Psychological Foundations of Cultural Forms

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### 1 Cognitive constraints on religious ritual form: a theory of participants' competence with religious ritual systems

#### Paradoxes, puzzles, and explanatory problems

Some rituals captivate the imagination. Others provoke boredom.

We are easily moved, often excited, and occasionally even astounded by the sights, sounds, and smells accompanying ritual spectacles. These events stimulate our senses, enliven our emotions, and captivate our minds. The enthronement of popes, the inauguration of presidents, the burial of heroes arrest our attention and embed memories that last a lifetime. Everyone loves sensory pageantry. Some rituals focus the attention, feed the imagination, evoke the remembrance of things past as well as the desires of things to come, and inspire dramatic actions that stand out against their everyday background. Yet the salience of such dramatic spectacles should not obscure the fact that "ritual" often refers to the repetition of small and thoroughly mundane acts. Even though these rituals break with the ordinary world too, they frequently remain thoroughly humdrum. They trigger automatic responses that appear to be completely mindless. If we focus on participants' psychological responses in ritual situations, we cannot fail to notice the different degrees of emotion involved in these two sorts of cases. Some rituals are so emotionally arousing that their effects seem to last forever. In other rituals emotion seems to play little, if any, role.

Compare, for example, the comparatively lavish preparations for weddings and their impact on the participants' emotions with the more modest accouterments and emotional responses connected with routine blessings. The weddings quite regularly involve special music, clothes, foods, and more. By contrast, priests often perform blessings almost as an afterthought.

To draw out this contrast particularly sharply, consider the following comparison between two ritual practices of the Church of England. Any regular member of the Church of England participates in worship services that are structured by the *Book of Common Prayer*. It provides a blueprint for various ritual acts that priests and participants are expected

to perform. Some acts apply to everyone whether they are commoners or royalty. But there is nothing like a special royal occasion to highlight the differences between rituals that arouse the emotions and are only infrequently performed and other rituals in the same tradition that are regularly performed and carry little emotional intensity. For example, at the coronation of Elizabeth II, the monarch of the United Kingdom, in Westminster Abbey, not only did all of the ritual participants wear special garments and priceless jewelry, but this very special event was marked by sounding trumpets, singing choirs, chanting priests, cheering crowds, and the participants traveling in horse-drawn carriages (in the age of the automobile).

British coronations are both affairs of state and matters of religion, because the Queen is not only the symbolic head of the government but also the symbolic head of the Church. On this particular political and religious occasion the sensory pageantry in the abbey (and outside for that matter) was overwhelming, the emotional reactions it elicited were considerable. Coronations are infrequent affairs, yet in this same abbey, the scene of this unrivaled splendor, participants perform religious rituals in which they sit and then kneel and then sit again, time after time, as they follow once again the order of service for the day. This stark contrast suggests that it is important that students of religious ritual distinguish the comparatively infrequent ritual situations involving striking levels of sensory stimulation, such as weddings and coronations, from the far more frequent situations of ritual work, which are often quite routine. What puzzles us – what is worthy of scholarly attention – is why ritual systems show such a Janus-face.

With religious rituals, novelty and repetition traffic together in intriguing ways, whether they involve queens or commoners. The fact that ritual phenomena include both activities filled with the sensory pageantry that dazzles and practices that are so repetitious and uninspiring that they verge on the mechanical poses something of a paradox. We want to know why it is that the same system generates phenomena that differ so radically in their emotional effects. Such apparently paradoxical traits encourage us to plumb the depths of religious ritual systems in search of an explanation.

In this book we intend to offer what we hope will be compelling explanations of why some rituals are unique, attention-grabbing events whereas others become such a normal part of daily life that they seem quite commonplace. This paradoxical character of rituals, especially *other* people's rituals, has provided grist for the mills of some of the greatest minds in Western intellectual history. Some researchers focus on the excitement, others on the boredom. Scholars in the tradition of Van Gennep (1960) have noted that some rituals mark and celebrate unique events that are absolutely pivotal in the lives of the participants. Rites of passage stand out from the mundane ritual background and by their very uniqueness tell both the participants and the observers: "this is special; this happens only once in your life; pay attention." Other researchers have highlighted the habitual and mundane aspects of ritual. Their point is to show how ritual is thoroughly integrated into the affairs of daily life. These scholars focus upon the fact that frequently rituals are so common and ordinary that, because everyone is doing them, no one notices them. They merge with the background. People will count their prayer beads as they engage in commerce and make frequent signs of the cross as they enter and leave buildings (or score touchdowns).

#### Other puzzles about ritual

Although this contrast will receive most of our attention in this book, it is by no means the only puzzle surrounding ritual we shall address. For example, some religious rituals permit substitutions whereas others do not. A rite of purification may require water, but if no water is available, what then? Substitute sand. Or a sacrifice may require the slaughter of an ox, but an ox is a valuable commodity. A cucumber may be a perfectly appropriate substitute. Why is it that some rituals permit such substitutions and others do not?

Let us take another example. It makes no sense to reverse some rituals' consequences. When faithful Muslims circumambulate the Ka'bah, there is no reversing the blessings they accrue. On the other hand, some rituals can have their consequences reversed. A priest goes through an elaborate ordination ritual. There are pomp and circumstance aplenty. Bishops and sometimes even cardinals participate in the ceremony. Family and friends crowd the aisles of the cathedral. But in contrast to the blessing a Muslim accrues, this ordination can be revoked. Or a person who has been brought into a state of communion by a special ritual of confirmation might be excommunicated. It seems as if sometimes what the gods have done can be undone. Why is this so? And how does it come about?

Rituals generate other contrasts that beg for explanation. For example, some rituals require specially qualified people to bring about their effects, while others do not. Any Yoruba can make an offering at a local shrine but only authorized diviners can carry out divinations. Similarly, anyone can observe some rituals, whereas others remain closed. Consider, for

example, the election of a new pope. Only by observing the color of the smoke from the Vatican do observers have any clue as to what is going on among the cardinals.

#### Competence theories and empirical research

Before proceeding further, we should say a few words about competence theories. Competence theories were first proposed in the study of language. Competence theories in linguistics attribute to the cognitive systems of speaker-listeners of a language a wide array of grammatical principles and processors that generate an even wider array of abstract linguistic structures. The cognitive representations of these general principles and the specific structures they beget underlie speaker-listeners' linguistic competence, i.e., their abilities both to produce and comprehend linguistic strings and to render an assortment of relatively systematic judgments about the syntactic and semantic character of those strings.

These abilities are manifest when language users confront errors. Not only do they readily detect them, they often have robust intuitions about the differences between the various sorts of errors. So, for example:

1 Inquisitive verdant ruminations snooze fiercely.

2 John singed the song before he departed.

3 Harry ringed the bell when the signal was given.

Most native speakers of English recognize both that item (1) differs from items (2) and (3) concerning the character of their abnormalities and, by contrast, that the problems with items (2) and (3) are similar in origin. Such linguistic competence is a form of tacit or intuitive knowledge. Language users do not have conscious awareness of or control over the principles and representations at stake. Once acquired, our cognitive systems for the processing of language seem to work largely automatically.

In *Rethinking Religion* we proposed a theory of religious ritual competence (despite dire warnings about competence theories' sole applicability to linguistic materials). We adopted the competence approach to theorizing about religious ritual because of the striking similarities we noted between speaker-listeners' knowledge of their languages and participants' knowledge of their religious ritual systems. Both languages and religious ritual systems are examples of what we called "symbolic-cultural systems." Symbolic-cultural systems involve symbolic phenomena whose forms are relatively restricted in both their use and their transmission. Linguistic and religious ritual forms are usually not explicitly codified, unlike civil law. Usually very little about these systems is directly taught. They are the kinds of system about which explicit instruction is, at least sometimes, completely absent, and about which, therefore, participants must have some form of intuitive knowledge. That knowledge is revealed by their acquisition of and successful participation in the systems and by their judgments about real and possible uses of the symbols within the systems (Lawson and McCauley, 1990, pp. 2–3).

In our original presentation of the theory of religious ritual competence we looked primarily to religious ritual participants' intuitions about religious rituals as evidence for our claims. With little, if any, explicit instruction, religious ritual participants are able to make judgments about various properties concerning both individual rituals and their ritual systems. These include inferences about religious ritual forms and relationships and about the efficacy of ritual actions.

Our discussions of these matters in *Rethinking Religion* were instructive but informal. Little of the evidence we cited there arose from empirical research about aspects of ritual performance from experimental psychology. In fact, experimental evidence is still hard to come by, though the situation has improved recently. (See Boyer and Ramble, 2001, Barrett, 2000, and Barrett and Lawson, 2001.)

This feature of competence modeling in linguistics (viz., inattention to independent experimental evidence) has attracted substantial criticism over the years, but there is no principled reason why competence theories must remain aloof from a varied range of empirical research. We intend to show how both psychological evidence and detailed ethnographic research can bring performance findings to bear on the shape and fate of competence theories. A competence theory, like any scientific theory, will gain credibility to the extent that it is able to stand up to independent tests with materials it was not originally designed to explain. In addition, competence theories will improve to the extent that they undergo adjustment and revision in the face of recalcitrant findings concerning processing and performance. In fact, it is only when competence theorists prove responsive to research concerning processing and behavior and, when necessary, revise their proposals in its light, that they will be able to use these independent sources of evidence to their advantage. Revisions of competence theories on the basis of performance and processing evidence will not only enhance their empirical accountability but relieve the sense that they are irredeemably idealized as well. We have no doubt that programs of research on competencies with symboliccultural systems such as religious ritual systems will benefit from such interaction.

So long as we demand empirical evidence to substantiate our more speculative probings, a theory of religious ritual competence will contribute to our understanding of religious ritual behavior. The critical point is that these sorts of cognitive analyses provide exciting new tools

for illuminating dimensions of religion that have, unfortunately, suffered from neglect. Future inquiry into religion should benefit from the fact that cognitive studies have already made significant discoveries about how minds work. What we intend to show is that the resources of cognitive science can make valuable contributions to the scientific study of religion.

#### A road map for this book

In order to allay such concerns about our own competence theory we shall explore in this book some of our theory's notable implications for the interactions of psychological processing and religious ritual performance. We shall test how well those implications square with both ethnographic details about religious ritual performance and relevant theories and experimental findings from psychology.

In the next section we shall lay out the basic commitments of our theory of religious ritual competence. One of our central theses in this book is that the cognitive variables our theory isolates provide critical insights into the connections between religious ritual and memory dynamics. Two means of enhancing memory that religious rituals routinely enlist are performance frequency and emotional arousal. Presumably, enhanced memory is a relevant consideration in understanding the process of cultural transmission, especially in non-literate societies. Chapter 2 explores these issues and reviews relevant work in psychology and anthropology, showing, in particular, how recent research in cognitive psychology on enhanced memory bears on these questions.

In chapter 3 we examine two cognitive hypotheses for explaining the connections between ritual and memory dynamics. The first is the frequency hypothesis, which holds, in short, that the amount of sensory stimulation (and resulting emotional excitement) a ritual incorporates is inversely proportional to its performance frequency. Harvey Whitehouse offers the most formidable and best defended version of this hypothesis in various papers and in his books Inside the Cult (1995) and Arguments and Icons (2000). The second is our own ritual form hypothesis, which holds that aspects of the representations of ritual form our theory delineates explain and predict the comparative levels of sensory pageantry religious rituals incorporate. We show that our theory of religious ritual competence, which inspires the ritual form hypothesis, (1) characterizes the forms of religious rituals precisely, (2) specifies principles for distinguishing among these forms, and, therefore, (3) has the resources for dealing with problems that the frequency hypothesis both occasions and cannot, itself, handle. The ritual form hypothesis makes the correct predictions about the connections between performance frequencies and the comparative levels

of sensory pageantry and emotional arousal religious rituals incorporate (the principal topic of chapter 4). It also points to further grounds, viz., motivational ones, beyond considerations of memory, for why rituals of different forms have the levels of sensory pageantry that they do. Chapter 3 opens with an extended summary of Whitehouse's ethnography because it supplies many of the materials we shall use to assess the two hypotheses' predictive and explanatory merits.

We devote chapter 4 to a sustained discussion of the comparative predictive and explanatory virtues of the ritual frequency and ritual form hypotheses by examining a wide range of relevant empirical evidence. We are able to compare the two hypotheses so extensively because both are clear (at least compared with most theoretical proposals in the study of religion) and both make straightforward predictions. In many situations the two hypotheses make the same predictions, but in some they do not. It is the latter on which we focus.

In short, both hypotheses do well, but the ritual form hypothesis does considerably better. In *Rethinking Religion* we showed that the Principles of Superhuman Agency and Superhuman Immediacy generate a typology of ritual forms, which organize and thereby, in part, explain a number of features about religious rituals. In chapter 4 we show how the principles that generate that typology of religious ritual forms account for when religious rituals enlist emotional stimulation and when they do not. We also argue that these principles go some way toward explaining *why*. Both hypotheses get at critical cognitive variables, but we shall argue at length that religious ritual form proves the more fundamental of the two, since, among other things, it constitutes what is, perhaps, the principal variable determining rituals' performance frequencies. Therefore, it also constitutes a sounder cognitive foundation for any broader theory of religious modes.

The first half of chapter 5 continues comparing the two hypotheses' explanatory and predictive strengths. In the course of that comparison we sketch a dynamical systems account of the principal cognitive and psychological constraints on the evolution of religious ritual patterns. That account shows how our theory makes sense of some larger historical patterns in the evolution of ritual systems. Although we focus primarily on the details of Whitehouse's ethnography, our aim is to show how our theory's analysis of this case reveals larger patterns in the evolution of religious ritual systems (and of religious systems generally) that cut across cultures and historical epochs.

We examine the eruption of ecstatic movements in religions. Sometimes this phenomenon is linked with religious ritual systems abandoning (or at least minimizing) rituals clustered in certain regions of an abstract space

of possible ritual arrangements. By explaining why a religion's system of ritual practices will inevitably repopulate this region, our theory anticipates not only one of the most basic patterns in the evolution of religious ritual systems but also one of the factors that apparently enhances *the fitness of a religious ritual system in any cultural setting*. Identifying both stable configurations and characteristic dynamic patterns in the space of possible ritual arrangements enables us to clarify how micro-processes at the psychological level are responsible for sustaining these kinds of religious ritual systems. Our aim is no less than delineating the cognitive architecture of *Homo religiosus* – not merely to understand well-known historic patterns in religious systems better but also to *explain* them.

#### A theory of religious ritual competence

Theorizing about religious ritual systems from a cognitive viewpoint involves (1) modeling cognitive processes and their products and (2) demonstrating their influence on religious behavior. Particularly important for such an approach to the study of religious ritual is the modeling of participants' *representations* of ritual form. In pursuit of that goal, we presented in *Rethinking Religion* a theory of religious ritual form that involved two crucial commitments.

The theory's first commitment is that the cognitive apparatus for the representation of religious ritual form is the same system deployed for the representation of action in general. The differences between everyday action and religious ritual action turn out to be fairly minor from the standpoint of their cognitive representation. This system for the representation of action includes representations of agents. Whether we focus on an everyday action such as closing a door or a ritual action such as initiating a person into a religious group, our understanding of these forms of behavior as actions *at all* turns critically on recognizing agents.

The theory's second crucial commitment (1990, p. 61) is that the roles of culturally postulated superhuman agents (CPS-agents hereafter) in participants' representations of religious rituals will prove pivotal in accounting for a wide variety of those rituals' properties. On our view religious ritual systems typically involve presumptions about CPS-agents.

Amazingly (by our lights anyway), our claim that a (conceptual) commitment to the existence of CPS-agents is the most important recurrent feature of religion across cultures is controversial. With everything from Theravada Buddhism to Marxism to football in mind, various scholars in theology, religious studies, the humanities, and even the social sciences maintain that presumptions about CPS-agents are not critically important to religious phenomena. On this view cheering at football games or marching at May Day is just as much a religious ritual as is sacrificing pigs to the ancestors. Perhaps this is so. In that case what we have, then, may not be a theory of religious ritual. Instead, it is only a theory about actions that individuals and groups perform within organized communities of people who possess conceptual schemes that include presumptions about those actions' connections with the actions of agents who exhibit various counter-intuitive properties.

If that is not religion (and religious ritual), so be it, but we suspect that this description of our theoretical object covers virtually every case that anyone would be inclined, at least pretheoretically, to include as an instance of religion and very few of the cases they would be inclined to exclude. Overly inclusive views of religion confuse the problematic claim that only meanings matter with the even more problematic claim that all meanings matter. Hence, on these views, virtually anything may count as religion (depending upon the circumstances). Fans of such views should keep in mind, then, that on their view what we are advancing is not a theory of religious ritual. To adherents of these less constrained views of religion, we should repeat that we have only supplied (pardon the redundancy) a theory about actions that individuals and groups perform within organized communities of people who possess conceptual schemes that include presumptions about those actions' connections with the actions of agents who exhibit various counter-intuitive properties.

We do not desire to engage in debates about definitions. In science explanatory theories ground central analytical concepts. Those concepts earn our allegiance because of the achievements of the theories that inspire them. These include their predictive and problem-solving power, explanatory suggestiveness, generality, and empirical accountability. Whatever explanatory value construing "religion" in such a manner exhibits turns on whether or not the theory we have elaborated provides empirically useful insights about religious ritual.

Rituals often occasion an astonishingly wide range of interpretations not only from observers in the field but even from the participants themselves. Their own testimony reveals that the planting of this bush means one thing to the wedded couple, another thing to their neighbors, and a third thing to the ethnographer who questioned them. Even when authorities intent on maintaining the status quo vigilantly police doctrines, the blooming of interpretive schemes remains a wonder to behold.

While the meanings associated with rituals may vary, such variability typically has no effect on the stability of the ritual actions' underlying forms. Although they have brought nearly as many interpretations as the times and places from which they hail, pilgrims to Mecca continue to circumambulate the Ka'bah the same way year after year. Whether in

Rwanda, Rio, or Rome only communicants are eligible to participate in the mass and only priests are eligible to perform it. Not only do other things matter besides meanings, for some explanatory purposes meanings hardly matter at all.

We have just rehearsed the respect in which rituals' details are independent of meanings either participants or scholars assign them. It is important not to confuse these proposed semantic contents of rituals with factual details about their elements. Interested parties may attribute some meaning or other to the fact that an orthodox rabbi must be a male, but that fact is not the same thing as proposals about its significance. Some points of detail may permit considerable variation, such as how high the priest elevates the host, whereas others, like the circumcision of Jewish boys, may not.

We think that religious ritual form and the properties of rituals it explains and predicts are overwhelmingly independent of attributed meanings. There is also a respect in which some very general features of ritual form are independent not only of meanings but even of these specifically cultural details. In other words, these very general features of religious ritual form are independent of both semantic and cultural contents. Clarifying these general features of action is valuable for distinguishing the roles CPS-agents can play in participants' representations of their religious rituals.

#### The action representation system

Distinguishing ritual form from both semantic and cultural contents will prove useful for many analytical and explanatory purposes. Our cognitive system for the representation of action imposes fundamental, though commonplace, constraints on ritual form. Attention to these constraints enables us to look beyond the variability of religious rituals' details to some of their most general underlying properties. The point, in short, is that religious rituals (despite their often bizarre qualities) are actions too. (Ritual drummers ritually beating ritual drums are still drummers beating drums.) Consequently, this general system for the representation of action is also responsible for participants' representations of their religious rituals' forms.

From a cognitive standpoint, then, postulating special machinery to account for the representation of religious rituals is unnecessary. The requisite cognitive equipment is already available. A wide range of evidence from developmental psychology indicates that human beings readily distinguish agents and actions from other entities and events at an early age. (See, for example, Rochat et al., 1997.) At as early as nine months of age, they seem capable of not merely recognizing agents but attributing goals to them (Rochat and Striano, 1999). This cognitive machinery seems task specific, and it is – with only a few exceptions – ubiquitous among human beings (Baron-Cohen, 1995).

This assortment of resources is what we have collectively referred to as the human "action representation system" (Lawson and McCauley, 1990, pp. 87–95). This action representation system must account for humans' command of the distinctions between agents and other entities and between actions and other events. To summarize, then, we hold that the representation of religious rituals requires no special cognitive apparatus beyond the garden-variety cognitive machinery all normal human beings possess for the representation of agents and their actions.

Cognitive scientists, especially psychologists working on cognitive development, have thought a good deal about how human beings represent and distinguish agents. (See, for example, Leslie, 1995.) Human infants seem particularly sensitive to things in their environments that move irregularly through both space and time. They construe agents as animate entities capable of self-motion who can initiate actions. Presumably, agents do so because they have interests that determine their aims and goals. They are thought to be capable of acting in ways that enable them to achieve those goals, because they seem capable of representing these counterfactual situations to themselves. All of the things that we are tempted to classify as agents seem to have these features in common. Whether agency is properly described as including the ability to entertain attitudes toward these representations is less clear. Even when they cannot see it, dogs seem to *desire* their food when they are hungry, but it is a good deal less obvious just what exactly they might be said to believe about it. As humans mature they come to attribute fully intentional minds to at least some agents – principally, other human beings. They entertain quite complex representations of such agents. They represent them as capable of entertaining a wide array of attitudes toward their (mental) representations. They also represent them as possessing higherorder mental states whose representational objects are themselves mental representations, and finally, they represent these agents' prodigious representational abilities as pivotal to accounting for their actions. So, for example, humans can readily understand Lucy's flipping the switch in terms of her thinking that Ricky thought that she wished to keep him in the dark.

Agents and their agency are clearly the pivotal concepts for the representation of action, but they are not the whole story. A basic representational framework for characterizing this special sort of event must also capture familiar presumptions about the internal structures and external relations of actions too. Most straightforwardly, actions involve agents who do something often, though not always, to something. We should

note here that while cognitive scientists have proposed interesting accounts of our understanding of agency, they have had much less to say about our understanding of actions. We hold that whether a religious ritual action involves waving a wand to ward off witches, building a pyramid to facilitate the flight of a pharaoh to the realm of the gods, or lighting a fire to summon the presence of a spirit, representing such actions will depend upon exploiting a dedicated cognitive system for action representation. Our theory of religious ritual offers some general, preliminary proposals about that system.

In *Rethinking Religion* we introduced a formal system to increase the clarity and precision of our theory's claims about the action representation system and, therefore, about the forms of the religious rituals whose representations it assembles.<sup>1</sup> The precision of formal systems aids in the detection of significant relationships and connections among the phenomena modeled. As a matter of fact, the formal system we employed and the diagrams it generates introduced an exactness to our descriptions that enabled us to see more clearly how rituals' general action structures and the roles attributed to CPS-agents in particular suggest (non-obvious, unfamiliar) principles for predicting a number of those rituals' features. Assuming these principles describe, albeit quite abstractly, capacities that are psychologically real, they also constitute a first pass at an empirically testable hypothesis about the cognitive mechanisms behind participants' abilities to produce judgments about those features.

The formal system employs a set of categories and generative rules for representing action and, thereby, participants' conceptions of religious ritual form. The categories signify the basic components involved in the representation of *any* action. They include participants, acts, and the appropriate qualities, properties, and conditions sufficient to distinguish them. (See, for example, Lawson and McCauley, 1990, p. 120.) The rules describe basic action structures that any normal human being could readily recognize. They generate structural descriptions of people's representations of actions, including their ritual actions. (The diagrams we mentioned in the previous paragraph, which populate many of the pages in *Rethinking Religion*, depict such structural descriptions.) Rituals' structural descriptions portray basic action structures, which:

- 1 include the roles (agents, acts, instruments, and patients<sup>2</sup>) that distinguish actions (and rituals) from other events and happenings;
- 2 take as ritual elements the various entities and acts, as well as their properties, qualities, and conditions, that can fulfill these formal roles in religious rituals;
- 3 presume that at least two of these roles must always be filled (viz., that every action has an agent and that the agent must do something);

- 4 reflect the constraint that although any item filling the role of the agent may also serve as a patient, not all items that serve as patients may also fill the agent role;
- 5 reveal points of variability in the forms of actions such as whether they involve the use of special instruments as a condition of the act; and
- 6 accommodate the enabling relationships between actions, such as whether the performance of one act presupposes the performance of another.

Normal human beings have a ready intuitive grasp of all of these matters, the length of this list and the apparent complexity of its items notwithstanding. That appearance of complexity is a function of attempting to describe precisely what is at stake in these intuitions. In fact, most talk about the "cognitive representations of ritual form" does not involve anything out of the ordinary.

#### A technical sense of "religious ritual"

Actions typically come in one of two sorts. Either they involve agents doing something or they involve agents doing something to something. In other words, some actions do not have patients and some do. In religious contexts only the second sort of action need concern us. Since all religious rituals on our theory involve agents acting upon patients, the structural description of a religious ritual will include three ordered slots for representing a religious ritual's three fundamental roles, viz., its agent, the act involved, and its patient. All of a ritual's details fall within the purviews of one or the other of these three roles. From a formal standpoint accommodating all of the rest of the ritual's details, then, involves nothing more than elaborations on the entries for these three slots. (See figure 1.1.)

Our claim that all religious rituals (as opposed to religious action more broadly construed) are actions in which an agent does something to a patient departs from popular assumptions about rituals. Typically, priests sacrifice goats, ritual participants burn offerings, and pilgrims circle shrines. But in religious contexts people also pray, sing, chant, and kneel. Even though such activities may be *parts* of religious rituals, such activities, in and of themselves, do not qualify as religious rituals in our theory's technical sense. All religious rituals – in our technical sense – are inevitably connected sooner or later with actions in which CPS-agents play a role and which bring about some change in the religious world.

So, for example, initiations are religious rituals on this account. In participants' representations of initiations, CPS-agents are ultimately responsible for the initiate's change in religious status. Sometimes those CPS-agents participate directly. So, frequently, initiations culminate in



Figure 1.1 Action representation system

the initiate meeting the CPS-agent face to face. Often, though, this link to the actions of CPS-agents is indirect. CPS-agents act through their ritually appointed intermediaries, e.g., an ordained priest.

As noted, it follows on this account that many religious activities are not, typically, religious rituals in our technical sense, even though they may be present in ritual practices and qualify as religious acts. It also follows that even many actions that religious persons repeat in religious ceremonies (such as everyone standing at certain points in a religious service) will not count as rituals either.

We defend these decisions on two principal grounds. The first is what we take to be a telling coincidence. Three relevant but quite different considerations bearing upon distinctions among religious actions coincide. Before we turn to the second ground, we offer a brief account of each of these three considerations.

The first consideration is that, invariably, religious rituals, unlike mere religious acts, bring about changes in the religious world (temporary in some cases, permanent in others) by virtue of the fact that they involve transactions with CPS-agents. Those interactions affect to what or whom anyone can subsequently apply the religious category associated with the act in question. Moreover, the performance of a religious ritual - in the sense our theory specifies – entitles anyone to apply the religious category associated with that ritual exclusively on the basis of the intersubjectively available information, as construed within the framework of the pertinent religious system. So, for example, if the priest baptizes Paul or a rabbi circumcises Joel, then henceforth the terms "baptized" and "circumcised" may be used to describe Paul and Joel respectively, regardless of the state of mind of Paul or foel or the priest when the ritual occurred. (What will matter is only that the priest qualifies as an appropriate ritual agent which, itself, turns on the priest's own ritual history.) By contrast, this is not true about religious actions that are not rituals in our technical sense. If Paul prays publicly, all we can say is that Paul has appeared to pray publicly. Paul may have been feigning prayer. Only Paul knows for sure. Whereas when a priest baptizes Paul (under the appropriate publicly observable conditions), anyone privy to this event and the relevant parts of the accompanying religious conceptual scheme can know that Paul has been baptized.

The next consideration differentiating religious rituals (in our technical sense) from other religious activities is what we shall call the "insider– outsider criterion." Although mere religious actions are typically open to outsiders, religious rituals typically are not. (Of course, who counts as an "outsider" may change over time.) A non-Catholic is welcome to pray with Catholics but not to take Holy Communion with them. Although anyone can practice yoga, only boys of the Brahmanic caste can be invested with the sacred thread (Penner, 1975). Anyone can chant Zulu war songs; only Zulus can be buried in the *umuzi* (village). With the exception of what we might call "entry-level" rituals (for example, for juniors or new converts), those who are not participants in the religious system are not eligible to participate in that system's rituals in our technical sense of that term.

The distinction between participants in the religious system and participants in a religious ritual is noteworthy. Except, perhaps, relative to entry-level rituals, the latter category's referents constitute a subset of the former category's referents. This distinction, in effect, helps to explicate the notion of "eligibility" for a ritual. Although every member of the family is a participant in the religious system, only the young adult getting married is a participant in that particular religious ritual.

The final consideration is that rituals are invariably connected with other rituals. While participating in anything other than entry-level religious

rituals turns unwaveringly on having performed earlier religious rituals, carrying out these other sorts of religious actions does not. So, for example, a Jew must have gone through his bar mitzvah in order to qualify to become a rabbi but that ritual accomplishment is not a necessary condition for him to be eligible to pray. Below we shall develop this idea further in the discussion of ritual embedding.

The second ground for employing our technical sense of the term "religious ritual" simply looks to the success of the resulting research program the theory inspires. The argument, in effect, says that if the overall theory is successful on many fronts, then that fact is relevant to the defense of any of that theory's details. Obviously, that's the case we are out to make. In Rethinking Religion we showed that our theory could simultaneously account for an assortment of ritual properties, each of which some others had noted but none of which they had explained - let alone explained in terms of a single, unified theory. Subsequently, other scholars have demonstrated the theory's explanatory power in specific cultural settings (e.g., Abbink, 1995). Now in this book, we show how the theory can explain additional features of religious rituals that we had not even considered before. The argument here, then, is that demonstrating a theory's ability to generate a progressive program of research justifies its technical distinctions, even when they run contrary to widespread, common-sense assumptions. This is not unusual in science. Copernicus' theory rejected the prevailing list of the planets at the time and did not conform to common-sense knowledge about the motionlessness of the earth. The success of his theory redefined what should count as a planet and established that the earth moves. The point of formulating systematic, testable theories in any domain is to get beyond the hodgepodge of suppositions that characterize pretheoretic common sense.

#### Properties and qualities of ritual elements

People are, of course, agents, but they can also be the patients in some actions, including rituals. This does not mean that the agent ceases being an agent but that he or she is being acted upon rather than engaging in action. So, for example, when Brahman priests invest student initiates with the sacred thread as part of the *upanayana* ritual, even though the initiates are agents ontologically, as participants undergoing this investiture they serve as the patients in these ritual acts. In religious rituals agents with appropriate qualities and properties can do things to other agents who function as the patients of those rituals. We turn, therefore, to these qualities and properties, because a theory that only provided for a general structural description of the relationships among agents, acts,

and patients may miss important details. We should be able to represent some ritually salient qualities and properties of the agents, actions, and patients. This requires that we specify, when necessary, what makes the agent eligible to perform the action, what properties a particular act must possess, as well as the qualities of the patients that make them eligible to serve in that role.

The conceptual schemes of particular religious systems will, of course, designate which qualities and properties matter. For example, in one religious tradition it might be necessary for ritual officials to be males, in another that the patient be an unmarried woman who has fasted for three days, and in another that the action be performed at night. Our account of the action representation system can accommodate such cultural variations.

A cognitive representation of a religious ritual will include the formal features that determine participants' judgments about that ritual's status, efficacy, and relationships to other ritual acts. The efficacy of the ordination of a monk in Theravada Buddhism, for example, will have derived from the officiating monks' legitimacy, the appropriate ritual history of the water used in the ritual bath, and the eligibility of the patient. The bathing itself and the previous act of consecrating the water are qualified by the fact that the officiating monks are eligible to carry out such ritual acts. If they are imposters, ritual failure looms. Minimally, it contravenes basic assumptions about the relations between various ritual actions and about those rituals' connections with CPS-agents.

Just as participants possess qualities and properties that may require specification, sometimes conditions on ritual actions do too. Particular ritual acts sometimes require fulfilling particular conditions for their execution; for example, carrying out some task may require particular instruments. Ritual agents often need specific tools in order to do their jobs properly. These tools can be anything the tradition permits – antelope bones for divining, sharp stones for circumcising male children, red ochre for coloring corpses, or nettles for whipping initiates.

Instruments, however, should not be confused with agents. For example, a priest uses incense to sanctify a house or uses rocks of a particular shape to establish a temple site. While these instruments are not the agents, they often specify necessary conditions for the success of the agents' ritual actions. The ritual official may sanctify the house by means of burning incense. What we called the "action condition" in *Rethinking Religion* can specify an element in a ritual, viz., the instrument employed by the agent (the incense) as well as qualities of the instrument the conceptual scheme defines as relevant (in this case, that the incense is burning). A complete representation of a ritual is a representation of an agent with

the requisite qualities acting upon an object with the requisite qualities potentially using an instrument with the requisite qualities.

Sometimes such instruments contribute fundamentally to the outcome of the ritual. (The holy water may be fundamental to the blessing of the parishioner.) If so, it is only by virtue of their ritual connections to superhuman agency that they derive their efficacy. (Water that has not been consecrated is just plain old water.)

#### Enabling actions

In the above cases the requisite qualities of instruments are their own connections with CPS-agents through the performance of earlier rituals. Making sense of a religious ritual typically involves reference to a larger network of ritual actions. The performance of earlier rituals "enables" the performance of the later ones. Because the priest has blessed the water in the font, participants can use it to bless themselves when they enter the vestibule of a church. These earlier rituals that fulfill necessary conditions for the performance of subsequent rituals are what we call "enabling rituals" (or, more generally, "enabling actions"). So, for example, participants can partake of first communion because they were previously baptized. Their baptism enables them to participate in the communion. The validity of their participation in the communion presupposed their successful participation in the divinely sanctioned ritual of baptism.

If there is no direct reference to a CPS-agent in a ritual's immediate structural description, then at least one of its elements must involve presumptions about its connections with one or more (earlier) ritual actions that eventually involve a CPS-agent in one of those rituals' immediate structural descriptions. For example, the action of initiating someone into a cohort of a certain kind requires prior actions performed on the agents involved in the initiation. No uninitiated person can initiate the "newcomer." Ritual practitioners performing the initiation will have to have been initiated themselves. (We shall define ritual "practitioners" as participants who hold some privileged religious status by virtue of which they are able to perform some rituals that other participants, who do not share their status, cannot.) Ultimately, of course, the gods are responsible for the initiating through these connections with the ritual practitioner, i.e., the immediate ritual agents who serve as the gods' intermediaries.

Although it may not always be immediately obvious, ritual actions are systematically connected with one another. The acts involved must follow in a certain order. Some ritual actions presuppose the performance of others. In everyday life, actions of any kind frequently presuppose the successful completion of previous actions, since those earlier actions fulfill necessary requirements for the performance of the action at hand. For example, operating a car presupposes that someone has put gas in the tank. Carrying out a particular religious ritual action typically presupposes the prior performance of another ritual action that enables the current one to be performed.

The classic rites of passage in many religious systems offer the best illustrations. The integration of children into a community precedes their rising to adult status, which, in turn, precedes their marriages. In each case the associated rituals presuppose the successful completion of their predecessors. An example is the sequence of initiation rites among the Zulu. In order for a Zulu male to be eligible for marriage, he has to go through a number of rites of passage starting with the naming ritual and proceeding through the earpiercing ritual, the puberty ritual, and the "grouping up ritual." (See Lawson and McCauley, 1990, pp. 113–121.)

Technically, we can talk about the representation of such a connected set of rituals as "embedded" within the current ritual's structural description. Embedding is a formal notion for representing in their structural descriptions the external relations among rituals that we have described in terms of enabling actions. A diagram of the relationships among these successively performed rituals would start with the *current* ritual (the one under study), which would be depicted at the top of a tree diagram, with all of the logically (and temporally) prior rituals below, connected to it through its ritual elements. So, the *full* structural description of a ritual would include all of these embedded rituals.

A ritual's full structural description contrasts with an *immediate* structural description of its surface features. A full structural description includes that immediate structural description plus the structural descriptions of all of the enabling ritual actions the current ritual presumes as well as accounts of their connections with ritual elements in that current ritual. Recall that in the case of religious ritual, enabling actions are simply (earlier) rituals whose successful completion is necessary for the successful completion of the current ritual. So, for example, weddings are not valid typically, if the priests performing them have not been properly certified ritually by their prior ordination. The priests' ordinations enable them to perform weddings. These ordinations are, therefore, enabling rituals whose structural descriptions must be incorporated (as a property of these priests) into weddings' full structural descriptions.

In the everyday world the exploration of such presuppositions can go on indefinitely either by tracing causal chains (the window broke, because the ladder fell and hit it, because the ground on which it rested was damp, etc.) or by concatenating reasons (John flipped the switch, since he wanted to see the room's contents, since he wanted to ascertain

whether he could load them into the truck in the next ten minutes, since, if at all possible, he wanted to complete that job before the police arrived, since he wanted to avoid arrest, etc.). Religious rituals, while engaging the same representational resources, possess a distinctive feature that marks them off not only from everyday actions but also from the other sorts of routine religious actions we mentioned above (such as standing at various points during a worship service). That distinctive feature is that religious rituals (in our technical sense) always presume an end point to such causal or rational explorations. In religious ritual representations things come to an end. Causal chains terminate; reasons find a final ground. In short, the buck stops with the gods. The introduction of actions involving CPS-agents (or agents with special, counter-intuitive qualities) into the conception of an action introduces considerations that need neither further causal explanation nor further rational justification.

Boyer (2001) has argued that human beings possess moral intuitions that arise spontaneously from their natural competence with social situations and for which they have no considered explanations. He suggests that humans' representations of gods seem capable of grounding these moral intuitions, because they include presumptions about the gods' possession of what he calls "strategic information." The gods possess strategic information because humans presume that the gods have, in effect, a "god's eye view" of human social affairs. They can serve as (hypothetical/mythical) arbiters of moral matters, since they enjoy access to *all* agents' states of mind. (Like Santa, they know if you – and everyone else – have been bad or good, so be good *for goodness sake*.) Of course, not every supernatural entity that religions have proposed possesses this full range of capacities, but at least collectively, not only do they see the big picture, they see – with comparable acuity – all of the relevant intentional details as well.

Religious rituals involve transactions with these strategically informed agents. Armed with this information, the gods – again, at least collectively – have all of the knowledge it takes to *know* what the right thing to do is – morally or ritually. But, of course, knowing the right thing to do is not the same thing as having the power to do it. The gods may meet the necessary epistemic conditions for definitive actions, but why are they also conceived as possessing the *power* to act definitively?

To answer *that* question will require some theoretical extensions of some intriguing psychological findings from other domains. First, human beings tend to ascribe agency far more liberally than the stimuli demand. When we hear unexpected sounds in the basement, we instantly worry about the possibility of intruders. This makes theoretical sense from an evolutionary standpoint. In a world where our ancestors crossed the