THE IMPORTANCE OF MAGIC TO SOCIAL RELATIONSHIPS

by Craig T. Palmer, Lyle B. Steadman, Chris Cassidy, and Kathryn Coe

Abstract.   Many anthropological explanations of magical practices are based on the assumption that the immediate cause of performing an act of magic is the belief that the magic will work as claimed. Such explanations typically attempt to show why people come to believe that magical acts work as claimed when such acts do not identifiably have such effects. We suggest an alternative approach to the explanation of magic that views magic as a form of religious behavior, a form of communication that promotes or protects cooperative social relationships. We suggest that all forms of religious behavior involve persons communicating acceptance of a supernatural claim and that this act communicates a willingness to accept nonskeptically the influence of the person making such a claim. Thus, religious behavior communicates a willingness to cooperate with the claim maker and others who accept his or her influence. We suggest that magic, which can be distinguished by the communicated acceptance of the claim that certain techniques have supernatural effects, also promotes cooperation. Different types of magic, including sorcery, love magic, and curing magic, can be shown to communicate different types of messages, such as a threat to use violence to punish unsocial behavior, sexual desire, or concern for a person's well-being. Ethnographic examples are used to support this hypothesis. This approach requires no assumptions about whether the practitioners of magic do or do not believe that the magical acts work as claimed. It attempts only to account for the identifiable talk and behavior that constitute magical acts by examining the identifiable, and often important, effects of these acts on the behavior of others.

Keywords: belief; communication; cooperation; magic

Craig T. Palmer is an associate professor in the Department of Anthropology, University of Missouri-Columbia, 107 Swallow Hall, Columbia, MO 65211-1440; e-mail Palmer CT@missouri.edu. Lyle B. Steadman is Professor Emeritus, Department of Anthropology, Arizona State University, 539 W. 15th St., Tempe, AZ 85281; e-mail lyle.steadman@asu.edu. Chris Cassidy is a free-lance writer studying in the Department of Anthropology, University of Missouri-Columbia, 1529 Spring Street, Bethlehem, PA 18018; e-mail c.l.cassidy@gmail.com. Kathryn Coe is Associate Professor, Mel and Enid Zuckerman College of Public Health, University of Arizona, P.O. Box 245209, Room A250, Tucson, AZ 85724-5209; e-mail kcoe@email.arizona.edu.

Screams echoing through the early morning mist marked the murder of an elderly woman in a remote, mountainous region of Papua New Guinea. The group of Hewa men who had killed her fled quickly back toward their own hamlet. However, they stopped en route at a predetermined spot by a stream to perform a magical ritual. This ritual involved drinking water that had washed over one of the arrows that had been bloodied by their victim. They claimed that this ritual would have the effect of making them invulnerable to their potential pursuers: the kin of the elderly woman they had just slain.

Nearly all explanations of magic would be based on the assumption that the men perform this ritual because they believe it will make them invulnerable to their pursuers, as claimed. The fact of the matter is that, despite their noncritical acceptance of this claim, they and their kin will be anxiously on guard against a retaliatory attack for weeks—an anxiety well grounded in their memories of such attacks' occurring despite the performance of the magical ritual claimed to prevent them.

In contrast, we suggest that acts of magic such as this one, which occurred in the early 1970s (see Steadman 1975; 1985), are best seen as a form of communication and thus are best explained by their identifiable effects on the behaviors of those participating in, and aware of, the ritual. The communication here occurs among the men involved in the killing. By participating in the ritual these men obviously are acknowledging their involvement and guilt in the killing. But why make and communicate acceptance of the claim that as a result of this ritual they will not have to face the consequences of that killing? Such a claim is contradicted by both their memories of past rituals' being followed by retaliatory raids and their heightened state of anxiety and concern about such a raid occurring. What agreeing with the supernatural magical claim does, identifiably, is strengthen the social relationships and cooperation among the men. Increased cooperation among allies obviously is of value in withstanding a retaliatory attack. Communicating acceptance of the supernatural claim increases cooperation because it communicates a willingness to accept the influence of both the speaker of the claim and the coacceptors unskeptically, and the acceptance of a person's influence is the sine qua non of cooperation.

This approach differs from approaches to magic that assume that magical rituals are performed because of the belief that the magical ritual really has the effect on the world that it is claimed to have. Explanations based on the assumption of belief attempt to explain this belief. In contrast, our explanation requires no assumptions about the belief or disbelief of participants. In the case of magic, it attempts only to study the identifiable acts that anthropologists tend to label magic by examining the identifiable effects of those acts.

Although the focus of this essay is on magic, we propose that our argument applies to other aspects of religious behavior as well, and we use both

terms throughout. (For discussion of the relationship between magic and religion see Braarvig 1999; Thomassen 1999; Thomas 1975.)

ATTEMPTS TO EXPLAIN THE BELIEF THAT MAGIC WORKS AS CLAIMED

The assumption of belief is so taken for granted that definitions of magic virtually always include belief (see Hunter and Whitten 1976; Evans-Pritchard 1937; Nadel 1977; Styers 2004). This assumption that claims about the effects of magic result from belief that magic really has those effects has made magic a puzzle, and thus a challenge, to anthropologists attempting to explain human behavior, because magical acts do not identifiably have the effects they are claimed to have. What makes magic particularly challenging is that those who are most knowledgeable about the failure of magic to work as alleged should be just those who have the most experience with it: the practitioners and their audience. Siegfried Nadel notes perspicaciously that "inevitably, the believers in magic must be confronted, again and again, with evidence proving the failure of their magic efforts. How, then, does the belief in magic survive?" (1977, 1). Similarly, Hans Penner refers to "the troublesome question: why do so many people persist in holding false beliefs?" (2002, 153), and Maurice Bloch asks "how is it possible to hold such beliefs? Or, in the fashion of [Donald] Davidson: how can one interpret statements by people who apparently believe such bizarre things about the world?" (Bloch 2002, 129). This is why the study of magic, and religion in general, is so often implicitly guided by the question "How does it come about that people capable of logical behavior so often act in a non-logical manner?" (Evans-Pritchard 1965, 94)

Many of the answers to this question given by early anthropologists were based on the assumption that "primitive" practitioners of magic were so ignorant and dull-witted that they lacked the mental ability needed to realize that magic failed to accomplish the goals it was claimed to accomplish. This view is perhaps stated most clearly by Sir James Frazer, who argues that primitive people have a false understanding of cause and effect and hence attempt to influence various things—people, objects, weather, and so on—by following a "Principle of Sympathy." This principle consists of two "laws": the Law of Similarity—"the magician infers that he can produce any effect he desires merely by imitating it"—and the Law of Contact, whereby the magician "infers that whatever he does to a material object will affect equally the person with whom the object was once in contact" (Frazer 1951, 12).

The notion of the mentally inferior primitive was profoundly shaken by Bronislaw Malinowski, who, in contrast to Frazer, did actual fieldwork and found that the Trobrianders he studied did indeed depend on accurate knowledge (Malinowski 1931, 634), that the "savage" is no more superstitious

than modern humans are (p. 636), and that primitive knowledge, like knowledge everywhere, is "essentially scientific [in] character" (p. 634). "Primitive man is capable of exact observation, of sound generalizations and of logical reasoning" (p. 634). Further, "the only association or connection [constituting knowledge] is the empirical, correctly observed and correctly framed concatenation of events" (p. 636).

Malinowski's evidence led to the necessity of new explanations of magic. His own explanation (apparently following William James and R. R. Marett; Evans-Pritchard 1965, 39–40, 48) is that magic originated in situations of great anxiety that resulted from people's inability to control the outcome of important events. Malinowski assumes that this anxiety causes people to lose their abilities of exact observation and sound generalizations, which are necessary to discern the failure of magical acts to work as claimed. The magical acts reduce anxiety by giving practitioners confidence because, in their anxious state, they mistakenly believe the magic actually works as claimed.

One problem with this explanation is pointed out by Edward Evan Evans-Pritchard, who wonders, "what evidence is there that when a man performs agricultural, hunting, and fishing magic he feels frustrated, or that if he is in a state of tension the performance of the rites releases his distress? It seems to me there is little or none. . . . [The rites] are a customary and obligatory part of the proceedings" (1965, 45).

Other answers retain the extreme cultural relativist position that the worldviews of people in different cultures are profoundly different but discard the ethnocentric negative judgment of other non-Western cultures found in earlier Frazerlike explanations. These types of answers hold that attempts to explain why people in other cultures believe in magic are hopeless because they "hold beliefs that we cannot possibly share and engage in practices which are peculiarly difficult for us to comprehend" (Winch 1999, 342; see also Styers 2004). Keith Thomas takes this cultural relativity even further by suggesting that not only are the terms *magic* and *religion* not applicable to other cultures, but even the term *belief* is contentious as a category because it is culture-bound (Thomas 1975, 93).

In contrast to the views that the practices and beliefs of other cultures are too exotic to be comprehended, some researchers have questioned "the apparent strangeness of these beliefs" (Bloch 2002, 129; see also 1996; Atran 2002; Boyer 2001; Foster and Kokko 2009; Sperber 1982). Some of these theorists suggest that beliefs in the efficacy of magic are not strange because it is difficult for any human to tell the difference between random coincidence and causal relationships. For example, the persistence of magical practices, and the alleged belief in their efficacy, often is explained by the fact that sometimes simply by chance they appear to work: The patient "cured' by countersorcery sometimes gets better, a successful hunt sometimes occurs after the performance of hunting magic, a safe journey some-

times follows the purchase of a St. Christopher's medal, and a patient may recover after being sung over by a native curer (Kluckhohn [1942] 1972, 102).

Other theorists take this approach so far that it essentially reverses Malinowski's original argument. Instead of arguing that not even primitive people believe in Frazer's laws of similarity and contact, these authors assert, "The laws of sympathetic magic may well be universal beliefs or laws of thought" (Rozin and Nemeroff 1990, 229; see also Kottak 1974, 187; Haviland 1983, 368; Peoples and Bailey 2000, 227; Boyer 1994; Burkert 1996). The problem with this explanation is that no human being's behavior actually follows the mistaken notions of Frazer's Laws of Similarity and Contact. Why would anyone bother to risk his own life in killing an enemy if he believed it could be accomplished simply by destroying his clothing or burning a wax doll? Indeed, if one took these laws seriously, one should never do anything risky or difficult; magic should be used to accomplish everything.

Like many approaches to magic and religion, we obviously are questioning the truth content of beliefs and how religious truth-claims can be justified (see Frankenberry 1987, ix). However, unlike many other authors, our goal is not the "derogation of the truth content of religious beliefs" (Lawson and McCauley 1990, 1). The lack of evidence that magical acts work as claimed is used only to demonstrate the failure of attempts to explain magical practices as the result of the belief that the practices work as claimed, and thus draw attention to the fact that the puzzle and challenge of magic remains. To grasp the magnitude of this puzzle, it is necessary to remember that the magical practices described by Frazer usually are traditional, having been passed down from ancestor to descendant for thousands of years. They have not only been practiced for a long time, they have become extremely widespread, as Frazer's examples illustrate.

What we have, then, are many magic rituals that have persisted over long periods of time despite the fact that they cannot be shown to work as claimed. This suggests that the accuracy of magical claims is not itself what is significant, despite magicians' and ancestors' assertions to the contrary. An explanation of magic must account not only for the persistence of magical practices but also for why magical practices so closely fit Frazer's Laws of Contact and Similarity.

We suggest that a solution to all of these puzzles can be found by first addressing the fundamental question of whether or not people actually hold the belief that magical practices work as claimed.

The Problem of Identifying Belief

According to the *Shorter Oxford Dictionary*, cited by Robert Hinde, belief means "mental assent to or acceptance of a proposition, statement, or fact, as true, on the ground of authority or evidence" (Hinde 1999, 34). Religious

and magical beliefs are different from ordinary beliefs (Proudfoot 2002; James 1979) because they "are not subject to empirical verification" (Hinde 1999, 34). Thus, religious and magical beliefs can be defined as mental assent to or acceptance of a supernatural proposition or statement on the grounds of authority. Although it may be that such a statement was made by a supernatural being itself, such a source cannot be verified. More important, although it also is possible that the person is experiencing "*mental* assent," the only thing that can be identified by both social scientists and "believers" is the *explicitly communicated* assent or acceptance of another person's claim about something supernatural.

The problem of identifying supernatural belief complicates not only the study of magic (Romberg 2003) but the entire study of religion, because probably the most widely accepted definition of religion is something like "belief in supernaturals" (see Sosis and Alcorta 2003, 264). Although the very concept of the supernatural has been criticized by some cultural relativists for being ethnocentric (Lavenda and Schultz 2003), according to most scholars it is the supernatural (meaning literally "beyond nature" and hence beyond identification by the senses) that distinguishes magic and religious behavior from other forms of behavior. Ake Hulkrantz, after pointing out the crucial role of unidentifiable things in the definitions of such theorists as Max Müller, Frazer, and William Robertson Smith, concludes that "religion cannot be defined without reference to the concept of the 'supernatural'" (1983, 231). Wesley Wells, after referring to a similar emphasis on unidentifiable phenomena in the definitions by Plato, Immanuel Kant, and William James, concludes that "regard for correct usage of the term requires that religion be defined in such a way as to include supernatural belief" (1921, 275; for further examples of anthropological definitions based on the supernatural see Steadman and Palmer 1995; for examples of evolutionary/cognitive psychology definitions see Palmer and Steadman 2004; Steadman and Palmer 2008).

Although it *may* be true that magical acts and claims about their alleged effects are indeed consequences of the belief that the acts work as claimed, the problem of identifying this belief still needs to be fully confronted. Often an author's claims about the beliefs of other people, like those about supernaturals, are supported only by citing people's statements. Many authors point out problems with this "simplistic approach to religious belief" (Hilty 1988, 243) that assumes a direct equation of people's statements with their beliefs. Evans-Pritchard warns that "statements about a people's religious beliefs must always be treated with the greatest caution, for we are then dealing with what neither European nor native can directly observe" (1965, 7; see also Saler 1974; Hahn 1973).

The authors making such criticism often assume that the problem of identifying beliefs can be solved indirectly, merely by determining if there are other behaviors consistent with the stated beliefs. Consistency between

the asserted belief and a few specific behaviors is claimed to be proof of the existence of the belief. Evans-Pritchard cites the north central African tribe Azande's invariable consultation of the poison oracle before making important decisions in support of his claim that they believe in its efficacy (1937, 261). Yet, such isolated actions can occur without professed belief in supernaturals. This has led to the assertion that the consistency between a person's asserted belief and all of that person's behavior constitutes evidence of the existence of the belief. In regard to someone who asserts that he believes in a last judgment, Ludwig Wittgenstein writes, "In a way, how are we to know whether to say he believes this or not? Asking him is not enough. . . . [His belief in a last judgment] will show, not by reasoning or by appeal to ordinary grounds for belief, but rather by regulating for in all his life" (Frankenberry 1987, 9, quoting Wittgenstein 1966, 53–54; see Davidson 1999, 310). However, someone could say she believes in a last judgment and regulates all of her behavior throughout her life even if she does not actually believe in a last judgment. Someone else could say she believes in the last judgment and still frequently engage in unregulated behavior. Just as humans can say things they do not believe, they also can dissimilate. In short, humans can act. We are not claiming that individuals do not believe their asserted beliefs; we are simply saying we cannot tell whether they believe or not from their behavior.

Many authors have struggled with the difficulty, if not the impossibility, of identifying belief (Rappaport 1979; Hahn 1973; Romberg 2003; Kirsch 2004; Needham 1972; Bell 2002). Some have implied the difficulty of identifying beliefs without fully addressing the consequences of this fact. Pierre Smith states that in certain initiation rituals involving masked figures claimed to be gods, spirits, or ancestors "the women and children believe, or are supposed to believe, or at least are supposed to act as if they believed, often under pain of death, that these really are supernatural manifestations" (Smith 1982, 105–6, cited in Humphrey and Laidlaw 1994, 8). Other authors have responded to the difficulty of identifying whether or not a person believes by asserting the existence of partial beliefs. Regarding magical or religious rituals, Caroline Humphrey and James Laidlaw write that "Claude Levi-Strauss, Pierre Smith, and Pascal Boyer, amongst others, have shown how such 'rituals' rest on a simulation, a half-believed fiction that some unseen supernatural event really happens as they are performed" (Humphrey and Laidlaw 1994, 8).

We join other authors who have argued for an even more dramatic shift away from the focus on beliefs. Jeppe Sinding Jensen writes,

In recent years, in many publications, the problems with the study of "religious experience," "belief" and "faith" as the core activity in the comparative study of religion have become evident; the realization of this will increasingly lead to a methodological shift from an approach based on a philosophy of consciousness or a philosophy of mind to a philosophy of language on the conditions of the "linguistic turn." (Jensen 2003, 415)

Gavin Flood states,

Rather than an emphasis on "religious experience," on "belief," or on "Phenomena" understood as material expressions of tradition, there is an emphasis on the way in which language functions in the transmission of tradition and the replication of culture, and a more dynamic understanding of the processes of both transmission and understanding. (Flood 1999, 192; see also Wilson 2002; Sosis 2000; Irons 2001)

This move away from a focus on belief has its critics. Terry Godlove asserts that "While students of religion need not believe in God, we do need to believe in belief" (2002, 24), and Davidson writes that "To dispense with such entities [as beliefs] is to eliminate rather than solve a number of vexing problems" (1999, 310). We agree that avoiding assumptions about beliefs does not solve all problems, and we are not saying that individuals engaged in magic do not believe that the magic works as claimed. We are saying that whatever the human brain is doing during talk about magic is more complex and different from believing or disbelieving and that much can be learned about magic without assuming either belief of disbelief on behalf of the practitioners of magic.

We further suggest that there is no need to assert the existence of unidentifiable beliefs given that these beliefs cannot be demonstrated to have any effects at all. What "works"—that is, has identifiable effects—is the behavior, not the alleged beliefs. The identifiable effects of the behavior distinguishing magic as a form of communication are what can increase our understanding of magic. By avoiding the intestable assumption that talk implies belief, it is possible to view magic (and religion in general) as a form of communication. This transforms the fundamental question about religion to read: Why do people assert and communicate acceptance of statements that are not demonstrably true by the senses? We argue elsewhere that the most significant, identifiable effect of such behavior is its encouragement of cooperation among those involved (Steadman and Palmer 1995; Palmer and Steadman 2004). Because this effect is identifiable to the participants as well as to social scientists, there is no longer anything nonlogical about engaging in magical rituals.

THE COMMUNICATION MODEL OF MAGIC

The key to explaining magic without assuming beliefs is to remember that it is certain talk, not beliefs, that distinguishes magic from other activities. But this is important only if it is remembered that talk is communication, whether or not it is the expression of belief, and that in any act of communication "The *addresser* sends a message to the *addressee*" (Jakobson 1960, 353). Further, "participants in a process of communication . . . utter sentences as well as understand and respond to sentences" (Habermas 1979, 6). Thus, discourse occurs "in interactional contexts to achieve interac-

tional ends" (Berryman 2005, 20). Within these interactional contexts there exists what Jürgen Habermas refers to as "communicative rationality" because "In communicative action, the validity basis of speech is presupposed. The universal validity claims (truth, rightness, truthfulness), which participants at least implicitly raise and reciprocally recognize, make possible the consensus that carries action in common" (Habermas 1979, 118).

We suggest that the key to distinguishing religious and magical acts from ordinary conversation is to contrast the way speech is validated in these two types of interaction. The communicative aspects of many everyday interactions are so subtle that "Ordinary members are more or less uninterested in how they produce social order: it is ethnomethodology that shows the methods that produce order" (Laurier 2004, 393). Other times, however, the communicative messages being sent by actions are bold and clear, and some of these types of acts are intriguingly similar to magic. The message communicated during the American custom of hanging a university's football coach in effigy is obvious. It is instantly clear how such a performance can influence individuals—the coach, the students, and perhaps the university president. The same holds for political protesters' burning portraits of reviled leaders. These effects are identifiable not only to the outside observer but also to the participants and audience and may influence their decision to repeat that behavior in the future. (For further examples of the communicative aspects of rituals see Rappaport 1979; Frank 1988; Cronk 1994; Watanabe and Smuts 1999; Irons 2001; Sosis 2000; 2003a, b; 2004; Sosis and Alcorta 2003; Sosis and Ruffle 2004.) We suggest that the only thing that distinguishes these acts from a performance of magic is the addition of a further dimension to the communicative process.

Magical acts differ from the acts just described in terms of the behavior both of the addressor and of the addressee. The only thing that keeps these acts from being labeled *magic* is the absence of a claim by the addressor that these acts actually have the effects they symbolize (hanging the coach in effigy actually kills that coach) and the absence of the addressee communicating acceptance of the claim that such acts have their alleged effects. That is, the acts just described can be identical to a magical performance, *except for people communicating acceptance of the claim that it actually injures or kills the victim.* Thus, magic is a form of communication that combines the message sent in such nonreligious symbolic acts as burning someone in effigy with the supernatural claim that it actually, physically works as claimed, and the communicated acceptance by the addressee that this claim is true. An explanation of magic must identify what this additional behavior by the addressee and addressor communicates.

Following Nancy Frankenberry (2002), we suggest that the supernatural claims about magic appear to be responded to as metaphor, but metaphor of a special kind: Their metaphorical status is denied, and they are asserted to be literally true. Thus, we suggest that magic and religious behavior is a

specific kind of communication, a metaphor that is denied to be a metaphor. As Stanley Jeyaraja Tambiah points out, "Every metaphor or symbol contains both truth and fiction: if it is taken literally it misrepresents, but it is more than a conventional sign because it highlights a resemblance" (1985, 36). In the use of metaphors, like many interactions, "Together the participants contribute to a single over-all definition of the situation which involves not so much a real agreement as to what exists but rather a real agreement as to whose claims concerning what issues will be temporarily honored" (Goffman 1959, 3). Such agreement often is facilitated by the addressor's employing "a switch of register required for understanding a live metaphor brought about by the obviously outrageous character of the statement" (Bloch 2002, 131; see also Thourangeau and Sternberg 1981). Such signals help participants in ordinary metaphors reach agreement that the metaphorical statement is a metaphor and not to be taken as literally true. In magic, the communicative agreement requires further collusion between the participants because what distinguishes a magical claim from an ordinary metaphor is that despite the outrageous character of the statement, the addressee communicates that the claim is literally true, that it is not a metaphor.

What would be the advantage of communicating acceptance of a metaphor as being literally true? We suggest that communicating explicit acceptance of such a metaphor communicates a willingness to accept the speaker's influence nonskeptically and thus a willingness to cooperate, to collude, with the speaker. The effect of communicating that the outrageous claim is literally true, and not a metaphor, promotes and requires much greater collusion between the participants in the communicative interaction than is required by ordinary metaphor. This is because the acceptance now includes the claim that the statement, untrue according to the senses, is in fact true.

The explicit, communicated acceptance of a claim that cannot be verified by the senses communicates a willingness to suspend skepticism, to suspend the critical use of the senses to examine the accuracy of an assertion (see Steadman and Palmer 1995; Palmer and Steadman 2004). This is because the "truth" of the conversation can be validated only by such an acceptance of influence. With this in mind, let us examine one case of magic, Australian sorcery, as described by Adolphus Peter Elkin in 1964.

THE EXAMPLE OF AUSTRALIAN SORCERY

Many forms of sorcery are practiced by Aboriginal peoples in Australia, including the damaging of a straw image of an intended victim and the stabbing of a footprint in order to cause sickness or death. But the "most powerful, most feared, and most wide spread" magic is "pointing" (Elkin 1964, 286). In pointing, a specially prepared bone is used. Ideally, this is obtained from a dead man, but kangaroo bones or even sharpened sticks

may be used. The sorcerer, in plain view of the victim, assumes the proper posture and points the bone in the direction of his victim (p. 287). The sorcerer then sings a special chant that incorporates the victim's name while he dances and taps two of the *kundela* sticks together. One of the sticks is thrown toward the victim; this is said to enter the victim's body and cause serious illness. Much care is taken in the performance of the ritual; it is never done casually (p. 293).

What is the evidence that Australian Aboriginal peoples believe in the efficacy of these magical techniques? Their practices are generally traditional, acquired from their ancestors. It is said that they are learned and performed for the purpose of killing or doing injury, and they are claimed to work. However, although deaths often are attributed to sorcery (especially when there is prior illness), Aboriginal people, including sorcerers, frequently use other methods for killing and injuring. Actual spear fights are common. When a revenging party is sent out after an accused sorcerer, he is killed with a spear, not by magic. If the victim of *kadaitja* sorcery (spear pointing) does not die in two or three days, he too may be speared to death by the sorcerers. If these people were convinced that death could be caused at a distance, by magic, why would they take the risk of fighting their enemies face-to-face with real weapons? Why not always use sorcery?

If one were to argue that the purpose or function of sorcery is to merely influence the sorcerer himself (for example, reduce his anxiety), the facts of Australian sorcery would not support this proposition. In many cases, people seek to prevent sorcery from being practiced, and sorcerers are sometimes punished or even killed. Why should others be concerned with suppressing something whose only significant effect would be on the sorcerer himself? Further, if the sorcerer's goal were simply to reduce his own anxiety, why would he not perform his activity in true privacy, where he could not be detected by the victim (or anyone else) and possibly criticized for his actions? Indeed, if magic in general was performed simply because it was believed to have its alleged effects, there would be no need for anyone else to know about it. Not only would the rituals be regularly performed in private, there would be no need ever to talk about the rituals or their alleged effects. However, if magic is a form of communication, other people must be aware of both the ritual and the claim about its effects, because magic can influence individuals only when they are aware of its performance.

The pointing rituals typically are performed in front of many people with little or no concern about who might see them. In bone pointing, the sorcerer faces his victim and actually points or throws the bone at him; he does not hide in the bush and perform the act in secret. The accompanying chants are sung out loud, not simply thought or secretly mumbled. In some cases there may be some effort to limit the number of individuals who see and thus may be influenced by the rituals. However, the fact that humans often strive to restrict those who observe their rituals supports

rather than challenges the claim that rituals are communication (Andersen 1972; Palmer 1990; 1991). Even in the rare cases when the rituals are done in private, the claim that the act has certain effects is not kept entirely private. Indeed, without hearing of such talk people would not classify the acts as magical rituals. There may be truly private rituals that are done in private and never talked about, but these are not written about in ethnographies because anthropologists would have no knowledge that such rituals existed.

Usually the only part of sorcery that is potentially secret is the identity of the practitioner of the magic. The victim is aware that an act of magic against him has taken place. The special objects, "medicines," and charms used by the sorcerer are left in a place where they can be discovered by the victim or his relatives, even if their preparation and placement has been done anonymously. In addition, the victim may actually hear, or hear of, the incantation. This "secret" but discoverable activity obviously has a different impact than one done publicly. For one thing, the sorcerer, like the anonymous phone caller, may want his victim to know that an anonymous someone wants him to die because of his behavior. The effects of such anonymity—making it impossible to know, and perhaps confront, the sender—could well increase the impact of the message.

These facts are consistent with the proposition that the aim of Australian Aboriginal sorcery is communication. In this case, the sorcerer's actions are visible and can be observed by his audience, who are thereby made aware of the sorcerer's displayed intentions. The sorcerer does more than state his desire that the victim die; he exhibits behavior said by the ancestors to kill a person. The elaborate preparations, which include time spent in learning the proper techniques and songs, emphasize the seriousness of the communication and strengthen its message. The sorcerer's willingness to suffer during the performance further increases the impact of his message (see Palmer, Steadman, and Cassidy 2006). From this point of view, the particular objects used in the ritual are simply appropriate symbols. Objects that have been in contact with, or are similar to, the victim are used to identify the receiver of the communication. Objects that are similar to objects used in real acts (a sharp bone is similar to a spear that could actually kill a person) identify the content of the communication. This is why magic so often appears to follow Frazer's Laws of Similarity and Contact. That the objects are prepared carefully increases the seriousness of the communication.

If the aim of sorcery is indeed to send a message, we should not be surprised that many individuals are interested in controlling and sometimes preventing the use of sorcery. At the very least, sorcery is a hostile act; it communicates a hostile message. It can stir up angry feelings and quarrels and fights between the sorcerer and the victim and their supporters. Sorcery also can intimidate. Elkin mentions that in one Australian

tribe, "the old men are seizing upon it as a method of restoring their authority" (1964, 290).

To understand fully why sorcery is performed we also must identify the consequences of the message. To do this we must distinguish the audience, including the victim, and how it is influenced. Individuals sometimes perform sorcery against members of their group who have committed incest. It is clear that the message communicated to the wrongdoer, as well as to anyone else who becomes aware of it, is severe disapproval of incestuous behavior and the intent to take action against it. The support shown by the number of influential individuals participating or supporting this act of sorcery obviously could discourage individuals from committing incest in the future. Such sorcery is a serious declaration of intent to harm or punish, more powerful than criticism or gossip but significantly less so than actually killing the wrongdoer.

Individuals sometimes die as a result of being sorcerized. Walter Cannon (1942) documented the physiological responses to the fear and anxiety caused by sorcery that can lead to death. The operation of the sympathetic nervous system in situations of stress, if continued over a period of time, can lead to a drop in blood pressure and oxygen deprivation of the organs. These symptoms are the same as those described as shock, which results from physical stress and frequently from injury. He argues that only a strong belief in the effectiveness of sorcery can explain these deaths; the belief causes the victim to feel afraid and, certain of his death, to make no attempt to recover from the resulting effects. The victim even contributes to his own demise by refusing food and water. How else can this be explained except by assuming a powerful belief in the effectiveness of sorcery?

In his article, Cannon, using W. Lloyd Warner's material ([1937] 1964), focuses on Australian bone pointing. In this case, as in any case of sorcery, for the victim to be influenced he must become aware that he is being sorcerized. Not every act of sorcery results in death, and the conditions under which death occurs, at least in the instance of bone pointing, support the hypothesis that what is crucial is the message communicated. Cannon reports that in some cases the close kin and friends of the victim gather around him and have countermagic performed. If this happens, the intended victim is said to always survive. When death occurs it is under different circumstances—the family and friends of the victim choose to withdraw their support from him and treat him as if he were already dead.

The victim's friends and family, then, have a choice. When they choose not to perform countermagic, it is clear that they have chosen to support the sorcerer and his message of ill will rather than the victim. They will return to the still-living victim and perform mourning ceremonies as if he had already expired, thus communicating their acceptance of his death. According to Cannon, this is the final blow, and the victim soon dies.

It is not surprising that the victim should find such a message devastating. Those on whom he depends for his aid and protection, for his livelihood, for his life, have rejected him. An Australian Aboriginal person in this situation does not have the modern alternative of moving to a new town, finding a job, and making new friends. It is not surprising that the recognition of his total alienation, the loss of all his social relationships, should produce fear and anxiety that may indeed lead to death.

Although in the example of bone pointing the result may be the victim's death, we do not want to suggest that the aim of sorcery in general is to destroy the victim. On the contrary, sorcery is a substitute for violence. We suggest that its basic aim is to influence the victim's behavior, and perhaps that of those close to him. The sorcerer, by communicating that the victim has done something serious enough to warrant death or injury, may influence him to discontinue his objectionable behavior or leave the community. What is distinctive of a victim of sorcery is that he has behaved in a way that has deeply offended the sorcerer and/or his supporters (see Hogbin 1964, 55–58). By communicating acceptance of the supernatural claims of sorcery, the sorcerer's supporters communicate their willingness to accept the sorcerer's disapproval of the victim's behavior and, hence, their willingness to cooperate in acts of punishment against the victim. Sorcery is a powerful, but nonviolent, means of letting the victim know this.

Sorcery, like magic generally, is traditional. The formula and knowledge of the paraphernalia are learned from ancestors along with when, by whom, and for what reason it should be performed. All of this reduces the likelihood that it will be done casually or by the inexperienced or uninitiated. Furthermore, to the extent the practice is derived from ancestors, they are part of, and give considerable authority to, the message. In small communities, where everyone is more or less related (and this has been the social setting for humans throughout the majority of our evolutionary history), violence may threaten these relationships. Where individuals share the same traditions and ancestors, sorcery can be seen as one kind of ancestral influence on descendants to cooperate with one another.

What are the effects that can account for its traditional persistence?

Sorcery, directed toward a known individual often living in the same community, permits individuals to influence those who have strongly offended them and to avoid the disruption of social relationships that might occur were more direct or physical action taken. Sorcery allows an individual (often anonymously) to let another know that his behavior is offensive, even unacceptable to the point that it warrants death. The consequence desired is that the victim discontinue his socially destructive behavior. However, the sorcery also communicates that if the socially destructive behavior continues, the consequence will be death. Thus, although there is no evidence that anyone literally believes "that magical speech . . . could be launched as 'breath' and transformed into magical missiles by accred-

ited magicians" (Tambiah 1990, 74), this is an appropriate metaphor. The talk that distinguishes magic from other acts of communication can indeed influence the participants in the verbal interaction in ways that have the same consequence (such as death) as an attack by physical weapons.

OTHER FORMS OF MAGIC

Not only sorcery but also other forms of magic can be seen as communication. Curing magic, for example, may take the form of elaborate rituals, such as the well-known Navajo curing ceremony described by Clyde Kluckhohn and Dorothea Leighton (1962). This ceremony is said to operate through the influence of supernatural beings, but its effects are said to be automatic; failure is said to result only from a mistake in the performance, not from the will of the supernaturals.

The Navajo curing ceremony requires hiring a specially trained professional "Singer," and the ceremony, or "chant," may take several different forms involving a number of activities lasting two, three, or five nights. All participants in the curing ceremony must observe special restrictions on their behavior, including sexual abstinence. Ceremonies may include a sweatbath or bath in yucca suds, making prayersticks, and singing throughout the night. A common feature is the making of a drypainting. Such paintings are made by sprinkling powdered charcoal, minerals, or vegetable matter in various colors on a piece of buckskin. There are many traditional designs, ranging in size from miniatures to some over twenty feet long. They may require the work of two people for only an hour or up to fifteen people for most of a day. If the chant lasts for several days, one painting may be made each day. When the drypainting is finished, the patient sits on it and the Singer treats him. The Singer gives him herbs to drink and prays for his recovery while touching various parts of his body. The painting is then destroyed (Kluckhohn and Leighton 1962, 217–21).

An obvious feature of this ceremony is that it can be very costly. The professional Singer and his assistants—trained specialists—must be paid, and all who attend must be fed. The length and elaboration of the ceremony is determined not by set rules but by how much the patient's family is willing to pay. Kluckhohn and Leighton note that "during the chant the patient feels himself personally . . . being succored and loved, for his relatives are spending their substance to get him cured, and they are rallying around to aid in the ceremonial" (1962, 231). We suggest that this message is precisely the aim of the ceremony: to demonstrate that the patient is loved and cared for by those supporting the ceremony. The impact of the message is not only on the patient but on all those who attend, some from long distances. Such behavior implants a memory that is likely to encourage social behavior between the participants, for they all have sacrificed for the patient, usually their kin.

The Navajo say that the ceremony will not only cure physical illness but "also 'change' [the patient] so that he will be a better man in his relations with his family and neighbors" (Kluckhohn [1942] 1972, 104). A Navajo who had just been released from jail for beating his wife and stepdaughter told Kluckhohn, "I am sure going to behave from now on. I am going to be changed just like somebody who has been sung over" (p. 104). Being sung over, then, is seen not simply as curing the patient of a physical malady but as improving the patient's behavior toward others. Kluckhohn indicates that the Navajo themselves recognize these consequences. A myth of the origin of the ceremony states, "The ceremony cured Dsiliyi Neyani of all his strange feelings and notions. The lodge of his people no longer smelled unpleasant to him" (p. 104).

It is this effect that accounts for the persistence of this ceremony—why individuals repeat it generation after generation regardless of their beliefs and whatever the physical results. The particular explanation (given by the participants, and accepted literally so often by anthropologists) appears to be intimately part of the ceremonies themselves—traditional metaphorical claims that justify and thereby encourage their practice.

Other forms of magic also are communicative. In sailing magic, the participants communicate their willingness to cooperate with one another, a quality essential in open-sea sailing. This explains why the greatest amount of fishing magic is found in fishing activities requiring the greatest cooperation among crew members (Palmer 1989). Love magic communicates to a person that she or he is sexually desired. We propose that all magic rituals can be shown to be communication aimed at influencing an audience.

Magic refers to techniques distinguished by a "supernatural" claim of their efficacy. Magic, like prayer, does not depend on its alleged physical results; indeed, such effects are irrelevant. Magic can influence individuals only when they are aware of its performance and its message: of lust, anger, concern for a person's health or his garden, military or sailing venture, and so on. Because the messages are not only symbolic but also usually traditional, they tend to be sent between individuals sharing the same traditions—specifically, the same ancestors and the same shared understandings of their traditional importance. The various kinds of magic, as forms of communication, encourage cooperation among individual codescendants. The most significant observable effect of magic is that it communicates. It influences an audience by the use of symbols appropriate to the message.

This communicative effect of magic can account for both the variety of magical practices and their regular encouragement by ancestors. Typically, "magic is traditional" (Malinowski 1979, 40). Based on its universality, the techniques involved, the claims about the effects of the techniques, and the ceremonies associated with them have been passed down from generation to generation for many thousands of years. We suggest that magic is one type of religious tradition that increased in frequency in succeeding

generations through its effect of promoting cooperation and avoiding conflict among codescendants or kin.

Not only does magic involve specific claims encouraging particular types of cooperative behavior, but the acceptance or rejection of the supernatural claim that magical techniques work as claimed has significant consequences for cooperation as well. If, as we suggest, the distinctive feature of a supernatural statement is that it cannot be verified and, hence, cannot be disproved by evidence, the rejection of such an assertion has the effect of rejecting the authority—the influence—of the individual who makes the statement and perhaps all those who make the same sort of statement. An individual faced with an assertion about something identifiable can cite evidence disputing it. One faced with a supernatural assertion does not have this option. Rejection of a supernatural claim implies rejection of the speaker's influence and authority. Such rejection can have enormous social consequences, especially when the speaker is an influential elder.

The consequences of accepting or rejecting claims that traditional magical techniques work, however, far exceed the simple acceptance or rejection of the influence of the person making the claim. To reject, deny, or ignore a traditional supernatural claim is to reject not only the person making it but also one's ancestors—the source of one's existence, one's traditions, and one's kin. When the influence of ancestors is not accepted, their descendants (kin of one another) are unlikely either to identify one another as kin or to cooperate with them. Traditions—implying a responsiveness to ancestral influence—will be lost. Disregarding ancestors, and hence traditions and kin, therefore has two important consequences: (1) it disrupts the acquisition of "successful" behavior (the ancestors have survived and left descendants with that behavior), and (2) it eviscerates the influence of those individuals themselves on their own descendants. It is difficult to guide one's descendants when one has defied one's ancestors. This evolutionary perspective overcomes objections to nonevolutionary functional explanations (Penner 1999; Lawson and McCauley 1984) that "are unable to explain why a particular trait has come to serve a certain function when alternative traits could also serve that function" (Thornhill and Palmer 2000, 7).

CONCLUSION

Much of the research on magic and religion asks "Are religious statements meaningful?" (Klemke 1999, 57). We suggest that the answer is "Yes" in the sense that magical and religious assertions profoundly influence the behavior of those who hear the statements, the behavior of the speaker who hears others communicate acceptance of them, and the relationship between the participants in such acts of communication. From this perspective, not only are such acts of communication meaningful, but participation in such acts is entirely logical. If involvement in a magical seafaring

ritual produces greater cooperation and willingness to sacrifice for each other among a crew, there is nothing nonlogical about engaging in such an activity before putting one's life in the hands of fellow crew members on a long ocean voyage. If participation in garden rituals increases the amount of altruism exhibited by neighbors, there is nothing nonlogical about participating in such a ritual if one will be relying on the altruism of neighbors in the event of crop failure.

Many approaches to magic would start their explanation of the magic performed by the Hewa men described at the beginning of this article by assuming that the men believe their claim that drinking the bloodied water really makes them invulnerable to the arrows and spears carried by retaliating kin of the slain woman. Such an explanation would focus on how the Hewa men mistakenly held to this belief despite their memories of others' having been killed or themselves wounded by kin of earlier victims even after they performed such a ceremony. In contrast, we attempt to explain this ritual by examining the identifiable effects of the behavior. The ritual communicates that all of the men are responsible for the killing and need to cooperate to withstand potential retaliation. Any increase in cooperation toward this end resulting from this communication would be far from nonlogical. Indeed, it could be a matter of life and death.

NOTES

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