay, Raymond Firth (1959:140) noted "Religious systems may change in accordance with changes in the social structure; but they may also change for demographic or ecological reasons, because of personal decisions by leaders, or from the logic of the internal character of the system. Such changes occur even in what are apparently static societies." He then described in detail doctrinal and ritual changes among the Tikopia and among the Hopi.

<sup>4</sup>In what may be the most widely cited essay ever written on religion by an anthropologist, Clifford Geertz (1966:43) noted "the surely untrue proposition" concerning universal individual religiousness in traditional societies. "But if the anthropological study of religious commitment is underdeveloped, the anthropological study of religious non-commitment is non-existent. The anthropology of religion will have come of age when some more subtle Malinowski writes a book called 'Belief and Unbelief (or even 'Faith and Hypocrisy') in a Savage Society'."

5. *To the degree that rewards are scarce, or are not directly available at all, humans will tend to formulate and accept explanations for obtaining the reward in the **distant future** or in some other **nonverifiable context**.*

Such explanations are difficult if not impossible to evaluate, and to accept them requires a substantial level of trust or faith. The mention of faith is not meant to suggest that only religious explanations have this aspect; in fact, most explanations of this sort are secular. When a child wants a bicycle and a parent explains that the bicycle can be obtained next year, if certain conditions (such as getting good grades) are met, the child must take this explanation on faith. There is no way to verify it, at least not before the due date. What distinguishes religious from secular explanations of this variety, aside from the immense value and scope of the rewards that are plausible through religious explanations, is the capacity to postpone the delivery of the rewards to an otherworldly context. As we shall see, religions also offer many rewards here and now, but the truly potent religious resource is otherworldly rewards.

Definition 2: **Otherworldly rewards** are those that will be obtained only in a nonempirical (usually posthumous) context.

As will be discussed below, such rewards are plausible through religious means because the postulated source is not a parent or a bank, but a supernatural being. However, the significant point here is the context within which the rewards are to be realized—one in which it is at least extremely difficult, if not impossible, for living humans to discover whether or not the rewards arrive as promised. In contrast, many other rewards that can be sought from supernatural sources, such as miracles, are not otherworldly as they entail delivery in an empirical context.

## THE SUPERNATURAL

Religion is concerned with the supernatural; everything else is secondary. As Sir Edward Burnett Tylor ([1871]1958:2:8) put it, “a minimum definition of Religion [is] the belief in Spiritual Beings.” Or, as Sir James G. Frazer (1922:58) explained, “religion consists of two elements . . . a belief in powers higher than man and an attempt to propitiate or please them.” Writing about the “concept of the supernatural,” Ruth Benedict (1938:628) noted:

The striking fact about this plain distinction between the religious and the nonreligious in actual ethnographic recording is that it needs so little recasting in its transfer from one society to another. No matter how exotic a society the traveler has wandered, he still finds the distinction made and in comparatively familiar terms. And it is universal.

Durkheim (1915:24–25) mistakenly rejected this definition of religion because, he asserted, the supernatural is far from being a universal feature of religions:

One idea which generally passes as characteristic of all that is religious is that of the supernatural . . . it is certain that this idea does not appear until late in the history of religions; it is completely foreign, not only to those people who are called primitive, but also to all others who have not attained a considerable degree of intellectual culture.

Durkheim (ibid.:30) went on to argue that there even are “great religions from which the idea of gods and spirits is absent,” identifying Buddhism as among those lacking a supernatural element. Because of his *a priori* claim that religion exists in *all* societies, being the source of social integration, he thus felt it necessary to omit a supernatural component from his definition in order to salvage the generalization, hence his famous definition (ibid.:47) that “A religion is a unified system of beliefs and practices relative to sacred things.” Although Durkheim was explicit that sacred did not imply “supernatural,” we don’t really know what sacred does imply since he never defined it beyond saying that it referred to “things set apart and forbidden.” Sir Edward Evans-Pritchard (1960:12) dismissed this criterion as “vague and ill-defined,” as have many other prominent anthropologists (cf. Firth 1959; Horton 1960; Goody 1961; Spiro 1966a).

Ironically, Durkheim’s exclusion of the supernatural was quite unnecessary. As Alexander A. Goldenweiser (1915:720-21) pointed out in his sixteen-page review of the original French edition (1912) of *Les Formes élémentaires* . . . in the *American Anthropologist*: “In claiming that primitive man knows no supernatural, the author fundamentally misunderstands savage mentality. . . . [Here] Durkheim commits his initial error, fatal in its consequences.” It was one thing for Durkheim to claim that when people worship the gods they are really worshipping society, but it was rather too much to conclude that they don’t even know what gods are. As for his remarkable claims about Buddhism, apparently Durkheim confused the teachings of a few Chinese court philosophers with Buddhism in general, and seemingly was unaware that Buddhism is particularly rich in supernatural beings. This blunder has long been cited by anthropologists as among Durkheim’s many shortcomings (for definitive treatment, see Spiro 1966a). Nevertheless, Durkheim’s claim about Buddhism and the corresponding idea that supernaturalism cannot be included in a universal definition of religion was accepted by sociologists for decades and was routinely used as a basis for ridiculing Tylor and other early social scientists (cf. Goode 1951). Amazingly enough, while claiming adherence to the Durkheimian tradition, Talcott Parsons (1951:369–70; 1972:89) made the “supernatural” the central aspect of his definition, substituting it for Durkheim’s term “sacred.”

Definition 3: **Supernatural** refers to *forces or entities beyond or outside nature that can suspend, alter, or ignore physical forces.*

When available natural means are of no avail, humans search for other means to achieve their goals. The supernatural, as conceived of by human beings, holds the potential for gaining rewards unobtainable from any other source.

6. *In pursuit of rewards, humans will seek to **utilize and manipulate** the supernatural.*

This is not a flight into irrationality. To the contrary, the consensus among anthropologists is that efforts to use and control the supernatural are exceptional for their hard-headed rationality, as one might suppose given that efforts to invoke the supernatural mostly involve matters of importance. Nor do humans resort to the supernatural capriciously. As Suzanne Langer (1942:129) noted, “No savage tries to induce a snowstorm in midsummer. . . . He dances *with* the rain.” Recall Bronislaw Malinowski’s ([1925]1992:28–29) profound observation that the Trobriand Islanders he studied resorted to supernatural means *only* as a *last* resort. They did not employ supernatural means in an effort to rid their gardens of weeds or to repair fences. They did turn to the supernatural to try to influence the weather. Thus, a limiting proposition must be added:

7. *Humans will **not** have recourse to the supernatural when a cheaper or more efficient alternative is **known and available**.*

The preference for cheaper alternatives and the tendency to bargain with the supernatural will be discussed later.



## GODS

As defined above, the supernatural is a rather vague and impersonal concept. It refers to forces and entities, not to “beings.” This is because in many contexts the supernatural is only a vague idea, a virtual background assumption, as will be clear in the subsequent discussion of magic. But, humans also hold more elaborate conceptions of the supernatural.

For the sake of clarification, let me offer a hypothetical account of cultural evolution. Early humans believed themselves to be surrounded by supernatural forces capable of causing them great harm and thereby capable of providing great rewards if only by sparing them from harm. Since it often seemed as if there were intentions behind supernatural activity, these early humans concluded that while some supernatural forces might well be impersonal, others must be conscious beings. Having no experience with conscious beings having no desires, these early humans also assumed that bargains could be struck with the supernatural, if only they were able to discover the right terms of exchange.

Definition 4: **Gods** are supernatural “beings” having consciousness and desire.

As defined, the word “god” implies no gender, and even when I mention female members of the Greek pantheon I will identify them as gods, not as goddesses. As will be discussed, there is immense variation among conceptions of the gods as to their temperaments, character, and scope, but it universally is believed that the gods have desires and therefore that they can be enlisted on behalf of human desires.

Proposition 8: *In pursuit of rewards, humans will seek to **exchange with a god or gods**.*

Finally, I am able to define the fundamental subject matter:

Definition 5: **Religion** consists of very general **explanations** that justify and specify the **terms of exchange** with a god or gods.

It is important to see that this definition does not reduce religion merely to a set of commandments or divine demands. Terms of exchange with the gods provide the foundation for religious thought, but as the words “very general” and “justify” indicate, there will be an extensive collection of ideas, principles, myths, symbols, images, and other elements of religious culture built upon this base. Within the context of clarifying what the gods want, religious explanations often explain the fundamental meaning of life: how we got here and where we are going. Religion is first, and foremost, an intellectual product and hence I propose that *ideas* are its truly fundamental aspect.

Because this definition is rooted in the relationship between humans and divinity, it returns, in its essentials, to that offered by Tylor more than a century ago. Indeed, Tylor attributed early religions to the reflections and inferences of “ancient savage philosophers” and described religion as “a fairly consistent and rational primitive philosophy.” As he ([1871]1958:1:22–23) explained:

nor, because the religions of savage tribes may be rude and primitive compared with the great Asiatic<sup>5</sup> systems, do they lie too low for interest and even for respect. . . . Few who will give their minds to master the general principles of savage religion will ever again think it ridiculous, or the knowledge of it superfluous to the rest of mankind. Far from its beliefs and practices being a rubbish-heap of miscellaneous folly, they are consistent and logical in so high a degree as to . . . display principles of their formation and development; and these principles prove to be essentially rational. . . .

<sup>5</sup>Since the Middle (or Near) East is in Asia, Tylor here refers to Judaism, Christianity, and Islam, as well as religions of the Far East.



It seems fitting that Tylor's position came to be known (and condemned) as "rationalism" by Durkheim and several generations of functionalists. Thus Goode (1951:243) thought it quite devastating to reveal that in Tylor's work "religious doctrines and practices are treated as theological systems created by human reason." Similarly, William Lessa and Evon Z. Vogt (1972:63) claimed that as anthropology gained sophistication it no longer could condone Tylor's attempt to make "primitive man into a kind of rational philosopher who tried to find answers to [life's] problems."

Why has it been thought absurd to suppose that "primitive man" wonders about life's many mysteries and tries to understand them? Initially, the answer given was because "primitives" can't think very well—that the "primitive mind" is incapable of intellectual speculation. Here, many early social scientists took their lead from Charles Darwin. In what should have become an infamous section in *The Voyage of the Beagle, 1831–36*, Darwin ([1839]1906:228–31) described the people of Tierra del Fuego as subhuman beasts, no more capable of enjoying life than "the lower animals." Similarly, Darwin's cousin Francis Galton (1890:82) claimed that his dog had more intelligence than did the natives in South Africa. Subsequently, Herbert Spencer (1896:1:87–88) asserted that the "primitive mind" lacks "the idea of causation" and is without "curiosity." These views were virtually universal throughout the nineteenth century and, in slightly more moderate form, persisted well into the twentieth century—as late as the 1920s, Durkheim's prominent contemporary, Lucien Lévy-Bruhl (1923, [1926]1979), wrote two entire books to illustrate that the mind of primitive peoples is "prelogical."

Quite aside from the racist nonsense, the claim that "primitives" can't reason about the supernatural is absurd. As Andrew Greeley (1989:189) put it, the ancient "mythmaker may be a poet but he is not a superstitious fool." Granted that preliterate societies do not produce the equivalent of the *Summa Theologica*, but neither are they lacking in systematic bodies of religious ideas. In the concluding chapter of *Nuer Religion*, regarded by many as the finest ethnography ever written about the religion of a preliterate society, Evans-Pritchard (1956:311) noted that "The Nuer are undoubtedly a primitive people by the usual standards of reckoning, but their religious thought is remarkably sensitive, refined, and intelligent. It is also highly complex." And so it should be. Unlike the sciences, religious thought does not depend upon centuries of accumulation of physical and natural facts. What it mainly requires is curiosity and inspiration, and these seem to be in ample supply in all human groups. Summing up his own fieldwork and that of others, Clifford Geertz (1966:15) concluded that humans are incapable of simply looking at the world "in dumb astonishment or bland apathy," but always seek to explain what is going on. Geertz added that the villagers he studied in Java behaved fully in accord with Tylor's claims about primitive philosophers, "constantly using their beliefs to 'explain' phenomena."

In any event, following World War II, Tylor's claim that religion is about belief in supernatural beings reemerged as the preferred definition of religion by a distinguished list of anthropologists: Monica Hunter Wilson (1957:9), Raymond Firth (1959:131), Robin Horton (1960:211), Jack Goody (1961:157), David G. Mandelbaum (1966:1174), Anthony F. C. Wallace (1966:5), and Melford Spiro (1966a:96–98). Even Mary Douglas (1982:29), who always has been reluctant to accept *any* general definition of religion, wrote: "I am not especially fond of the one based on belief in spiritual beings, but at least it defines the field without begging any questions about the integrative power—moral, intellectual, or social—of religion."

Unfortunately, as Douglas noted, it wasn't merely a contempt for primitive thinking that led many early social scientists to exclude the gods from definitions of religion, but also their conviction that social life is shaped by large, impersonal forces that go unnoticed

by the uninitiated. These, not the reasons cited by individuals, are the real causes of social phenomena. Applied to religion, what this often has meant is that its “real” cause is its contribution to social integration. Indeed, the inability of religious people to explain their behavior in these terms often has been cited as good reason to ignore them. Thus, Durkheim and his followers seemed to take considerable satisfaction from revealing that people are deluding themselves when they say they are worshipping a god, for they actually are worshipping their own reflection: gods are society, and social integration is the truly divine miracle.<sup>6</sup> Hence, as they embraced the doctrines of functionalism, many anthropologists reported that humans persist in giving “incorrect” answers when asked why they perform religious rituals and ceremonies. Malinowski ([1925]1992:38) reported that if asked to explain the purpose of a religious ceremony, a “native” will merely “narrate an explanatory myth.” A. R. Radcliffe-Brown (1939:25) agreed, noting that it is a “grievous error” to believe the reasons groups give for performing religious rites. Both men actually claimed that only sophisticated outsiders<sup>7</sup> can identify the true cause of ritual activities, which, of course, has nothing to do with god but with generating social solidarity and integration. Hence the emphasis functionalism placed on *rite* and *ritual* rather than belief.

Why is the “correct” reason that church bells rang all over America on August 14, 1945, the one that attributes these actions to their contribution to social integration, rather than the reason that would have been given by those who rang the bells that they did it “to thank God for peace”? Indeed, on what grounds could social scientists claim to know better than the Apa Tanus when they explain that the purpose of their Korlang-uni rite is to honor Mokum and thus to insure a healthy rice crop? The rite may indeed *also* contribute to group solidarity among the Apa Tanus, just as the World Series may do for the two American or Canadian cities whose teams are taking part, but surely solidarity is not the “real” cause of either activity.

I propose to take people at their word when proximate causes are involved and to credit even early humans with the capacity to base their religious rites on explanations that are recognizable as “philosophy.” Here, too, I am in good company. Melford Spiro (1966a:112–13) spoke for many of his peers when he noted:

The most obvious basis for religious behavior is the one which any religious actor tells us about when we ask him—and, unlike some anthropologists, I believe him. He believes in superhuman beings and he performs religious ritual in order that he may satisfy [them] . . . despite [Robert K.] Merton’s incisive analysis of functional theory, it is highly questionable if the persistence of Hopi rain ceremonies is to be explained by the social integration to which *he* (Merton) thinks their performance is conducive . . . rather than by the meteorological events to which the *Hopi* think they are conducive. [Spiro’s italics]

The Hopi belief in the efficacy of their rainmaking ritual is not irrational—although it is certainly false<sup>8</sup>—because the conclusion, rain ceremonies cause the rain to fall, follows validly from a worldview whose major premise states that the gods exist,

<sup>6</sup> Evans-Pritchard (1956:313) remarked that “It was Durkheim, not the savage, who made society into a god.”

<sup>7</sup> Clyde Kluckhohn (1952: 420–21) frankly acknowledged that all functionalist “analyses [are] from an observer’s point of view and with a minimum of content.”

<sup>8</sup> I think it likely that a proper statistical study of rain dances and rain would produce a relatively strong, positive correlation. Just as “primitives” do not attempt to make it snow in summer, rain dances are not held in the dry season. Moreover, rain dances are not prompted primarily by *lack* of rain. Rather, they are done in *anticipation* of rain.

and whose minor premise states that the behavior of the gods can be influenced by rituals.

At least Merton made social integration a *latent* function of the Hopi rain dance. In contrast, anthropologists committed to symbolist theory make this the *manifest* function by absolutely denying that religious rituals are performed in pursuit of any tangible results. That is, despite the fact that most prayers in all societies make specific requests of the gods (for health, good weather, safe travel, abundant crops, or the soul of a loved one), we are asked to accept that this is not why people do it. Thus, Geertz (1966:19–20) denied that healing ceremonies among the Navaho are performed to cure the afflicted, but are merely to provide “the stricken person a vocabulary” that will allow the victim to relate his or her distress “to the wider world.” Never mind that the ceremony consists almost entirely of the chant “may the patient be well.” Indeed, Dan Sperber (1975:5) offers the extraordinary claim that because it is self-evident that supernatural beings do not exist, it is impossible to interpret religious rituals as efforts to enlist the gods on one’s behalf! That is, since people don’t actually believe in the gods, their prayers are not to be taken literally as attempts at exchange. S. R. F. Price (1984) has gone so far as to claim that religious “belief” is a purely Christian invention and that when Romans prayed they didn’t really mean it in the sense that they thought prayers were heard. In response, one can only ask, what *did* Cato *think* he was doing when he said:

Father Mars, I beg and entreat you to be well disposed toward me and toward our house and household. I have ordered an offering of pigs, sheep and bulls . . . on account of this request, so that you may prevent, ward off and remove sickness . . . and damage to crops and bad weather. . . . Preserve my shepherds and flocks unharmed and give good health and strength to me, my home, and our household. For this purpose . . . Father Mars . . . you shall be increased by these offerings of suckling pigs, sheep and bulls. (*On Agriculture*, CXLI, translation by Charles King [1998:29])

Indeed, why did Cato publish this prayer in a book meant to instruct others on good farming methods? Was it because, although he knew full well that there is no Father Mars, he thought saying so would be good for the morale of his livestock?

I would not labor the matter were there not so many well-received books advocating the symbolic theory position. Among them is Rodney Needham’s *Belief, Language, and Experience* (1972), wherein he explicitly rejects the existence of any “interior state” that might be called belief. From this, Needham deduces that belief cannot be essential to ritual and that worship is not directed towards ends other than the socioemotional. Requests concerning fields, flocks, health, and fortune be damned! In similar fashion, Sperber is certain that it is so obvious that supernatural beings do not exist that even the rudest tribal priests must realize this “fact” and therefore they cannot really be attempting to exchange with the gods. Rather, they accept the reality of what is being symbolized by various rituals, and *that* always turns out to be some representation of the group and its well-being. Put another way, the proponents of symbolist theory do not argue, as the functionalists have done, that these symbolisms are an *additional* set of meanings and interpretations of religious rituals, but that they are the *entire basis* for such activities. The statements made by those who perform the acts are not merely dismissed as in error (à la Durkheim), but are rejected as fundamentally insincere, for those doing the praying, or performing the rituals, or offering the sacrifices know better, or at least *they ought to* (cf. Tooker 1992). In this regard John Beattie (1966:69–70) is entirely candid:

If a Nyoro tells me that his sacrificial ritual is effective . . . because it is a means of coercing gods or spirits to do what he wants . . . by what conceivable right do we assert that these informants are mistaken, that we know better than they do what they “really” think, and that even though they do not know it, what underlies their behaviour is a belief in the power of the symbolic expression itself? . . . [My] hypothesis that ritual has an essentially expressive quality, and that its causal efficacy is thought (when it is deeply thought about) to reside in this very fact, is not refuted by the observation that it is not thought to be thus effective when it is not deeply thought about, as it rarely is.

Hence, the only reason informants tell anthropologists the wrong reasons for their religious undertakings is lack of deep thought. Presumably, if they thought about what they were doing more deeply the Nyoro would agree with Beattie (ibid.:70) that the symbolic theory must be the real explanation of their behavior for “any alternative explanation of the thought which underlies ritual institutions simply does not make sense of people’s behaviour.” Beattie’s claims turn to slush *if* it is assumed that when people ask the gods for help they think there is someone or something to hear them. Indeed, this simple assumption, universally attested by all who do such things, makes perfect sense of their behavior—“Ask, and it shall be given you” (Matthew 7:7). It seems to me that the urgent need here is for a theory to make sense of the behavior of the symbolic theorists.

I have no quarrel with the notion that religion can contribute to solidarity. But, rather than asserting that by definition, I propose to allow the *social* aspects of religion to emerge through theorizing and not to assume that religion *is* the basis of social integration. Indeed, to define religion as integration results in a theory incapable of dealing with religious sources of social disorganization and conflict.

Many of the definitions of religion offered by the anthropologists cited above mention actions as well as beliefs. Since religious explanations define the terms of exchanges with the gods, they obviously do have implications for behavior, but religious action per se is excluded from my definition. Here I break with much of my own earlier work wherein I defined religion as consisting of beliefs *and* practices. It is my more mature view that it is worthwhile to separate the two because people often believe without acting—Grace Davie (1994:2) describes the religiousness of the average European as “believing without belonging.” The utility of a purely cognitive definition of religion is that it facilitates study of this link. Indeed, later in this essay, it enables me to formulate a proposition concerning religious procrastination.

## TERMS OF EXCHANGE

It follows from my definition of religion that the primary religious question is: *What do the gods want?* Rather than pausing here to categorize the variety of goods and services that have been offered to the gods, it seems more significant to focus on the matter of cost or price. That is, there are limits on how much even divine beings can charge for their favor and this will vary depending on a number of factors. One of these is competition.

*9. The greater the number of gods worshipped by a group, the lower the price of exchanging with each.*

This is self-evident as well as being widely observed. In polytheistic settings people “shop around” from god to god and temple to temple. In ancient Egypt there were thirty-one primary gods, each with temples (Barrett 1996), while in Rome, when the Pantheon for “all the gods” was reconstructed by Hadrian in the year 118, there were fifteen major

gods and scores of minor ones, not including temples dedicated to gods of various ethnic groups (MacMullen 1981). Other things being equal, the availability of many alternative gods will exert downward pressures on price. Of course, even within a pantheon as elaborate as that sustained by the ancient Egyptians, other things were not equal, and although competition kept down prices in general, within the religious marketplace some gods could demand higher prices than others. That is, some gods seemed to be more valuable and reliable exchange partners. These same principles also apply across societies.

10. *In exchanging with the gods, humans will pay higher prices to the extent that the gods are believed to be more **dependable**.*

Definition 6: **Dependable** means *the gods can be relied upon to keep their word and to be **consistent** in their orientations towards humans.*

Undependable, wicked, mischievous gods are legion. There is a huge anthropological literature on “trickster” gods and spirits (cf. Radin 1956; Evans-Pritchard 1967; Hynes and Doty 1993). Trickster gods are unusually frequent in the religions of Native North Americans, but are common around the world. In Dahomey people never know what to expect from “the lecherous, mischievous, but sometimes humanly helpful god Legba” (Norbeck 1961:79), while Japanese Shintō includes the misbehaving Susa-no-o, who is “divine yet subject to the most infantile of human passions” (Ellwood 1993:142).

To the extent that they regard the gods as dependable, humans will tend to separate them into two classes, *good* and *evil*. This distinction arises because gods are more dependable, and hence are more suitable exchange partners, to the extent that their intentions towards humans are *either* benign or hostile, as opposed to gods who unpredictably shift orientations (Stark and Bainbridge, [1987]1996:113–16). This division is, of course, true of all the “world” religions. But it is very common in the religions of preliterate societies too. For example, the Yakö in West Africa distinguish “supernatural beings” into “several distinct categories” according to Daryll Forde (1958:166). One category consists of “protective tutelary spirits,” while another is made up of “spirits capable of inflicting sickness, sterility and death.” Gladys Reichard (1950) reported that the Navaho distinguish their gods according to their dependability in giving help.

Definition 6a: **Benign gods** are *those who intend to allow humans to profit from their exchanges.*

Definition 6b: **Evil gods** are *those who intend to inflict coercive exchanges or deceptions on humans resulting in losses for human exchange partners.*

Definition 6c: **Inconsistent gods** are *those who alternate unpredictably between a benign and an evil orientation towards humans.*

It will be evident that humans will prefer to exchange with benign gods, especially with benign gods who will protect them from evil gods, although sometimes humans will be forced to accept losses in order to propitiate evil gods. But, whether explanations involve the terms of exchange with benign or evil gods, the definition of religion is met. That is, even Satanic worship is a form of religion, not something else.

Gods may be dependable without being especially responsive or sympathetic. Unlike most Greek gods who were notoriously undependable, Zeus was depicted as a consistent “good god,” but he also was seen as remote and not very concerned about human affairs. Greeks did not talk about having experienced the love of Zeus.

11. *In exchanging with the gods, humans will pay higher prices to the extent that the gods are believed to be more **responsive**.*

Definition 7: **responsive** means *the gods are concerned about, are informed about, and act on behalf of humans.*

I have selected “responsive” as the most appropriate term to sum up many similar attributes ascribed to the gods, including “personal” (impersonal), “caring,” “loving,” “mer-



ciful," "close," "accessible," all of which can, I think, be summed up as the belief that "there is somebody up there who cares." The Nuer often refer to god as their father and themselves as "'*gaatku*,' thy children," not meaning these terms literally, but to indicate a relationship that involves "the sense of care and protection parents give to a child," and they commonly acknowledge god's care with the remark "God is present" (Evans-Pritchard 1956:8–9). This same sense of divine responsiveness is found in the orthodox conception of god presented by Judaism, Christianity, and Islam. Such a god makes an extremely attractive exchange partner who can be counted on to maximize human benefits. In contrast, the god acknowledged by liberal Christian theologians, who disavow a divine being in favor of a divine essence (the "ground of our being"), seems incapable of response as are all "unconscious gods," such as the Tao.

The ancient Sumerians could only appeal to their high gods through an incredible number of layers forming a divine bureaucracy beyond Franz Kafka's worst nightmare (von Soden 1994). The reason Sumerians sent their prayers up the chain of command was because the gods on the lower levels had insufficient scope to "fulfill all the wishes of the petitioner" (ibid.:176).

12. *In exchanging with the gods, humans will pay higher prices to the extent that the gods are believed to be of **greater scope**.*

Definition 8: The **scope of the gods** refers to the diversity of their powers and the range of their influence.

Having more diverse powers, a god of weather is of greater scope than a god of wind or rain. A god who controls weather everywhere is of greater scope than a god who controls weather only in a small tribal territory. At one extreme are the minor gods and godlings that abound in preliterate societies or on the periphery of pantheons, and at the other extreme is the omnipotent god of the Jewish-Christian-Islamic tradition.

Gods of greater scope can provide far more valuable rewards and therefore can require more in return. Indeed, only gods of great scope offer rewards so valuable that they can be obtained only in another world.

13. *The greater their scope (and the more responsive they are), the more plausible it will be that gods can provide **otherworldly rewards**. Conversely, exchanges with gods of smaller scope will tend to be limited to **worldly rewards**.*

None of the gods in polytheistic pantheons offer immortality. Indeed, being immortal was the primary distinction the Greeks and Romans made between being a god or a mere human. Like the Greeks and Romans, many cultures have a conception of an afterlife, but it is often an unattractive, shadowy existence that is not a gift from the gods. And, also like the Greeks and Romans, groups with many gods go to them for worldly benefits: for health, for success in love, for victory, for good harvests, for financial success. These are to be achieved here and soon, not later and elsewhere.

14. *In pursuit of otherworldly rewards, humans will accept an **extended** exchange relationship.*

Definition 9: An **extended** exchange relationship is one in which the human makes periodic payments over a substantial length of time, often until death.

In societies where most people patronize many gods their exchange relations with any given god are infrequent and very short term. Hsinchih Chen (1995:1) notes that Taiwanese folk religion

is very this-worldly oriented. If one feels that the deity is no longer efficacious and cannot satisfy the individual's requests, then that person will switch his or her wor-

ship to other deities. In some extreme cases like lottery gamblers, some losers destroy the images of deities, just because they are furious with the gods that fail them on the lottery.

Christians, Jews, and Muslims find this behavior to be quite sacrilegious, accustomed as they are to expectations that faith is a lifelong undertaking, that certain obligations and duties must be met and performed from cradle to grave. Indeed, in the case of Buddhists it proves necessary to extend an exchange relationship over several lifetimes, as with the Burmese Buddhists studied by Spiro (1966b:1171–72):

Recognizing that their future welfare can best be achieved through saving and investment, the Burmese *do* save and invest extensively. Their investments . . . take the form of religious contributions, whose returns are in the form of improved karma. Although these returns cannot be cashed in, so to speak, until some future existence, their accumulation builds up large reserves in the form of merit. It is from deep concern with their future that the Burmese maintain constant vigil on their reserve balance. Like Weber's puritans, many Burmese keep a merit account book in which all expenditures on merit production are entered, and the units of merit thus achieved can be compared with the units of demerit attendant upon violation of the Buddhist precepts. In this way it is possible to compute the reserve balance in one's present merit bank and thereby come to some rough assessment of the contribution of one's present existence to one's future security.

Differences in the duration of exchange relationships with the gods rest on what people anticipate in return from the gods—a winning lottery ticket, a better next life, or life everlasting.

15. *In pursuit of otherworldly rewards, humans will accept an **exclusive** exchange relationship.*

Definition 10: An **exclusive** exchange relationship is one in which the human may exchange only with one specific god (and approved subordinate gods such as angels).

Not only must Jews, Muslims, and Christians engage in long-term exchange relations, they must do so with only one god. This is, of course, the First Commandment.

Although otherworldly rewards can generate extended commitments, the fact that they are only to be realized in the distant future has implications for commitment. Other things being equal:

16. *People will seek to **delay** their **payment** of religious costs.*

Just as people often delay their investments in a retirement plan, they often delay bringing their afterlife arrangements up to date. We might refer to this as the *principle of religious procrastination*. Evidence of it shows up in the tendency for people to raise their levels of religious commitment as they age (Argyle and Beit-Hallahmi 1975), and in the frequency of fox-hole and deathbed conversions. It also is consistent with the new literature on risk aversion and gender differences in religious commitment (Miller and Hoffmann 1995).

We have seen that religious costs will vary depending on certain aspects of the gods, on the amount of competition among them, and according to their dependability and scope. But, from the other side of the exchange relationship, the principle that humans attempt to maximize leads to the conclusion that, in addition to delaying their payments:



17. *People will seek to minimize their religious costs.*

Based on the assumption that religion is irrational and not amenable to calculation, many social scientists have stressed that people, especially in traditional societies, gladly (and blindly) bring their offerings to the gods. Thus Royden Keith Yerkes (1952:4) claimed that in ancient times in the Near East, "Sacrifices were always as large as possible; the larger they could be made, the greater the accompanying joy and festivity." Indeed, a substantial theoretical literature grew up around sacrifice to explain why people would act in ways so contrary to rational, economic self-interest. Turning a deaf ear to unanimous testimony that "we give to the gods in order to gain their favor," various scholars have offered several more profound explanations (Smith [1889]1907; Freud [1912–13]1950; Durkheim 1915; Frazer 1922; Money-Kyrle 1929). There is absolutely no room in any of these schemes for rational economic behavior. *Au contraire*, to these scholars sacrifice epitomized the irrationality of religious expression—being a never-ending reenactment of the Oedipus conflict, according to Freud and Money-Kyrle. If sacrifice is irrational, then proposition 17 is quite unrealistic. However, the charge of being unrealistic is better directed towards these same "theorists," none of whom, according to Evans-Pritchard (1965:6), "had ever been near a primitive people."

In contrast, anthropologists who actually have gone into the field report abundant examples that the sharp practices, the endless haggling, and the raw self-interest we expect in even the most rudimentary bartering systems, turn up in exchange relations with the gods as well. C. M. Doughty (1926:1:451–52), who lived among the Bedouin, reported that although a ritual would call for the sacrifice of a camel, they often substituted a sheep or a goat or a decrepit camel. On one occasion when a young suckling camel was sacrificed there were protests that it was much too valuable and a sheep or goat should have been substituted. The answer given was that "she refuses the teat" and would have died anyway. Evans-Pritchard (1956:202–3) found that among the Nuer, although a ritual may require that a certain number of oxen be given in sacrifice, they usually sacrifice fewer oxen than are called for and often will sacrifice none, making all manner of cheaper substitutions. In fact, the Nuer sometimes offer a wild cucumber (*cucumis prophetarum*) in lieu of an ox! "It is treated as though it were an animal victim. It is presented and consecrated, an invocation is said over it, and it is slain by the spear, being cut in half along its edge. . . . In a sacrificial context Nuer also always speak of a cucumber-victim as 'yang', 'cow.'" In his brilliant essay on economic aspects of sacrifice, Raymond Firth (1963:20) remarked that substituting a cucumber for a cow, "is a most economical way of meeting one's ritual obligations."

A somewhat similar practice among the Swazi is a form of "bait and switch." Each priest secures "a particularly fine beast" and dedicates it to his ancestors, making it a *licabi* animal. When time comes for a sacrifice, the *licabi* animal is placed in an enclosure with a much inferior animal which, by association, acquires the ritual qualities of the *licabi*. The inferior beast is then used in the ritual, and "the *licabi* itself serves the role many times; it is not killed until it becomes too old to serve as the display animal" (Firth 1963:21).

Lest it be thought such calculating religious behavior is somehow limited to traditional societies, let me note the Catholic tendency to "shop" for a confessor who imposes the mildest penances. At the collective level, the well-known transformation of sects into churches is primarily a process of minimizing religious costs. Thus while nineteenth-century American Methodists did not feel obligated to sacrifice camels or oxen, they were obligated not to gamble, dance, drink alcoholic beverages, or go to the theater. These rules were dropped precisely because new generations of more affluent Methodists no longer wished so costly a faith.

Implicit in each of these examples of calculation in exchanging with the gods is the answer to why will people exchange with the gods at all. They do so, not because they don't know better or can't help themselves, but because they want what the gods have to offer—even if they cannot resist seeking the best possible terms. As Firth (1963:23) remarked, "One may serve God without losing touch with Mammon."

## INTERCESSION

However it is that humans conceive of the gods, few individuals formulate their own religious explanations or attempt to discover on their own what it is that the gods want.<sup>9</sup> That is, religious expression does not consist primarily of interaction between a lone individual and a god, but is anchored in social groups and in the division of labor.

Since humans will retain explanations (proposition 3), other things being equal, over time human cultures will become more extensive and complex. Indeed, from very early in prehistory, any given culture has been so extensive and complex that no single person could master it all. At that point cultural specialization (or a division of labor) occurred, wherein individuals master parts of their culture and rely on exchanges with others in order to have the benefits of other parts. The order of emergence of specialists reflected the importance of a particular cultural "bundle" and the particular qualities required to master and sustain it. Thus it is not surprising that political leadership seems to have been the earliest specialization. It is indicative of the importance placed on religion, that it serves as the basis for what was perhaps the second specialization to emerge (Spencer 1896 vol. 2; Lenski 1966). Not surprisingly, societies lacking religious specialists also are relatively deficient in terms of their religious culture (Holmberg 1950; Norbeck 1961). Among the Chenchu nomads in the jungles of the Indian State of Andhra Pradesh, there "are no priests or other religious experts . . . and the structure of Chenchu religions is thus one of extreme simplicity" (Parrinder 1983:37). As with the fine arts, so too with religion: creative talent is uncommon and it benefits from training and practice.

Definition 11: An **ecclesiastic** is *anyone who specializes in religion—in explaining, supervising, and/or conducting exchanges with a god or gods.*

I have followed Herbert Spencer (1896, vol. 2) in using this term to identify religious specialists. Its advantages are several. It does not impute gender and seems sufficiently generic to transcend cross-cultural variations in a way that terms such as priest or clergy do not.

Definition 12: **Religious organizations** are *social enterprises whose primary purpose is to create, maintain, and supply religion to some set of individuals and to support and supervise their exchanges with a god or gods.*

People may participate in religious organizations for all sorts of secular reasons (fun and friendship are common motives), but the *raison d'être* of all organizations to be identified as religious has to do with relationships with a god or gods.

18. A religious organization will be able to **require extended and exclusive commitments to the extent that it offers otherworldly rewards.**

This is a simple extension of propositions 13–15. As a direct result of the capacities attributed to the god or gods they serve, religious organizations will differ in the extent they can bind members into a long-term and exclusive relationship.

<sup>9</sup>In an overlooked, but methodologically quite remarkable discussion, Herbert Spencer (1893:II:671–72) quotes reports by several teachers of adult deaf mutes that their students had grown up without wondering about religious questions. He quoted "an American lady who was deaf and dumb, but at a mature age was instructed, and who said the idea that the world must have had a Creator never occurred to her." Spencer regarded this as proof that there is no religious instinct.

Definition 13. **Religious commitment** is the degree to which humans promptly meet the terms of exchange with a god or gods as specified by the explanations of a given religious organization.

Generally speaking, religious organizations will distinguish two forms of commitment, the *objective* (behavior) and the *subjective* (beliefs and feelings). This distinction is consistent with my decision to limit the definition of religion to cognitive elements in that these definitions also will facilitate examination of the link between faith and practice.

Definition 14: **Objective religious commitment** refers to all **behavior** in accord with the explanations sustained by a religious organization.

Such behavior includes all forms of religious *participation* or practice (taking part in rites and services, for example), *material offerings* (sacrifices, contributions, and donations), and *conformity* to rules governing actions (not sinning).

Definition 15: **Subjective religious commitment** involves **belief** in the explanations sustained by a religious organization and having the appropriate **emotions**.

That religion involves belief is obvious and needs no additional discussion here. But, some discussion is required of the immense literature on the emotional aspects of religion. Some have argued that religion consists primarily of emotions, even to such an extent that religion is an entirely subjective phenomenon that can only be apprehended through experience, and then only described, not analyzed. Early in his famous work *The Idea of the Holy*, Rudolph Otto (1923:8) asked readers to recall “a moment of deeply-felt” religious feelings, and then directed that anyone who could not do so “is requested to read no further.” His point was that the essence of religion is “inexpressible” and therefore cannot be discussed intelligibly with those who lack direct experience of the “mental state” he called “numinous” and which “is perfectly *sui generis* and irreducible to any other” (ibid.:7).

No one could deny that emotions are of very great importance in religious life, and that people often seem to have some difficulty in describing these feelings. But there is no evidence whatever that there exist *uniquely religious* emotions. Rather, humans experience all of the normal emotions in response to religious stimuli or objects. No one put this better than William James. In the second lecture of the set making up *The Varieties of Religious Experience* ([1902]1958:39–40) James announced his intention to have done with the notion of “religious sentiment,” which was frequently treated “as if it were a single sort of mental entity.” James noted that “There is religious fear, religious love, religious awe, religious joy, and so forth.” But these are only ordinary, natural emotions “directed to a religious object.” Later in this essay I discuss mystical experiences—incidents of perceived direct contact with a god. These do seem to be uniquely religious in *form*, but the emotions and feelings involved are those of ordinary experience. Put another way, it is the *object* of emotions and feelings that determines whether an episode is religious or secular. Were we to accept claims that religion consists of feelings per se, such as awe, reverence, or depth of commitment, we would be forced to expand the category of religion to include groups such as the Communist and Nazi parties, Greenpeace, and even some fan clubs, as well as activities such as sex and drug use or contemplation of the starry sky, all of which are, for some people, the object of such feelings. A subjective definition appeals to many intellectuals (particularly those employed in seminaries or in religion departments) who wish to claim to be religious while rejecting all aspects of supernaturalism. But, a subjective definition ignores the profound differences between secular and supernatural assumptions,<sup>10</sup> and to adopt it would require that we immediately introduce a distinction between

<sup>10</sup>“The differences between supernatural and non-supernatural or naturalistic systems are so profound that it makes no more sense to equate them than to equate totem poles and telephone poles” (Stark 1981:159).

“religions” that did and did not assume the supernatural, in which case nothing has been accomplished except to have made “religion” a superfluous concept (Stark 1965; 1981).

In terms of religious commitment, what typically is required is that people feel and exhibit the appropriate emotions concerning their religious actions and undertakings. The gods may require that their altars be approached in awe, or that prayers be said sincerely. And, as countless millions of children have learned through the ages, one does not giggle during solemn rites.

## RELIGION AND MAGIC

Sociologists have had a very difficult time distinguishing religion from magic mainly because they have favored a much too broad definition of religion. Indeed, many sociological definitions of religion are so general that they not only are unable to separate magic and religion, but, as in the case of subjective definitions, they cannot differentiate religion from wholly secular philosophies, such as those that animate radical political movements, nor can these definitions efficiently separate magic from science (cf. Luckmann 1967; Bellah 1970; Yinger 1970; Beyer 1994). However, all secular philosophies, including science, are excluded if the supernatural is made part of the definition of religion and magic. Then, to separate religion from magic, we may turn to anthropologists, who finally have isolated the critical difference between the two.

Both religion and magic are based on supernatural assumptions, but while religion deals primarily with the gods, magic is *limited to impersonal conceptions of the supernatural*. Summing up more than a century of anthropological studies of magic, John Middleton (1967a:ix) pointed out:

the realm of magic is that in which human beings believe that they may directly affect nature and each other, for good or for ill, by their own efforts (even though the precise mechanism may not be understood by them), as distinct from appealing to divine powers by sacrifice or prayer.

Of course, Middleton did not mean to place in the magical realm just any or even most human efforts to affect nature or one another. He assumed his readers understood that, just as rain dances differ from irrigation projects, only efforts involving a resort to supernatural means constitute magic. Hence:

Definition 16: ***Magic** refers to all efforts to manipulate supernatural forces to gain rewards (or avoid costs) without reference to a god or gods.*

When a Catholic wears a St. Christopher medal to ensure a safe journey, that is *not* magic, because the power of the medal is attributed to the patron saint whose powers, in turn, are granted by a god. The medal is intrinsic to an exchange with a god. But, when devotees of the New Age place “mystic” crystals under their pillows in order to cure a cold, this *is* magic, because no appeal has been made to a god. That is, magic deals in impersonal supernatural forces, often in the belief that such forces are *inherent properties* of particular objects or words—especially written or spoken formulae and incantations. In a nearly forgotten essay, Ruth Benedict (1938:637) was among the first to distinguish religion and magic in this way, proposing that the former involves “personal relations with the supernatural,” while the latter deals with “mechanistic manipulation of the impersonal.”

Anthropologists often use the Melanesian word “mana” to identify these impersonal supernatural forces or properties. More than a century ago R. H. Codrington (1891:118–

19) defined mana as “a force altogether distinct from physical power which acts in all kinds of ways for good and evil and which it is of the greatest advantage to possess and control.” Benedict (1938:631–32) offered a more precise definition of mana: “this supernatural quality [is] an attribute of objects just as color and weight are attributes of objects. There [is] just the same reason that a stone should have supernatural power as one of its qualities as there [is] that it should have hardness. It [does] not imply the personification of the stone.”

Admittedly, magic sometimes involves supernatural forces a bit more animate than mana. That is, sometimes magic does involve attempts to compel certain primitive spiritual entities to perform certain services (often to harm someone). Thus some magical incantations are believed to summon minor demons or various other supernatural entities and bend them to the will of the magician. The key concept here is “compel” as opposed to “exchange,” or as Benedict (ibid.:637) put it: “*Magic* is mechanical procedure, the compulsion of the supernatural.” Later in her essay, Benedict (ibid.:647) explained that there are “two techniques for handling the supernatural—at the one extreme compulsion and at the other rapport.” Compulsion of spiritual entities remains within the realm of magic, but exchange (which implies rapport) shifts the activity into the realm of religion.

Finally, because magic promises worldly rewards to be realized in the short term, magic is unable to form its clients into organizations.

19. *Magic cannot generate extended or exclusive patterns of exchange.*

20. *Magicians will serve individual clients, not lead an organization.*

Thus I am able to give more formal expression to Durkheim’s (1915:44) famous assertion that “There is no Church of magic. Between the magician and the individuals who consult him, as between these individuals themselves, there are no lasting bonds. . . . The magician has a clientele and not a church.”

## CONFIDENCE AND RISK

Although otherworldly rewards are impervious to disproof, by that same token they cannot be demonstrated to exist. Therefore, exchanges involving long-term expenditure of tangible costs here and now, in hope of otherworldly rewards, involve risk.

21. *Otherworldly rewards entail risk.*

The universal problem of religion is one of confidence. No exchanges with the gods will occur until or unless people are sufficiently confident that it is wise to expend costs. Like all investors, people contemplating religious commitments will seek assurance. Not surprisingly, they are able to obtain it in a number of ways, both secular and sacred.

22. *An individual’s confidence in religious explanations concerning otherworldly rewards is strengthened to the extent that others express their confidence in them.*

Throughout our lives we rely on the wisdom and experience of others to help us make good choices. The proposition no doubt can be qualified by the additional tendency for people to assess what others tell them on the basis of their evaluation of each as a source. That is, we learn to place greater faith in the testimony of some people over others.

The next two propositions examine ritual and prayer as sources of confidence in religious explanations. I do *not* suggest that this is the primary reason that people engage in these religious activities—I think they do them mainly because they are believed to be proper forms of exchange with the divine. But neither do I suggest that the confidence that these activities provide is an unconscious “function” that escapes individual notice. It is very common for people to pray for strengthened faith—“Lord, I believe; help thou mine unbelief” (Mark 9:30). The “peace of mind” that comes from these activities is widely remarked.



23. **Confidence** in religious explanations concerning otherworldly rewards increases to the extent that people participate in **religious rituals**.

Definition 17: **Religious rituals** are collective ceremonies having a common focus and mood wherein the common focus is on a god or gods—the common mood can be quite variable.<sup>11</sup>

I have chosen to limit rituals to *collective* or social activities and to further restrict the class to ceremonies. *Ceremonies* are formal acts, usually based on custom, having a preset pattern or script. By limiting ritual to collective activities I have excluded private, personal “rituals,” which fall under my definition of prayer. By referring to *religious* rituals I eliminate magical activities of a similar patterned form.

Social scientists are unanimous that participation in rituals builds faith—“Ritual actions . . . [give] the members of a society confidence” is how George Homans (1941:172) put it in his youthful days as a functionalist. And Kingsley Davis (1949:534) advised that “Ritual helps to remind the individual of the holy realm, to revivify and strengthen his faith in this realm.” Even Durkheim (1915:226) admitted that the “*apparent* function [of ritual] is to strengthen the bonds attaching the believer to his god.” Of course he quickly added that what ritual “*really*” does “is strengthen the bonds attaching the individual to society, since god is only a figurative expression of society” (my italics).

I am entirely willing to give Durkheim and the functionalists their due on the observation that social rituals do generate group solidarity, and, in that sense, social integration. But a crucial element of solidarity is commitment to the central ideas and ideals of the group. Indeed, propositions 22 and 23 are legitimate extensions of Homans’s (1974) propositions concerning how interaction results in agreement among group members. And, what religious social rituals produce is agreement about the value of religious explanations. For example, Christmas services affirm the truth of all Christian teachings by affirming that Jesus was born the “son of God.” In that sense, affirmation becomes integration.

24. **Prayer** builds bonds of affection and confidence between humans and a god or gods.

Definition 18: **Prayer** is a communication addressed to a god or gods.

Prayers may be silent or spoken out loud, impromptu or regular, formulaic (ritualistic) or spontaneous, mandatory or voluntary, and they may express need, praise, hope, joy, or even despair. People may pray in private, in small groups (formal, as in the case of the Jewish *minyan*, or informal, as in the case of the family devotion), or as part of a collective ceremony. But, in all cases, prayers are meant to be *heard*. As Firth (1996:169) put it, “prayer is ostensibly a manifestation of a personal tie with the transcendent . . . [and] constitutes an act of faith or hope that it will reach its mark.” Moreover, people do not always pray *for* something; often prayer is an experience of sharing and emotional exchange much as goes on between humans having a long, intimate relationship, for in fact many people have come to regard their prayer relationship as long and loving (Poloma and Gallup 1991). This is entirely to be expected. Homans’s (1974) law of liking reads that the longer people interact, the more they will come to like one another. Prayer, then, can have many purposes, but an important result is to reassure humans that religious phenomena are real.

Granted that we may not assume that prayer really is interactive, that there really is a second party. But, that doesn’t matter *if* the human experiences prayer as a two-party affair, if the divine seems to hear and to care. Hjalmar Sundén ([1959]1966; 1987) has developed an elegant role-taking model of how people come to experience a divine exchange

<sup>11</sup> Here I respond to Randall Collins’s (1997) suggestions that the previous version of the theory gave insufficient attention to the ritual aspects of religion. My definition of religious rituals was informed by his (1998) definition of social or interaction rituals.

partner. And, in the well-worn words of W. I. Thomas, "If men define situations as real, they are real in their consequences" (Merton 1995:380).

25. **Confidence** in the explanations offered by religion concerning otherworldly rewards will increase to the degree that **miracles** are credited to the religion.

Definition 19: **Miracles** are desirable effects believed to be caused by the intervention of a god or gods in worldly matters.

Miracles vary from the quite limited (a specific person's recovery from alcoholism or survival of a seemingly fatal event) to the immense (the parting of the Red Sea or the sinking of the Chinese invasion fleet by a "divine wind" during its voyage to Japan). However, unlike the results sought through magic, miracles are regarded as problematic. That is, the results of a magical procedure are thought to be certain if it is properly conducted, but religions merely regard miracles as possible. For example, as they offered prayers for victory, priests of Roman temples did not assure the results of an impending battle. They merely sought the support of the gods, fully acknowledging that the gods retain their autonomy and freely choose whether or not to grant a request.

Even religions, such as Islam or Christianity, having omnipotent gods do not guarantee miracles. Allah or Jehovah may or may not respond for many reasons. All religions assume that, in deciding to grant a miracle, gods must consider consequences for their larger plans or concerns. It also is believed that gods consider the motives and moral worthiness of the beneficiaries of requested miracles as well as possible unanticipated consequences of their request for the supplicants. Thus the saying, "God answers all prayers, but often the answer is 'no'." In this way, even those religious explanations involving worldly rewards are relatively immune to disproof.

Nevertheless, miracles happen in *this* world. If people observe desirable effects that seem not to have naturalistic explanations, and if they attribute these effects to a god, confidence is increased in *all* explanations offered by the religion (and therefore in the reality of otherworldly rewards). Thus, for example, during the two great plagues that swept the Roman empire during the second and third centuries, Christians had a much lower death rate than did their pagan neighbors. Today we attribute that to the fact that Christians nursed the sick while the pagans did not. At the time, however, Christians (and many pagans) attributed these results to miracles and their faith in other Christian doctrines was strengthened thereby—they had objective proof that Christianity "worked" (McNeill 1976; Stark 1996a).

26. **Confidence** in the explanations offered by religion concerning otherworldly rewards will increase to the degree that people have **mystical experiences**.

Definition 20: **Mystical experiences** are some sense of contact, however fleeting, with a god or gods.

This addition to the theory was proposed by Lawrence Young (1997:142) who noted that a "religious experience [may be] understood to demonstrate unobservable realities such as the existence of God or of life beyond the grave" and to thereby offset the potential "risk" involved in religious promises. Events qualifying as mystical experiences differ greatly according to the intensity and intimacy of the contact (Stark 1965) and they vary correspondingly in their impact on confidence. But even the least intense mystical experience constitutes a "small miracle" and provides recipients with personal confirmation of their religious explanations (Neitz and Spickard 1990; Howell 1997). For example, during his encounter with the "Madonna of O'Hare," Andrew Greeley (1995:27–28) did not ever believe that the young woman and child he saw in the Chicago airport *were* the Madonna and Child, but seeing them evoked a flood of memory and emotions involving the Christmas story in a powerful reaffirmation of faith. Consider the impact on individual faith when people believe they are encountering the actual Madonna (Zimdars-Swartz 1991).



Although mystical experiences do occur among the mentally ill and sometimes are caused by fasting or drugs, overwhelmingly mystical experiences occur among normal, sane, sober people (Stark 1965, 1971, 1992; Stark and Bainbridge 1997). Indeed, there is an immense body of evidence suggesting that quite ordinary mental phenomena can be experienced as some sort of mystical or religious episode involving contact with a supernatural being (Hood 1985) and that many (perhaps even most) people in most societies have such experiences (Greeley 1975; Gallup International 1984; Yamane and Polzer 1994). More dramatically, people often display quite remarkable symptoms of contact with the divine (trances, seizures, glossolalia), not only in simple preliterate societies (Norbeck 1961:83–100), but even among groups of well-educated members of advanced industrial societies (Neitz 1987; Poloma 1987; Yamane and Polzer 1994; Goldman 1999). Not surprisingly, such occurrences are taken as direct evidence on behalf of religious explanations. As a young Catholic student of mine said during a class discussion, “How do I know Mary hears my prayers? I’ve seen her!”

The testimonial is a primary means by which people communicate their confidence in religion. In addition to asserting their personal certainty about otherworldly rewards, people often enumerate miracles—how they recovered from cancer, how they overcame alcoholism or drug abuse, how they became reliable and faithful spouses, how they survived a catastrophic accident, or how their prayers for a dying child were answered. Thus do people demonstrate that a religion “works,” that its promises come true. And like the young Catholic woman in my class, they also testify about their own mystical experiences as proof that religious explanations are valid. In the case of groups that engage in various forms of collective “ecstatic” experiences, they offer one another direct *demonstrations* of the existence of a god or gods (Neitz 1987; Poloma 1987).

Finally, this entire line of theorizing leads to this proposition:

27. *Vigorous efforts by religious organizations are required to motivate and sustain high levels of religious commitment.*

When religion is anchored in stable social groups, people are able collectively to maximize their confidence in religious explanations and in the security of otherworldly rewards, and also to effectively reinforce one another for their commitment. Put another way, as I define it, a stack of books or a few pamphlets in the library qualify as a religion, but these systems of explanations only come to life as they are embodied in collective activity.

I end my theorizing here because more macro aspects of religion will be dealt with elsewhere.

## ON TESTABILITY

To qualify as theory, a set of statements must give rise to predictions that are subject to empirical verification; that is, theories must be potentially falsifiable. Note that not all propositions in a theory need to be testable; it is sufficient that the system meets that criterion. Many of the propositions developed above are testable. For example, one could test whether the costs of exchanging with gods in a polytheistic setting tend to be lower than those involved in exchanges with exclusive gods. Or, we could determine empirically whether higher levels of commitment are associated with the responsiveness and dependability attributed to gods (#10–#15). Are there churches of magic? Nevertheless, the truly interesting and problematic propositions in this theoretical system emerge at the somewhat more macro level as I am able to deduce such things as “strict” churches will be strong, or that smaller congregations will generate higher levels of commitment. These matters await. Here it seems enough to note that this is not simply a conceptual scheme, nor is it insulated from empirical realities.

## CONCLUSION

A theory of religion based on reason and choice stands in opposition to the long-held social scientific view that such a theory is inappropriate and, indeed, impossible because the phenomenon itself is irrational. From earliest days, many social scientists have taught that people do not make religious choices, but are so effectively socialized as to make religiousness obligatory, and even if people do make some religious choices, they do not do so in any rational way. However, reliable evidence suggests that religious behavior is as rational as other forms of human action—including studies based on close-up field observations in a modern context (cf. Warner 1972; Barker 1984; Neitz 1987; Poloma 1987; Davidman 1991; Howell 1997; Goldman 1999). This surely is not to say that religion is true, for that is as beyond science as is proof that religion is false. But, it is to say that people go about being religious in much the same way that they go about everything else.

Indeed, I have attempted to demonstrate that point by showing that it is possible to produce an adequate micro theory of religion within the limits of rational assumptions. Nowhere does the theory resort to irrationality—even the inclusion of mystical experiences derives from a rational theory (Stark 1992). The single difference I acknowledge between exchanges involving only humans and exchanges when one of the partners is a god is that the latter can involve far more valuable payoffs. Aside from that, in their dealings with the gods, people bargain, shop around, procrastinate, weigh costs and benefits, skip installment payments, and even cheat. Blind faith indeed!

## REFERENCES

- Argyle, Michael, and Benjamin Beit-Hallahmi. 1975. *The Social Psychology of Religion*. London: Routledge and Kegan Paul.
- Barker, Eileen. 1984. *The Making of a Moonie: Brainwashing or Choice*. Oxford: Basil Blackwell.
- Barrett, Clive. 1996. *The Egyptian Gods and Goddesses: The Mythology and Beliefs of Ancient Egypt*. London: Hammersmith.
- Beattie, John. 1966. "Ritual and Social Change." *Man* 1:60–74.
- Becker, Gary S. 1976. *The Economic Approach to Human Behavior*. Chicago: University of Chicago Press.
- . 1996. *Accounting for Tastes*. Cambridge: Harvard University Press.
- Bellah, Robert N. 1970. *Beyond Belief*. New York: Harper and Row.
- Benedict, Ruth. 1938. "Religion" Pp. 627–65 in *General Anthropology*, edited by Franz Boas. New York: C.D. Heath.
- Beyer, Peter. 1994. *Religion and Globalization*. London: Sage.
- Blumer, Herbert. 1969. *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice-Hall.
- Boudon, Raymond. 1993. "Toward a Synthetic Theory of Rationality." *International Studies in the Philosophy of Science* 7:5–19.
- Bruce, Steve. 1995. "The Truth About Religion in Britain." *Journal for the Scientific Study of Religion*. 34:417–30.
- Carroll, Michael P. 1996. "Stark Realities and Androcentric/Eurocentric Bias in the Sociology of Religion." *Sociology of Religion* 57:225–39.
- Chen, Hsinchih. 1995. "The Development of Taiwanese Folk Religion, 1683–1945." Ph.D. dissertation, Department of Sociology, University of Washington.
- Codrington, R. H. 1891. *The Melanesians*. Oxford: Oxford University Press.
- Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge: The Belknap Press of Harvard University Press.
- Collins, Randall. 1997. "Stark and Bainbridge, Durkheim and Weber: Theoretical Comparisons." Pp. 163–80 in *Rational Choice Theory and Religion: Summary and Assessment*, edited by Lawrence A. Young. New York: Routledge.
- . 1998. *The Sociology of Philosophies: A Global Theory of Intellectual Change*. Cambridge: Harvard University Press.
- Darwin, Charles. [1839]1906. *Voyage of the Beagle, 1831–36*. New York: P.F. Collier & Son.
- Davidman, Lynn. 1991. *Tradition in a Rootless World: Women Turn to Orthodox Judaism*. Berkeley: University of California Press.

- Davie, Grace. 1994. *Religion in Britain since 1945: Believing Without Belonging*. Oxford: Blackwell.
- Davis, Kingsley. 1949. *Human Society*. New York: Macmillan.
- Doughty, C.M. 1926. *Travels in Arabia Deserta* (3rd ed.). New York: Boni & Liveright.
- Douglas, Mary. 1982. "The Effects of Modernization on Religious Change." Pp. 25–43 in *Religion and America: Spirituality in a Secular Age*, edited by Mary Douglas and Steven M. Tipton. Boston: Beacon Press.
- Durkheim, Emile. 1915. *The Elementary Forms of the Religious Life*. London: George Allen and Unwin, Ltd.
- Ellwood, Robert S. 1993. "A Japanese Mythic Trickster Figure: Susa-no-o." Pp. 141–58 in *Mythical Trickster Figures: Contours, Contexts, and Criticisms*, edited by William J. Hynes and William G. Doty. Tuscaloosa: University of Alabama Press.
- Evans-Pritchard, Sir Edward. 1956. *Nuer Religion*. Oxford: Oxford University Press.
- . 1960. "Introduction" to Robert Hertz. *Death and the Right Hand*. New York: The Free Press.
- . 1965. *Theories of Primitive Religion*. Oxford: Clarendon Press.
- . 1967. *The Zande Trickster*. Oxford: Clarendon Press.
- . 1981. *A History of Anthropological Thought*. New York: Basic Books.
- Ferejohn, John A. 1991. "Rationality and Interpretation: Parliamentary Elections in early Stuart England." Pp. 279–305 in *The Economic Approach to Politics: A Critical Reassessment of the Theory of Rational Action*, edited by Kristen Renwick Monroe. New York: HarperCollins.
- Firth, Raymond. 1959. "Problem and Assumption in an Anthropological Study of Religion." *The Journal of the Royal Anthropological Institute* 89:129–48.
- . 1963. "Offering and Sacrifice: Problems of Organization." *The Journal of the Royal Anthropological Institute* 93:12–24.
- . 1996. *Religion: A Humanist Interpretation*. London: Routledge.
- Forde, Daryll. 1958. "Spirits, Witches, and Sorcerers in the Supernatural Economy of the Yakö." *The Journal of the Royal Anthropological Institute* 88:165–78.
- Frazer, James G. 1922. *The Golden Bough*. New York: Macmillan.
- Freud, Sigmund. [1912–13] 1950. *Totem and Tabu*. London: Routledge and Paul.
- Gallup International. 1984. *Human Values and Beliefs*. London.
- Galton, Francis. 1890. *Narrative of an Explorer in Tropical South Africa*. New York: Ward, Lock and Co.
- Geertz, Clifford. 1966. "Religion as a Cultural System." in Michael Banton, editor, *Anthropological Approaches to the Study of Religion*. London: Tavistock Publications. pp. 1–46.
- Goldenweiser, Alexander A. 1915. "A Review of *Les Formes élémentaires de la vie religieuse*." *American Anthropologist* 17:719–35.
- Goldman, Marion. 1999. *Passionate Journeys: Why Successful Women Joined a Cult*. Ann Arbor: University of Michigan Press.
- Goode, William J. 1951. *Religion Among the Primitives*. New York: Free Press.
- Goody, Jack. 1957. "Anomie in Ashanti?" *Africa* 27:148–57.
- . 1961. "Religion and Ritual: The Definitional Problem." *British Journal of Sociology* 12:142–64.
- Greeley, Andrew M. 1975. *Sociology of the Paranormal: A Reconnaissance*. Beverly Hills: Sage.
- . 1989. *Myths of Religion*. New York: Warner Books.
- . 1995. *Religion as Poetry*. New Brunswick: Transaction Publishers.
- Hechter, Michael, and Satoshi Kanazawa. 1997. "Sociological Rational Choice Theory." *Annual Review of Sociology* 23:191–214.
- Holmberg, A.R. 1950. *Nomads of the Long Bow*. Washington: The Smithsonian Institution.
- Homans, George. 1941. "Anxiety and Ritual: The Theories of Malinowski and Radcliffe-Brown." *American Anthropologist* 43:164–72.
- . 1974. *Social Behavior: Its Elementary Forms* (rev. ed.). New York: Harcourt Brace Jovanovich.
- Hood, Ralph W., Jr. 1985. "Mysticism." Pp. 285–97 in *The Sacred in a Secular Age*, edited by Phillip E. Hammond. Berkeley: University of California Press.
- Horton, Robin. 1960. "A Definition of Religion and its Uses." *The Journal of the Royal Anthropological Institute* 90:201–26.
- Howell, Julia Day. 1997. "ASC Induction Techniques, Spiritual Experiences, and Commitment to New Religious Movements." *Sociology of Religion* 58:141–64.
- Hynes, William J. and William G. Doty (eds.). 1993. *Mythical Trickster Figures: Contours, Contexts, and Criticisms*. Tuscaloosa: University of Alabama Press.
- Iannaccone, Laurence R. 1995. "Risk, Rationality, and Religious Portfolios." *Economic Inquiry* 33:285–95.
- James, William. [1902]1958. *The Varieties of Religious Experience*. New York: Mentor Books.
- Jarvie, I.C. 1970. "Explaining Cargo Cults." Pp. 50–61 in *Rationality*, edited by Bryan Wilson. Oxford: Basil Blackwell.
- King, Charles. 1998. "The Living and the Dead: Ancient Roman Conceptions of the Afterlife." Ph.D. Dissertation, Department of History, University of Chicago.

- Kosko, Bart. 1992. *Neural Networks and Fuzzy Systems*. Englewood Cliffs, NJ: Prentice Hall.
- Gluckhohn, Clyde. 1952. "Values and Value Orientations in the Theory of Action: An Exploration in Definition and Classification." Pp. 406–14 in *Toward a General Theory of Action*, edited by Talcott Parsons and Edward A. Shils. Cambridge: Harvard University Press.
- Langer, Suzanne. 1942. *Philosophy In a New Key*. Cambridge: Harvard University Press.
- Lenski, Gerhard E. 1966. *Power and Privilege: A Theory of Social Stratification*. New York: McGraw-Hill.
- Lessa, William A. and Evon Z. Vogt. 1972. *Reader in Comparative Religion: An Anthropological Approach* (3rd ed.). New York: Harper and Row.
- Lévy-Bruhl, Lucien. 1923. *Primitive Mentality*. New York: Macmillan.
- . [1926] 1979. *How Natives Think*. Salem, NH: Ayer.
- Lienhardt, Godfrey. 1961. *Divinity and Experience: The Religion of the Dinka*. Oxford: Oxford University Press.
- Luckmann, Thomas. 1967. *The Invisible Religion*. New York: Macmillan.
- MacMullen, Ramsey. 1981. *Paganism in the Roman Empire*. New Haven: Yale University Press.
- Malinowski, Bronislaw. [1925] 1992. *Magic, Science and Religion*. Prospect Heights, IL: Waveland Press.
- Mandelbaum, David G. 1966. "Transcendental and Pragmatic Aspects of Religion." *American Anthropologist* 68:1174–91.
- March, James G. 1978. Bounded Rationality, Ambiguity, and the Engineering of Choice. " *The Bell Journal of Economics* 9:587–607
- . 1988. "Variable Risk Preferences and Adaptive Aspirations." *Journal of Economic Behavior and Organization* 9:5–24.
- McNeill, William H. 1976. *Plagues and Peoples*. Garden City, NY: Doubleday.
- Mead, George Herbert. 1934. *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*. Chicago: University of Chicago Press.
- Merton, Robert K. 1995. "The Thomas Theorem and the Matthew Effect." *Social Forces* 74:379–424.
- Middleton, John (ed.) 1967a. *Magic, Witchcraft, and Curing*. Austin: University of Texas Press.
- (ed.). 1967b. *Gods and Rituals*. Austin: University of Texas Press.
- Miller, Alan S. and John P. Hoffmann. 1995. "Risk and Religion: An Explanation of Gender Differences in Religiosity." *Journal for the Scientific Study of Religion* 34:63–75.
- Money-Kyrle, R(oger). 1929. *The Meaning of Sacrifice*. London: Hogarth Press.
- Murphy, Tim. 1994. "Wesen und Erscheinung in the History of the Study of Religion: A Post-Structuralist Perspective." *Method and Theory in the Study of Religion* 6:119–46.
- Needham, Rodney. 1972. *Belief, Language and Experience*. Chicago: University of Chicago Press.
- Neitz, Mary Jo. 1987. *Charisma and Community: A Study of Religious Commitment Within the Charismatic Renewal*. New Brunswick: Transaction.
- Neitz, Mary Jo and James V. Spickard. 1990. "Steps Toward a Sociology of Religious Experience: The Theories of Mihai Csikszentmihayi and Alfred Schutz." *Sociological Analysis* 51:15–33.
- Norbeck, Edward. 1961. *Religion in Primitive Society*. New York: Harper.
- Otto, Rudolf. 1923. *The Idea of the Holy* (rev. ed.). Oxford: Oxford University Press.
- Parrinder, Geoffrey (ed.). 1983. *World Religions: From Ancient History to the Present*. New York: Facts on File.
- Parsons, Talcott. 1951. *The Social System*. Glencoe, IL: The Free Press.
- . 1972. "Sociology and Social Psychology." Pp. 88–93 (excerpted) in *Reader in Comparative Religion: An Anthropological Approach* (3rd edition), edited by William A. Lessa and Evon Z. Vogt. New York: Harper and Row.
- Poloma, Margaret. 1987. *The Charismatic Movement: Is There a New Pentecost?* Boston: Twayne Publishers.
- Poloma, Margaret and George H. Gallup, Jr. 1991. *Varieties of Prayer: A Survey Report*. Philadelphia: Trinity Press International.
- Price, S.R.F. 1984. *Rituals and Power: The Roman Imperial Cult in Asia Minor*. Cambridge: Cambridge University Press.
- Radcliffe-Brown, A.R. 1939. *Taboo*. Cambridge: Cambridge University Press.
- Radin, Paul. 1956. *The Trickster*. London: Routledge and Kegan Paul.
- Reichard, Gladys A. 1950. *Navaho Religion*, 2 vols. New York: Pantheon Books.
- Simon, Herbert A. 1957. *Models of Man: Social and Rational*. New York: John Wiley & Sons.
- Smith, W. Robertson. [1889] 1907. *Lectures on the Religion of the Semites* (new ed.). London: Adam and Charles Black.
- Spencer, Herbert. 1896. *The Principles of Sociology*, two vols., New York: D. Appleton.
- Sperber, Dan. 1975. *Rethinking Symbolism*. Cambridge: Cambridge University Press.
- Spiro, Melford E. 1966a. "Religion: Problems of Definition and Explanation." Pp. 85–126 in *Anthropological Approaches to the Study of Religion*, edited by Michael Banton. London: Tavistock Publications.
- . 1966b. "Buddhism and Economic Action in Burma." *American Anthropologist* 68:1163–73.
- Stark, Rodney. 1965. "A Taxonomy of Religious Experience." *Journal for the Scientific Study of Religion* 5:97–100.

- . 1971. "Psychopathology and Religious Commitment." *Review of Religious Research* 12:165–76.
- . 1981. "Must All Religions Be Supernatural?" Pp. 159–77 in Bryan Wilson, ed. *The Social Impact of New Religious Movements*. New York: Rose of Sharon Press.
- . 1992. "How Sane People Talk to the Gods: A Rational Theory of Revelations." Pp. 19–34 in *Innovation in Religious Traditions: Essays in the Interpretation of Religious Change*, edited by Michael A. Williams, Collet Cox, and Martin S. Jaffe. Berlin: Mouton de Gruyter.
- Stark, Rodney and William Sims Bainbridge. 1980a. "Towards a Theory of Religion: Religious Commitment." *Journal for the Scientific Study of Religion* 19:114–28.
- . 1985. *The Future of Religion*. Berkeley: University of California Press.
- . [1987]1996. *A Theory of Religion*. New Brunswick: Rutgers University Press.
- . 1996. *The Rise of Christianity: A Sociologist Reconsiders History*. Princeton: Princeton University Press.
- . 1997. *Religion, Deviance, and Social Control*. New York: Routledge.
- Stark, Rodney and Laurence R. Iannaccone. 1994. "A Supply-Side Reinterpretation of the "Secularization of Europe." *Journal for the Scientific Study of Religion* 33:230–52.
- . 1996. "Recent Religious Declines in Quebec, Poland, and the Netherlands: A Theory Vindicated." *Journal for the Scientific Study of Religion* 35:265–71.
- Sundén, Hjalmar. [1959]1966. *Die Religion und die Rollen*. Berlin: Topelmann. Originally published in Swedish as *Religionen och Rollerna*.
- . 1987. "Saint Augustine and the Psalter in the Light of Role-Psychology." *Journal for the Scientific Study of Religion* 26:375–82.
- Tooker, Deborah E. 1992. "Identity Systems in Highland Burma." *Man* 27:799–819.
- Tylor, Edward B. [1871]1958. *Primitive Culture* (2 vols.). New York: Harper & Brothers.
- von Soden, Wolfram. 1994. *The Ancient Orient*. Grand Rapids: Eerdmans.
- Wallace, Anthony F.C. 1966. *Religion: An Anthropological View*. New York: Random House.
- Warner, R. Stephen. 1972. *New Wine in Old Wineskins: Evangelicals and Liberals in a Small-Town Church*. Berkeley: University of California Press.
- . 1997. "Convergence Toward the New Paradigm: A Case of Induction." Pp. 87–101 in *Rational Choice Theory and Religion: Summary and Assessment*, edited by Lawrence A. Young. New York: Routledge.
- Wilson, Monica Hunter. 1957. *Rituals of Kinship among the Nyakyusa*. New York: Oxford University Press.
- Yamane, David and Megan Polzer. 1994. "Ways of Seeing Ecstasy in Modern Society: Experiential-Expressive and Cultural-Linguistic Views." *Sociology of Religion* 55:1–25.
- Yerkes, Royden Keith. 1952. *Sacrifice in Greek and Roman Religions and Early Judaism*. New York: Scribner's.
- Yinger, J. Milton. 1970. *The Scientific Study of Religion*. New York: Macmillan.
- Young, Lawrence A. 1997. "Phenomenological Images of Religion and Rational Choice Theory." Pp. 133–45 in *Rational Choice Theory and Religion: Summary and Assessment*, edited by Lawrence A. Young. New York: Routledge.
- Zimdars-Swartz, Sandra L. 1991. *Encountering Mary*. Princeton: Princeton University Press.