Bringing Ritual to Mind

Psychological Foundations of Cultural Forms

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3 Two hypotheses concerning religious ritual and emotional stimulation

Whitehouse's ethnography

In October of 1987 Harvey Whitehouse entered the village of Dadul in the Eastern Province of New Britain Island in Papua New Guinea to begin his fieldwork among the Mali Baining. Unbeknownst to him then, his arrival was one of the catalysts for a series of events that made not only for considerable excitement in the area over the next eighteen months but also for an ethnography (Whitehouse, 1995) that is as theoretically fertile as it is dramatic. Inevitably, the short summary which follows will capture little, if any, of the drama, but it will point to some of these materials' theoretically suggestive aspects.

New Britain Island lies off the eastern coast of Papua New Guinea. The Mali are one of five subgroups of the Baining people, who occupy the rural regions of the Gazelle Peninsula, which constitutes the northern half of the island's Eastern Province. A different ethnic group, the Tolai, occupies the more developed northeastern corner of the Gazelle Peninsula. A third ethnic group, the Pomio, inhabit most of the southern half of the province. Comparatively speaking, the Tolai, unlike the Baining and the Pomio, have prospered from contacts with the industrialized world.

From the late nineteenth century until the end of World War I the area was under German administration. Exclusive of the traumatic Japanese occupation during World War II, from 1919 until independence in 1975, Australia administered the region. Other than government officials, the principal European influences were Christian missionaries, who – by the 1930s and with the cooperation of the Tolai – had both converted the various peoples of the Eastern Province and, for the most part, successfully suppressed their traditional religious systems (Whitehouse, 1995, p. 40). Broadly similar to the religious systems of hundreds of other groups in this region of the world (including the Baktaman), traditional Mali Baining religion focused on sacred relics of the ancestors, a temple for their storage, and – connected with their possession – a system of

infrequently performed initiations as well as a broader collection of rituals, which senior males supervised.

Dadul, where Whitehouse spent the first half of his period of field-work, had arisen as the result of Methodist missionaries' attempts to establish permanent settlements centered around churches. Its residents abandoned Dadul during World War II. It was not resettled until the 1960s, when most of the Baining people in the nearby village of Sunam moved there to avoid domination by and, ultimately, even contact with Tolai immigrants. From the outset it was opposition to Tolai culture and influence that motivated this resettlement of Dadul (Whitehouse, 1989).

The Pomio Kivung

By the mid-1970s nearly everyone in Dadul had joined the Pomio Kivung, which was simultaneously a millenarian cargo cult and a political move-ment seeking autonomy, if not outright independence, from both the cen-tralized national authority and Tolai influence. The Kivung had arisen among the Pomio about fifteen years previously. Pomio Kivung doc-trine holds that adherence to the Ten Laws (a modified version of the Decalogue) and the faithful performance of an extensive set of rituals, including the payment of fines for the purpose of gaining absolution, are essential to the moral and spiritual improvement that is necessary to hasten the return of the ancestors. The most important of these ritu-als aims at placating the ancestors, who make up the so-called "Village Government." Headed by God, the Village Government includes those ancestors whom God has forgiven and perfected.

The spiritual leaders of the Pomio Kivung have been its founder, Koriam, his principal assistant, Bernard, and Koriam's successor, Kolman. Followers have regarded all three as already members of the Village Gov-ernment and, hence, as divinities. All three have resided on earth phys-ically (specifically in the Pomio region of the province), but their souls have dwelt with the ancestors all along.

Achieving sufficient collective purification is the decisive condition for inducing the return of the ancestors and inaugurating the "Period of the Companies." The Period of the Companies will be an era of unprece-dented prosperity, which will result from the transfer of knowledge and an industrial infrastructure for the production of technological wonders and material wealth like that of the Western world. The Period of the Com-panies is, however, also a time of temptation during which the Village Government will be able to ascertain whether individuals will indulge themselves in a time of plenty or whether they will use their newly achieved power and prosperity responsibly, supporting the Kivung movement,

performing Kivung rituals, and continuing to seek absolution through the payment of fines.

The Period of the Companies will be a time of temptation, presumably, because things will not, in fact, be as they seem. The ancestors will not return with the bodies they had on earth. Instead, Koriam claimed, the ancestors will come as white-skinned, "foreign investors" and "Western scientists and industrialists" (Whitehouse, 1995, p. 43). When the Period of the Companies ends faithful Kivung members will enter an eternal paradise on earth, known as the "Period of the Government," while those who succumbed to temptation and lived immoral, decadent, luxurious lives will be dispatched to hell. The Period of the Government will signal an end to conflict, suffering, labor, death, and reproduction. Participants in this paradise will shed their dark skins, disclosing their unblemished white skins underneath.

The Kivung seeks a paradise on earth, but its means are not religi-ous only. The Pomio Kivung movement also peacefully pursues poli-tical goals, including the general welfare and political autonomy of its membership. Koriam and Alois Koki, Kolman's principal assistant, have held seats in the national assembly and have defended Kivung interests. Various Kivung supervisors, who serve as intermediaries between the central Kivung leadership and the various local congregations, hold of-fices in provincial and local governments. Kivung members presume that the utterances of the Kivung leaders serving in official government capa-cities frequently carry a double meaning. They address current political matters, but their comments may have a deeper religious significance as well.

Besides a detailed eschatology, Kivung ideology also includes an ela-borate program for moral and spiritual purification. As noted above, it stresses conformity to the Ten Laws and ongoing participation in nu-merous rituals aimed at the members' improvement and at enticing the ancestors – primarily through daily food offerings – into interacting pos-itively with the community and eventually returning.

The coherence of Kivung beliefs has always been a concern of its leaders. The movement has displayed a lasting concern with the logical integration of its beliefs, doctrines, and practices. Proselytization does not rely on the cultivation of secrecy and mystery but rather on the persuasive-ness of a logically integrated program addressing personal, communal, and cosmic issues. As a consequence of (1) its political goals in this world, (2) this concern for rigorous systematization of beliefs, and (3) the virtual absence of literacy among its members, a comparatively centralized and stratified system of authority has emerged within the Pomio Kivung. Its apotheosized leaders pronounce on religious matters, and the cadre of

supervisors carry this information to various Kivung communities, while simultaneously monitoring and guiding the orthodoxy of local congregations. Meanwhile, local leaders (all of whom are male) periodically visit the seat of central Kivung authority in the Pomio region of the province for consultation and instruction. These measures all help to preserve and standardize Kivung belief and practice.

Among the local leaders are "orators" (Whitehouse, 1995, p. 48), who preside at, among others, the nine most notable meetings of the entire Kivung community that occur each week. Their principal responsibility is to address the assembled believers, especially after the daily Cemetery Temple rituals and at community meetings that occur simultaneously with the twice-weekly rituals at Bernard's Temple. They deliver speeches after the Cemetery Temple rituals that report on and interpret the testimony of the "witness" that day (Whitehouse, 1995, p. 70). The witness's job is to sit in a cubicle in the temple for about an hour carefully listening to determine whether or not the ancestors have come to partake of the food offerings that that day's team of cooks has prepared. The presumption is not that they consume the food itself, but rather that they savor "the respect, goodwill, generosity, deep faith, and devotion which the living supposedly put into its preparation and presentation" (Whitehouse, 1995, p. 67). Generally, the ancestors' presence reflects positively on the moral status of the community, while their absence reflects negatively.

The orators also speak twice weekly at community meetings that occur during the ritual proffering of food to the ancestors in Bernard's Temple. On these days their jobs include speaking on the basic tenets of Kivung faith, pointing out recent transgressions, resolving disputes, and at the end giving an essentially standardized, fifteen-minute sermon on one of the Ten Laws, so that across any five-week period they have preached on all ten.

This only begins to hint, though, at the amount of time, energy, and resources Kivung rituals consume. Attending just these nine meetings requires about nine hours per week from every member of the *entire community*. This, however, would be a huge *underestimate* of the amount of time that members spend either preparing for or participating in Kivung rituals. Whitehouse (1995, p. 78) counts the nine temple rituals among "the most elaborate and time-consuming activities within Kivung communities." He estimates that food preparation for these rituals alone consumes twelve person hours per day. On a *daily* basis they also involve the maintenance and preparation of the temples, the delivery of the food, the witnesses' monitorings, and the cleaning up. And these are not the

only Kivung rituals. The entire community must also participate in fortnightly rituals in each of the two sacred gardens as well as a monthly ritual for collective absolution. Married Kivung members also perform a weekly Family Temple ritual to present food offerings to their deceased kin in their homes, while widows and widowers must do so twice a week.

Unlike that of the Baktaman, the Kivung system aims to instill in participants a familiarity with and some understanding of a large body of propositional materials. Its centralized and carefully delineated religious authority, its logically integrated body of doctrines, and, in particular, its unending cycles of ritual performance help to achieve this aim, even in the face of the complete absence of texts (and members' pervasive illiteracy). Koriam demanded that Kivung communities meet in this nearly perpetual fashion in order to insure uniformity of belief and practice throughout the movement. To help in this effort he also dispatched his patrolling supervisors to insure standardization and to discourage variation.

Frequency is, of course, the crucial mnemonic variable the Kivung system exploits. The Kivung ritual system is a quintessential illustration of a ritual system situated at the first attractor, relying exclusively on performance frequency to insure recollection of rituals. Both the frequency with which members perform rituals and the frequency with which the orators confront Kivung believers with lengthy, largely canned speeches about the basic tenets of the faith insure that participants master Kivung cosmology, principles, and practices. Whitehouse comments that

the continuity of kivung religion . . . is not threatened by memory failure. The very frequent repetition of all the sacred rituals of the kivung is sufficient to ensure a high degree of standardization . . . the effect is to "drum home" every detail of the religion to the community at large. The explicit goal is to create a single, unified system of ideas within each individual. (1992, p. 784)

Whitehouse also repeatedly underscores just how boring and monotonous all of this repetition of ritual and doctrine is, the developed rhetorical skills of the local orators notwithstanding:

the characteristic activities of Pomio Kivung members are not intrinsically very exciting . . . Temple rituals are performed somewhat mechanically, like other uninspiring chores, and seem to be neither intellectually challenging nor emotionally arousing . . . it is not productive of the kind of high excitement that is stereotypically associated with Melanesian "cargo cults." (1995, pp. 86–87)

Apparently, during the daily routine of rituals glassy-eyed Kivung devotees in Dadul not infrequently yawned and even nodded off. This is all the more telling since Whitehouse arrived amidst a period of notable religious upheaval.

The splinter group

About two months before Whitehouse and his wife arrived, a young man named Tanotka was possessed by a prominent local ancestor, Wutka. According to the only witness, Baninge, who is Tanotka's matrilineal, parallel cousin, i.e., Tanotka's "brother" in the Mali Baining kinship system, during this possession Wutka delivered startling news through Tanotka. The force of Wutka's messages was (1) that in addition to Koriam's revelations, the Kivung had parallel origins in the region of Dadul and Maranagi, (2) that these two villages were now poised to usher in the return of the ancestors, and (3) that Tanotka would be a pivotal figure for bringing this miracle about.

Over the subsequent months interest in Tanotka and his revelations grew. Three developments, in particular, stand out. First, within two months of Tanotka's initial possession, two members of the Village Government appeared in Dadul requesting permission to live there for a while. These ancestors seemed dedicated to keeping the entire village of Dadul under constant scrutiny. Consistent with Baninge's interpretation of Wutka's pronouncement that Dadul and Maranagi were on the threshold of bringing in the new era, these white-skinned people followed Dadul residents around, watched what they did (even when what they were doing was thoroughly commonplace), and asked them all sorts of questions about a wide range of topics. Using the conventional euphemisms for referring to the ancestors, the orators cautioned the people to answer all of these visitors' questions honestly and fully. Regular attempts to explain the character of anthropological research did little to persuade Dadul's residents to abandon their suspicions about the true identities of Whitehouse and his wife. Instead, they only clarified the cover story these two ancestors were employing.

The second startling development was that the witnesses, beginning with Baninge's father at the Cemetery Temple in Maranagi, began to hear the ancestors' voices as they endorsed Tanotka's revelations and his status. Because one of the Dadul witnesses did not hear these voices during his vigils, it was soon agreed that "the witness only needed to hear the voices 'in his head' rather than 'through his ears'" (Whitehouse, 1995, p. 98). With the possibility of such important daily communication from the ancestors, the duration of the witnesses' vigils was approximately doubled – to two-and-a-quarter hours each day. During the subsequent four months the ancestors spoke to the witnesses over eighty times. The ancestors' utterances regularly proved to be responses to queries that the orators permitted Baninge to submit with the presentation of the daily offerings in the temples. The ancestors' willingness to

reply to these queries only enhanced the credibility and prestige of Tanotka and Baninge.

Indirectly, Baninge pressured the orators on his own behalf. By carefully manipulating the contents of his queries to the ancestors, he was fortunate enough to elicit consistently convenient replies from the ancestors as reported by the witnesses. Wutka, for example, was alleged to have said, "I am pleased with Baninge; when will the orators stand by the side of Baninge? It is true that the orators tell everybody to obey the Ten Laws but who will stand by the side of Baninge?" (Whitehouse, 1995, p. 101). For the first few weeks the orators had persisted in delivering their stock speeches at the regular community meetings. Under such pressure, though, they quickly abandoned their cautious distancing of themselves from Tanotka and Baninge and generally acceded to their authority. Witnesses soon reported the ancestors' pronouncements that Tanotka and Baninge's spirits were already part of the Village Government. Like the leaders of the mainstream Kivung movement, they were, in effect, ancestors on earth (Whitehouse, 1995, p. 101).

For our purposes, though, it is the third of these developments that is of greatest interest. Shortly after Tanotka and Baninge's apotheoses, *new rituals* connected with the Dadul-Maranagi splinter group were introduced. In the orthodox Kivung system the necessary conditions for provoking the onset of the Period of the Companies always included not just the purification of individual Kivung members but the overt demonstration of the entire community's commitment to moral and spiritual improvement through the collective performance of Kivung rituals. Initially, Baninge supplemented these Kivung rituals, but eventually the splinter group's new rituals completely overshadowed the standard Kivung rites.

We shall argue in the course of this chapter and the next that these events exhibited numerous theoretically significant features. Some of those features were manifest from the outset. The first ritual innovation linked with the splinter group arose in connection with a special occasion. The witnesses had reported the ancestors' repeated complaints about the sorry state of the Cemetery Temple and its leaky roof, in particular. With the ancestors' testimony and the support of the first orator, Baninge convinced the community to build a new Cemetery Temple and to celebrate the event in an unprecedented fashion.

At the recommendation of Baninge and Tanotka this temple dedication included resuscitating practices and figures from *traditional* Mali Baining religion. An *awan*, a traditional dance, supplemented a night of singing, dancing, and feasting. Only a few senior men had ever actually observed these traditional religious activities and that had been decades ago. Their recollections contained gaps and inconsistencies. However, knowledge of

the system – if only by description – was still available, and given their essentially deified status, Tanotka and Baninge had no trouble providing authoritative instructions about how to fill in the gaps and resolve the discrepancies.

The standard dancers in an *awan* are the *awanga*, but this *awan* also included the *ilotka* among the dancing celebrants. Both the *awanga* and the *ilotka* are traditional masked figures whose bright headdresses and enormous costumes make them appear larger than life. Including the *ilotka* is interesting. So far as Whitehouse could ascertain, they were not traditionally part of the *awan*. Instead, they are salient figures in the second sort of traditional Mali Baining dances, the *mendas*, which are elemental in the traditional system of initiation.

In conformity with patterns characteristic of Mali Baining religious traditions, Baninge slipped away on the night of the temple dedication and had a dream in which Wutka pronounced, in effect, that Tanotka would take over *soon* from Kolman as the pivotal figure who would usher in the new age. Mindful of etiquette and custom, Baninge shrewdly manipulated events behind the scenes so that various senior men agreed to hold a new celebration of this revelation. This was the first event in which the entire community exhibited its loyalty to Tanotka and the new ideas that emerged from the events that began with his possession. That very day a lengthy report from a witness indicated the ancestors' endorsement of the contents of Baninge's dream, affirming Tanotka's authority and vital importance. At the festivities (just five nights after the temple dedication), "emergent ideas now resounded and danced in the night air, endorsed by the ancestors and celebrated by the living" (Whitehouse, 1995, p. 107).

Whitehouse regularly emphasizes how this and further novel rituals that would occur over the subsequent months were the overt manifestation of the entire religious community's gradual surrender of responsibility to the leadership of Tanotka and Baninge. In order to assuage local concerns about authority, a delegation including Tanotka, Baninge, and the first orator visited Kolman and – in what may seem like an incredible development – received, if not his approval, then at least an affirmation of his willingness to tolerate Tanotka and Baninge's movement. Allegedly, Kolman's tolerance was a function of what he perceived as a competition among various aspiring prophets in the region. His confidence in the truth of the old adage that "time will tell" apparently informed his tolerance of this and other such movements.

Four days after the celebration of Baninge's first dream, the residents of Dadul performed a third ritual (modeled on the monthly Kivung ritual for collective absolution) in response to a dream of Tanotka's. And so events continued for nearly six more months. Eventually, Tanotka

removed himself to Maranagi, in part to direct things there. In the meantime Baninge became increasingly assertive in Dadul. Dreams, visions, pronouncements, and reports prompted both increasing the performance rate of Kivung rituals (e.g., the twice-weekly meetings coordinated with the ritual offerings in Bernard's Temple now occurred on a daily basis) and creating new rituals aimed at bringing about reunification with the ancestors.

Quickly, these new rituals surpassed the orthodox Kivung rites in importance. Many of the new rituals were variations on a ring ceremony that one of Baninge's dreams inspired (Whitehouse, 1995, p. 110). According to Whitehouse the ring represented an enclosure under the protection of the Village Government into which Tanotka and Baninge were leading the splinter group members (but no one else) – on the assumption that they had now collectively achieved considerable favor in the eyes of the ancestors. In the ritual Tanotka (and later Baninge) stood at the center of a ring, and as signs of their loyalty and faithfulness each member entered the ring to shake his hand and give him money. Whitehouse (1995, p. 113) holds that their presence in the ring symbolized the splinter group's reception as God's chosen people. If this ritual's cosmic promise failed to capture members' interest, two other features of the ring ceremony were sure to get their attention, at least initially. On the instructions of their new leaders, members performed the ritual at dawn and they wore traditional genital coverings only, which rapidly became the preferred attire for all activities, including the standard Kivung rituals.

None the less, since after three months the miracle had not occurred, it appeared that the splinter group members were unable to secure their position in the ring. With enthusiasm flagging, Baninge announced a mass exodus of the Dadul membership to Maranagi in order both to break all ties with the world of non-believers and to join forces there with Tanotka and his followers for the performance of the final ritual necessary for inaugurating the Period of the Companies. At Baninge's instruction, the Dadul splinter group members took additional steps to renounce the outside world. They stopped confessing to the Catholic priest, who visited fortnightly. They also wrote insulting letters to the principal of a nearby school, to an official of the provincial government, to a Kivung orator in a neighboring village, and to people in Sunam. As a further sign of their faith that a cosmic transformation was imminent, they also ceased to work in the village's gardens and, just before undertaking the migration to Maranagi, they held a huge feast, for which members killed *all* of the pigs in Dadul.

The Dadul residents' arrival in Maranagi marked the beginning of approximately five weeks of even more emotionally provocative rituals.

These rituals would take place in a *traditional* Baining roundhouse that the men of Maranagi had constructed according to Tanotka's orders. A large feast and (unsuccessful) "preparation ceremony," which began with the standard ring ceremony, marked the opening of the roundhouse (Whitehouse, 1995, p. 137). These were followed in comparatively quick succession by a membership ritual (after Baninge invited some influential outsiders into the splinter group), a mass marriage in which Baninge paired off all eligible members of the splinter group with one another, and a long series of all-night vigils also based on the ring ceremony. Each of these rituals involved a wide array of sensory pageantry, including some combination of near-nudity, feasting, singing, and dancing (either by participants or by *awanga* and *ilotka*). The initial preparation ceremony and the final weeks of vigils introduced acute physical suffering to this list.

Especially over the course of the nightly vigils awaiting the ancestors' return, the people faced increasingly severe distress. Usually after huge feasts, they crowded into the roundhouse for these rituals. Overcrowding produced stifling heat and made even the smallest movements difficult. These conditions produced considerable discomfort. On the evening before the first vigil that Baninge and Tanotka had predicted would actually foment the miracle, the people took the unusual measure of eating the pork fat that they used for cooking, since their physical transformation would occur before they would suffer any ill-effects. Instead, widespread nausea and vomiting marked the vigil. Some argued, after the fact, that the unappealing scene that resulted was why the ancestors had failed to return that night as predicted.

Although the vigil on the very next night did not introduce the Period of the Companies, it enlarged participants' excitement for the next four nights especially. During that vigil an ancestor's apparent possession of an eighteen-year-old female, Lagawop, transfixed the splinter group members. Her possession dominated the next two nights' vigils as had her description (after the temple rituals on the second day) of her communications with her deceased grandparents. On the third night in the midst of her possession, members of Baninge's family insisted that it was Satan who possessed her and not her grandfather. After some of them attacked her physically, she announced in her possessed state that it was, indeed, Satan who was controlling her. Activities over the next day and the fourth night's vigil focused on her exorcism.

For our purposes what was of theoretical interest about her possession, though, was the character of her pronouncements on the first night, in particular. Although as a female she had held no positions within the local Kivung ecclesiastical hierarchy and as an eighteen-year-old she had had limited experience of the adult world, her statements demonstrated

her thorough grasp of the entire body of Kivung doctrine, which she expounded upon at length in her possessed state. "Lagawop was able to repeat extensive logical strings of kivung ideology for literally hours at a time in the manner of an experienced orator" (Whitehouse, 1992, p. 785). Her performance eliminates any doubts about the ability of at least some participants to master a complex religious system on the basis of frequent exposure alone.

After more weeks of feasting and vigils, food became less plentiful. For some hunger began replacing nausea as their primary somatic state during the vigils. Baninge led a group back to Dadul to retrieve the last food from their gardens; however, they found that people from neighboring villages had stolen most of what remained. While Baninge's expedition was in Dadul, a message arrived from Tanotka indicating that they had successfully expelled Satan from Maranagi and now, finally, the ancestors' return was at hand. The Dadul residents returned to Maranagi, because, as Whitehouse (1995, p. 149) notes, they "were frightened to risk exclusion from the miracle now that they had invested so many resources in the pursuit of it." Moreover, remaining in Dadul was no longer such an inviting option. They had alienated the people in most of the neighboring villages. They had slaughtered all of their pigs and neglected their gardens for weeks. Neighbors had stolen the food that had remained. "The houses were dilapidated, and the bush was advancing into the clearing" (Whitehouse, 1995, p. 149).

The final nightly vigils were especially agonizing physically. In addition to the nudity, the singing, the dancing, and the overcrowding (and all of its consequences), now the people were also hungry and faced new prohibitions on relieving themselves and on sleeping during the vigils (Whitehouse, 1996a, p. 188).

Although it took a number of months for the splinter group to emerge as a movement distinct from the mainstream Kivung system, it ended abruptly. When a government health inspector had seen conditions in both Dadul and Maranagi, he commanded the residents of Dadul to return home to clean up their village and resume productive activity. Along with similar admonitions to the people of Maranagi, he ordered the destruction of the roundhouse as a public health hazard. The members of both groups complied on pain of prosecution.

Sensory pageantry, codification, and the ritual frequency hypothesis

Whitehouse offers a proposal for explaining the contrasting patterns between the ritual practices of the orthodox Pomio Kivung and the

Dadul-Maranagi splinter group. He suggests that the *frequency* of ritual performance is the critical variable that determines just how much emotional stimulation any ritual involves. Whitehouse (1992) advances a version of what we shall call the *ritual frequency hypothesis* to answer the general questions we have raised concerning the memory dynamics religious rituals enlist.

In Whitehouse's hands the ritual frequency hypothesis fits into a larger theory about modes of religiosity that he lays out in various papers (1992, 1996a, and 1996b), in the final chapter of his first book (1995), and at length in his second (2000). Whitehouse situates the frequency hypothesis within a more extensive pattern of correlations dealing not just with ritual, memory, and emotion but with ideological factors and social and political arrangements as well. Whitehouse appeals to this larger theory of religious modes to make sense of the differences between the Kivung movement and the splinter group he witnesses. In this section we shall describe the frequency hypothesis and briefly sketch Whitehouse's overall position with particular attention to his account of the connections between ritual and cognitive variables.

As noted above, we and Whitehouse agree that processes of cultural transmission have rendered mnemonic considerations some of the most important reasons *why* some religious rituals incorporate more emotionally arousing features than others. What we most clearly differ about, though, is *which* religious rituals assume this garb. This is to say that we disagree about the conditions under which rituals are likely to include high levels of emotional arousal. In the next section we will return to some of the topics we examined in chapter 1, in order to show how our theory of religious ritual competence and the account of the cognitive representation of religious rituals it contains inspire an alternative hypothesis that identifies what we think is an even more fundamental cognitive variable explaining why rituals move towards one of the attractor positions or the other. There we will argue that it is participants' mostly tacit knowledge of *ritual forms* that is the critical cognitive variable that largely determines not only rituals' performance frequencies but also such things as how much emotional firepower a religious ritual possesses.

Our theory of religious ritual competence supplies the means for characterizing the forms of rituals precisely, and it includes principles that distinguish between these forms. We shall show how the typology of religious ritual forms accounts for when religious rituals enlist emotional stimulation and when they do not. The PSA and PSI not only provide a basis for predicting when religious rituals are emotionally arousing and when they are not, but also go some way toward further explaining *why*, thus enriching our understanding of cultural transmission in this domain.

This will be the point where the apparently minor differences with Whitehouse that we noted in chapter 2 about how elevated levels of emotion influence the consolidation of some episodic memories will really begin to matter.

Exciting times

On at least one dimension the new rituals the splinter group introduced contrasted conspicuously with orthodox Kivung practices. Recall that Kivung rituals are repetitive, monotonous, and dull. They do not excite emotion. They routinize religious practice and instill an elaborate set of logically integrated doctrines. By contrast, the splinter group's rites involved a great deal of sensory pageantry – both positive and negative. As a result, participants were anything but bored! Splinter group members reliably found the feasting, singing, and dancing – let alone the nudity – emotionally exciting. The vigils in the roundhouse during the last few weeks were no less emotionally provocative, though the experiences they engendered were not uniformly pleasant. With the overcrowding, the heat, the nausea, the sleep deprivation, and the other physical discomforts, misery was probably the dominant emotion near the end. Even this, though, was suffering to bring about a greater good. The splinter group construed it – *night after night* – as the *final* purification necessary to induce the ancestors' return with the dawn of the next day (Whitehouse, 1996a, p. 188).

In this respect the splinter group's rituals resembled the Baktaman initiations more than the standard Kivung rituals. It seems uncontroversial that both the amount and the diversity of sensory stimulation in splinter group rituals and Baktaman initiations substantially exceed that in any of the Kivung rites. That claim requires a sidebar.

By this comment we do not mean to suggest that the amount of sensory stimulation connected with any ritual is easy to quantify or compare, especially across modalities. The difficulties are *enormous*. For example, is the intensity of light more or less visually stimulating than the diversity of color? Or, worse yet, does the gustatory stimulation of eating pork fat exceed the auditory stimulation of singing?

Acknowledging both the enormity and the complexity of the difficulties involved, we shall make various intuitive judgments about these matters as we compare the competing hypotheses. For at least two reasons, though, intuition may not be so bad here. First, for most of our purposes we need not place too high a premium on precision, since the judgments in question are all *comparative*. The critical question that will arise will not be precisely how much sensory pageantry any ritual involves but simply

whether one ritual involves more or less sensory pageantry than another. Making *accurate* comparative judgments often requires very little *precise* knowledge. For example, when looking at a map of the United States we do not need to know their precise areas in order to judge that Montana is larger than North Carolina. For most of the relevant judgments the differences in the rituals' levels of sensory pageantry are so substantial that they present no problems. That the splinter group's nightly vigils were more emotionally inspiring than the Kivung temple rituals is not controversial.

That leads to our second reason why intuitive judgments will suffice in the comparison of our theory with Whitehouse's. However daunting the justification of such judgments may prove, that is not what is at issue. What is is the content of those judgments, and Whitehouse and we *concur* about the comparative levels of sensory pageantry in the Baktaman, Kivung, and splinter group rituals. There is no disagreement about what the facts are here concerning the relevant comparisons. End of sidebar.

Stimulating ritual participants' senses is the most straightforward, sure-fire means available for arousing their emotions. The intuition (again acknowledging myriad complications just off stage – see, for example, Tucker et al., 1990) is that the resulting levels of emotional excitement are often at least roughly proportional to the levels of sensory stimulation. These emotional responses are virtually always involuntary, and with particularly intense sensory stimulation, they are often difficult to control.

Some religious rituals are renowned for their sensory pageantry. Rituals employ countless means of arousing participants' emotions. Consider everything from the feasting, dancing, and singing of the Dadul-Maranagi splinter group to the pageantry of a royal wedding or the investiture of a pope. No sensory modality has been forgotten. Religious rituals are replete with the smells of burning incense and the tastes of special foods, the sounds of chant and the sights of ornate attire, the kinesthetic sensations of the dancer and the haptic sensations of the fully immersed. As we noted in the previous chapter, some rituals have included far more gripping ways of provoking haptic sensations, in particular. The Baktaman and hundreds of other groups worldwide, whose initiations include excruciating torture, are experts on these fronts.

Of course, sensory pageantry is only a means to an end. One reliable method of arousing human beings' emotions is to stimulate their senses. Sensory stimulation, however, is not the only means for doing so. Occasionally religious systems enlist other means. Perhaps the most common is dreams. Or when such substances are available, religious systems can dispense with some of the sensory pageantry and rely on hallucinogenic drugs to induce altered cognitive and emotional states. Baninge

introduces another one of the old stand-bys to the Dadul-Maranagi splinter group. Insisting that participants carry out all subsequent ritual activity in the nude introduced an unprecedented level of sexual arousal to the people of Dadul and Maranagi (though see the discussion below about the rapidity with which participants became habituated to these circumstances).

Recognizing that sometimes religious systems achieve the necessary levels of motivation in participants by such alternative means, we shall, none the less, focus throughout on what we have been calling sensory pageantry, i.e., on the stimulation of participants' various sense modalities in order to arouse their emotions. We do proceed, however, with the understanding that, ultimately, talk only of "sensory pageantry" is a convenient shorthand for a variety of means religions employ for inciting elevated emotion in participants in order to increase the probabilities that they will transmit their religious systems. (Indeed, we shall, henceforth, include the nudity of the Dadul-Maranagi splinter group under the category of sensory pageantry, even though we recognize that it involves a different form of arousal.)

We and Whitehouse share three assumptions here:

1 that participants find rituals that are loaded with sensory pageantry emotionally provocative;

2 that, whatever the mechanisms, this emotional provocation tends to increase the probabilities that at least some features of these rituals will prove more memorable than they would otherwise be; and

3 that such emotional provocation also increases the probabilities that participants will be motivated to transmit their religious representations to others.

We agree, in short, about the effects of sensory pageantry and about the two major reasons why rituals incorporate it when they do. Our disagreements mostly concern the "when they do" part of the previous sentence. The empirical question we want to explore is "*which* religious rituals incorporate such high levels of sensory pageantry?" or, given our common assumptions about its effects, "under what conditions do religious rituals turn up the emotional volume?" Why do rituals migrate toward the second attractor?

Two modes of religiosity

Whitehouse's short answer (e.g., 1992, p. 785) to this question and to the more general question of why rituals migrate toward either of the two attractor positions we have described is that this is overwhelmingly a function of rituals' performance *frequencies*. (For the case at hand, when

rituals are performed infrequently, they incorporate increasing levels of sensory pageantry and, therefore, migrate toward the second attractor.) Whitehouse embeds this short answer, though, in a far more ambitious theory about what he calls two "modes of religiosity" – the "doctrinal" and the "imagistic" (1995, p. 194, and 2000). Each of these modes has its characteristic "style of codification." The doctrinal style of codification includes the ritual arrangements of our first attractor position; while the imagistic style of codification includes those of the second. Whitehouse clearly thinks of these styles of codification in terms that are quite similar to those describing the migration of ritual arrangements in the directions of these attractor positions, describing them, for example, as "empirically significant trajectories" (2000, p. 1). He explicitly asserts that "the Melanesian traditions examined gravitate strongly towards one or other of the two modes of religiosity, or towards both but within readily distinguishable domains of operation" (2000, p. 2).

Whitehouse acknowledges straightaway that theoreticians of religion from Max Weber (1947) to Ernest Gellner (1969) have proposed such dichotomous schemes. However, his proposal has at least three notable features. First, although he hedges on this point occasionally (see, for example, Whitehouse, 2000, p. 160), his theory is general. It is clear most of the time that his theory applies to religious systems of any shape or size at any place or time. Second, the theory's scope is enormous. Whitehouse argues for substantial correlations among the values of thirteen different variables pertaining to religious systems. (See figure 3.1.) These thirteen variables deal with social, political, structural, historical, ideological, demographic, and cognitive issues. The third and, for our purposes, most significant feature is that at its core Whitehouse's theory (1995, p. 194) contains a cognitively oriented, causal hypothesis – again, Whitehouse's occasional hedges to the contrary notwithstanding (e.g., 2000, pp. 3–4).

More specifically, Whitehouse (1995, p. 220) insists – correctly we believe – that any theory about social and cultural forces that does not refer to the "micro-mechanisms of cognition and communication,"[1] which mediate their interactions, will be importantly incomplete. He (1995, p. 197) labels the four pivotal variables among the thirteen in his theory "frequency of transmission," "cognitive processing, " "style of codification," and "revelatory potential." Whitehouse argues that differential frequencies in opportunities to transmit cultural materials occasion different cognitive (particularly mnemonic) processes, which determine the styles of codification and, in particular, the "revelatory potentials" of religious materials. Those styles of codification (and associated revelatory

Variable	Doctrinal mode	Imagistic mode
1. Style of codification	Verbalized doctrine and exegesis	Iconic imagery
2. Frequency of transmission	Repetitive (routinized)	Periodic (at most every few years)
3. Cognitive processing	Generalized schemas (semantic memory)	Unique schemas (episodic memory)
4. Political ethos	Universalistic (imagined community)	Particularistic (face-to-face community)
5. Solidarity/cohesion	Diffuse	Intense
6. Revelatory potential	Intellectual persuasion	Emotional and sensual stimulation
7. Ideological coherence	Ideas linked by implicational logic	Ideas linked by loose connotations
8. Moral character	Strict discipline	Indulgence, license
9. Spread by	Proselytization	Group action only
10. Scale and structure	Large scale, centralized	Small scale, localized
11. Leadership type	Enduring, dynamic	Passive figureheads
12. Distribution of institutions	Uniform beliefs and practices	Variable beliefs and practices
13. Diachronic features	Rigidity (permanent "breaking away")	Flexibility (incremental change/radical innovation)

Figure 3.1   Modes of religiosity, after Whitehouse (1995, p. 197)

potentials), in turn, shape the values of the other nine variables the theory addresses (Whitehouse, 1992, p. 784 and 1995, p. 194). (See figure 3.2.) So, for example, the character of religious experience does not result from the contents of religious beliefs so much as each results from styles for codifying religious materials, which themselves hinge on the details of the underlying cognitive processing and, in particular, on the demands on human memory. Thus, although mediated by codification styles and their emotional impact (or lack thereof), the influence of cognitive processes on these constellations of social and cultural variables is substantial (Whitehouse, 1992, p. 791). Those demands on memory are a direct result of the frequencies of ritual performance. *Performance frequency, then, is the unexplained independent variable at the heart of Whitehouse's theory* (Whitehouse, 1996a, p. 175). Note, our claim is *not* that Whitehouse thinks that rituals' performance frequencies are inexplicable but only that he offers no explanation for them.

Enlisting Tulving's distinction between semantic and episodic memory, Whitehouse notes that these two types of cognitive representation arise, respectively, in connection with frequent and infrequent occasions for the
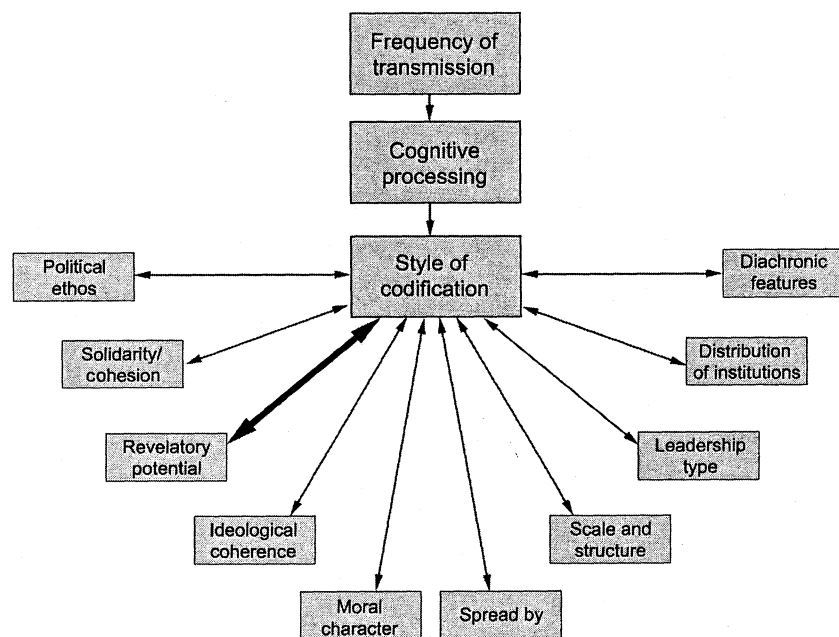
Figure 3.2   Direction of influence among Whitehouse's thirteen variables

transmission of cultural materials. He claims that the divergent principles of codification characteristic of the mainstream Kivung ritual system, on the one hand, and those of the Baktaman and the Dadul-Maranagi splinter group, on the other, simply represent adaptations to these differential demands on memory. Initially contrasting the Kivung and Baktaman systems (1992) and subsequently those of the Kivung and the Dadul-Maranagi splinter group (1995) and of the Paliau Movement and its Noise and Ghost splinter groups (2000), Whitehouse argues (1992, p. 789) that "messages are cultivated, structured and transmitted by two contrasting techniques ... these techniques constitute particular adaptations to differences in the frequency of reproduction and hence in the demands made on memory ..." These two contrasting techniques connect respectively with Whitehouse's two modes of religiosity.

Infrequent transmission dictates an imagistic mode of religiosity, whose style of codification relies on iconic *imagery* and whose revelatory potential turns on "emotional and sensual stimulation" (Whitehouse, 1995, p. 197). Whitehouse suggests that this codification style overlaps substantially with Barth's analogic coding. Both employ "non-verbal imagery."

Whitehouse associates this imagistic mode with indulgent, small-scale, socially cohesive groups that tend to have loosely formulated, flexible ideology.

The imagistic mode arises when the occasions for transmitting religious materials are infrequent and, consequently, participants must depend upon episodic memory. Relying on episodic memories means that the retention of cultural knowledge in such settings hinges on participants' abilities to recollect particular, specific events from their pasts (such as their initiations).[2] The major point is that this imagistic mode relies on the revelatory potential of "emotional and sensual stimulation and cognitive shocks" to engender improved episodic memory (Whitehouse, 1995, p. 198). Whitehouse (1996b, p. 713) stresses that "intense emotional states are a crucial element of the nexus" of factors characteristic of the imagistic mode.

The sort of intense sensory excitation and resulting emotional arousal typical of rituals in the imagistic mode would make little sense if people participated in these rituals frequently. The expenditures necessary to produce the sensory pageantry would be a profoundly inefficient use of resources, since, as Lagawop's conduct during the early stages of her possession indicates, the effects of frequency alone could suffice for memory. In addition, Whitehouse suggests that frequent exposure could result in participants' *habituation* to such sensory stimulation.

The transmission of Baktaman-type messages depends upon the unique and intense quality of ritual experience. It is not conducive to the cultivation of such messages to repeat them very often. Repetition deprives the experience of its uniqueness. Meanwhile, the intensity is largely generated by suffering which nobody would be anxious to repeat and which, if it were repeated, would not yield up its original fruits of revelation. (1992, p. 787; see also 1995, pp. 215–216)

Ironically, substantially increasing the frequency of rituals that are loaded with sensory pageantry will considerably escalate costs while producing diminishing returns. More is not better. To be effective for the long run, religions must administer sensory pageantry in carefully timed doses. So, a religious system that has frequent performances of its rituals will not utilize the imagistic mode. Instead, it will foster Whitehouse's doctrinal mode of religiosity.

In contrast to the imagistic mode, whose style of codification relies on iconic imagery, the style of codification the doctrinal mode exhibits is fundamentally *linguistic*. The so-called "religions of the book" operate chiefly in the doctrinal mode. Common sense, let alone experimental cognitive psychology, counsels, however, that without reading, writing, and available texts, the only way people can gain command of a substantial

body of linguistically formulated materials is by means of frequent exposure or rehearsal. Memory in the doctrinal mode depends upon participants building up general schemas in semantic memory on the basis of frequent encounters with religious materials. Transmission does not depend upon participants' recollections of their specific experiences of emotionally stirring religious rituals.

Whitehouse associates the doctrinal mode with proselytizing religions that are not confined to a single locale. Consequently, their orientation is "universalistic" and their communities are mostly "imagined" – with less social cohesion than religious communities that operate in the imagistic mode. With the doctrinal mode the tie that binds is not experiences in common of similar, emotionally provocative rituals loaded with imagery. Its revelatory potential turns on "intellectual persuasion." It arises from disciplined mastery of a unified, logically integrated, inflexible collection of often elaborate, explicitly formulated beliefs that a focused leadership has compiled in a mostly "emotionless way" (Whitehouse, 1995, p. 197).

Properly introducing these bodies of doctrine, let alone insuring their mastery, requires frequent presentations. This is especially so if a culture lacks the tools of literacy. "In an oral tradition, persuasion by the logic and coherence of cosmology and ritual at the same time necessitates frequent repetition... their persuasive capacities are in no small degree a function of the extent to which they can be preserved as an entirety through frequent transmission" (Whitehouse, 1992, pp. 787–788; also see 2000, pp. 105–106). Without literacy, gaining command of an extensive system of beliefs and practices is impossible without their continual re-presentation.

Cognitive theories (both Whitehouse's and ours) aim to identify fundamental variables underlying all religious systems. These theories do not distinguish Western religions or the great "world religions" or even literate religions from the rest (Lawson and McCauley, 1993). Both Whitehouse and we claim that the underlying cognitive dynamics are the same in all religions. (We just disagree about some of the salient cognitive details.) So, contrary to a major school of thought within cultural anthropology (e.g., Goody, 1987), both Whitehouse and we hold that, finally, literacy is *not* the fundamental variable in this mix. (See too Donald, 1991.) Although literacy can substantially relieve the cognitive burden that participants' memories must bear, Whitehouse maintains that this does not substantially alter the patterns characteristic of the doctrinal mode. Religions in the doctrinal mode overwhelmingly focus on frequent repetition of highly routinized rituals with little emotional excitement, whether they occur in literate cultures or not.

The crucial point is that a focus on linguistically formulated, logically coherent systems of beliefs and on proselytizing to a wider world marks the religious systems of at least some *non-literate* societies. The Pomio Kivung is but one example. Looking no further than Melanesia, Whitehouse (1996a, p. 191, and 2000) notes others. (See too Severi, 1987 and 1993, and Sherzer, 1983 and 1990.) Whether the tools of literacy are available to aid in the cultivation of religious sensibilities or not, religious systems that operate in the doctrinal mode rely on frequently repeating what are, comparatively speaking, emotionally tame ritual practices.

After advancing these two ideal types, i.e., the imagistic and doctrinal modes of religiosity, Whitehouse indicates that, in fact, they are not always either stable arrangements or uniform ones. As to their stability, some religious systems seem to fluctuate between the two modes. Whitehouse (2000, chapter 7) discusses both the introduction of the doctrinal mode in Papua New Guinea, its tendency to dominate once it arises, and its periodic fluctuation there with the imagistic mode. (As subsequent discussion in chapter 5 will show, a pattern of such alternation will prove the best description of the history of the Pomio Kivung.) Whitehouse also speculates on the evolution of the doctrinal mode. He (2000, chapter 8) agrees with Donald (1991) that it emerged much later than the imagistic.

Regarding their uniformity, Whitehouse concedes that even in New Guinea, where the operations of the two modes are usually fairly discrete, the distinction between the two patterns is not always completely clear. He acknowledges that sometimes the two modes become "so enmeshed that the analytical distinction seems to break down" (2000, p. 149; see also p. 52). He offers routinized practices for inducing ecstatic or mystical states in Hinduism, Buddhism, Taoism, and Islam as apt illustrations of these *mixed mode* phenomena (2000, p. 149).

Such qualifications to his dichotomous scheme are appropriate concessions to the complexities of the real world. In a particular religious system, nothing about alternation between the two modes over time is inconsistent with anything Whitehouse says. However, the ability of the cognitive principles to which Whitehouse appeals to make sense of either *why* a ritual system might alternate over time between rituals characteristic of the doctrinal and imagistic modes or *how* the two modes might become "enmeshed" is entirely unclear.

The ritual frequency hypothesis

Whatever qualifications he considers, Whitehouse never seriously backtracks on his basic hypothesis that the fundamental causal variables shaping the styles of codification that characterize the two modes of religiosity

concern cognitive processing. Nor does he hedge his claim that these patterns of cognitive processing result from frequency of transmission. (See figure 3.2.) The ritual frequency hypothesis anchors Whitehouse's overall theory.

The hypothesis is straightforward and clear. It proposes that the amount of sensory pageantry and, therefore, the amount of emotional stimulation any religious ritual involves are inversely proportional to the frequency with which that ritual is performed. Performing rituals frequently correlates with low levels of sensory pageantry and little emotional kick, while the infrequent performance of a ritual necessitates higher levels of sensory pageantry resulting in a bigger emotional bang.

Whitehouse is clear about the crucial role of the underlying cognitive dynamics. The ritual frequency hypothesis delineates the relations between the three most important variables of Whitehouse's larger theory of religious modes. As we have seen, "frequency of transmission" governs "cognitive processing," which drives the "styles of codification" and their associated "revelatory potentials," which, in turn, strongly influence the remaining nine variables. (See figure 3.2.) So, for example, Whitehouse claims to demonstrate (1992, p. 777) that the "differences between Baktaman and 'kivung' religions are related to the relative frequency of cultural transmission or reproduction, and are shown to represent adaptations to the variable demands placed on memory in the respective societies." Infrequently performed rituals call upon episodic memory; hence these rituals include comparatively greater sensory pageantry in order to produce the sorts of emotional responses that will occasion enhanced recall. The power of Baktaman initiation

lies in its remorseless assaults on the physical senses, contrasting and confusing pleasure and pain but above all bombarding the novices with surprising stimuli from multiple directions ... these features are bound together as creative adaptations to the demands which infrequent transmission inevitably makes on memory ... (Whitehouse, 1992, p. 794)

On the other hand, repetitive rituals that occur at the relentless pace the Kivung maintains engage the processes of semantic memory for which sensory pageantry is unnecessary (and, as we saw above, maybe even counterproductive). Whitehouse (1992, p. 781) claims that "kivung ... ritual action tends to be alternately cerebral and routine, and rarely does it construct meaning out of physical sensation or seek to excite or encourage a diversity of such experiences." Since Kivung rituals occur so often, they need not thrill participants in order to insure their recollection.

We shall argue in chapter 5 that, its idiosyncrasies notwithstanding, the Dadul-Maranagi splinter group manifests one pattern of responses

to general psychological considerations that constrain religious ritual systems the world over. For now the notable immediate consequence of Whitehouse's theory of religious modes is its apparent ability to make sense of the Dadul-Maranagi splinter group and its emergent rituals. On most relevant dimensions, the Pomio Kivung is a paradigmatic example of a religious system operating in the doctrinal mode. Its rituals clearly epitomize the conditions of the first attractor. In the doctrinal mode a religious system's beliefs and practices undergo considerable elaboration and integration. The resulting system is disciplined in practice and logically unified in belief but also correspondingly less flexible than religion in the imagistic mode. Once participants have worked the relations of ideas and practices out so precisely, a single innovation can be disruptive, since it may have consequences that affect logical and practical relations throughout the entire system. (According to Whitehouse [1996a, p. 191], the Pomio Kivung leaders have explicitly recognized these interconnections in their own system.) Consequently, innovation in religions of the doctrinal sort, unlike that in imagistic religious systems, is less likely to occur piecemeal (Whitehouse, 1992, p. 778).

Whitehouse's account of modes of religiosity, then, predicts that substantial innovation in a religious system like that of the Pomio Kivung will result in the sort of significant practical and ritual upheavals that the Dadul-Maranagi splinter group exhibited. By way of Tanotka's dreams they constructed a supplementary – though not inconsistent – mythology about the parallel origins of the Kivung in the Dadul-Maranagi area and reintroduced both the *awanga* and the *ilotka*. From a practical standpoint, the people of Dadul eventually abandoned their gardens and their homes, while the people of Maranagi built the new roundhouse and welcomed their compatriots from Dadul. The group's ritual innovations were sweeping and dramatic.

Since the splinter group had never performed their new rituals before, these rituals had an initial frequency of zero. According to the ritual frequency hypothesis, they should, therefore, be *saturated* with sensory pageantry – and they were. Whitehouse emphasizes that the splinter group rituals

provoked a diversity of emotions and sensations. The haunting and stirring melodies and rhythms accompanying the dances, the splendor of *awanga* costumes, the athleticism and aggression of the participants, the synchrony and eloquence of collective movements, all contributed to intense feelings ... The heat, smells, sounds, and visual impact of dances created a dramatic sensual experience ... The first ring ceremony was ... profoundly evocative ... (1996a, p. 186; also see 1995, pp. 195–196)

With no developed tradition of doctrine or practice, the splinter group had to bank on achieving religious inspiration by means of emotionally provocative rituals – just as the ritual frequency hypothesis predicts. The splinter group's eruption amounted to a community collectively overturning a doctrinal religious system in favor of religious experiences and an emergent religious movement both of which functioned in the imagistic mode – introducing rituals packed with sensory pageantry. Ritual arrangements among the Dadul-Maranagi splinter group far more closely approximated the conditions at the second attractor, rather than the first.

Our differences with Whitehouse's views may seem minor. We share objects of study, viz., the transmission of religious systems and the roles that ritual, emotion, and memory play in that process. We have the same convictions about the ability of cognitively oriented research to illuminate these matters. We agree that the manipulation of emotion in ritual is tied to mnemonic issues. We admire Whitehouse's ambitious attempts to formulate so encompassing a theory of human religiosity, and we continue to applaud his focus on cognitive processing as the decisive underlying variable explaining the patterns he ponders. Moreover, we acknowledge that neither admiration nor applause is enough. Any alternative proposal we advance about the cognitive underpinnings of religious ritual had better yield predictions that square pretty well with most of predictions of the ritual frequency hypothesis. That is because they seem, at least so far, to be mostly on target. Whitehouse's ritual frequency hypothesis does a pretty good job, so the more fundamental variables our theory pinpoints had better correlate fairly well with performance frequency. (They do.)

Whitehouse's ritual frequency hypothesis springs from the thoroughly reasonable assumption that the evolution of religious ritual systems is likely to reflect sensitivity to the role that mnemonic variables play in the transmission of those systems. We do not disagree. Our most important difference with Whitehouse, however, pertains to the conditions under which rituals contain the extensive sensory pageantry that produces elevated levels of emotion. We disagree about the critical properties of the rituals that gravitate to each of the two attractor positions. The variable on which we focus, viz., *ritual form*, not only gives a better account of the place of emotional arousal in ritual, it also suggests additional grounds, besides the mnemonic considerations on which we have focused so far, for *why* some rituals are emotionally arousing. We shall also show how ritual form accounts for the *motivational* roles rituals play. Remembering cultural representations is necessary but not sufficient for the transmission of culture. Participants must not only remember their cultural

representations, they must also be motivated to transmit them. (We will say much more on this later.)

The question of why some rituals are emotionally provocative connects straightforwardly with a further difference with Whitehouse that we have already noted. In the previous chapter we disagreed with him about the role of heightened emotion in the consolidation of episodic memories. We reviewed psychological research showing that many flashbulb memories are not accurate and that abrupt arousal of emotion is not necessary to produce ones that are.[3] Consequently, we are less sanguine than Whitehouse about a specific, dedicated, Now Print mechanism in the brain triggered by high emotion. By contrast, the cognitive alarm hypothesis suggests that high emotion tends both to marshal and to focus cognitive resources on its apparent causes, which, *if vindicated by subsequent developments*, marks the events as especially memorable.

Connecting sensory pageantry and emotional arousal with religious ritual form

The ritual frequency hypothesis maintains that the infrequent performance of some rituals is what necessitates high emotion in order to produce flashbulb-like, episodic memories. By contrast, we shall defend the *ritual form hypothesis*, which holds that instead of ritual frequency, it is *ritual form* or, more precisely, participants' tacit knowledge about differences in ritual form that determines *which* religious rituals migrate to one or the other of the two attractor positions. As we have already noted, ritual form correlates well with rituals' performance frequencies; indeed, we shall argue that it is one of the principal considerations *influencing* performance frequency. Because of this influence and because performance frequency is the unexplained independent variable of the ritual frequency hypothesis, ritual form is a more fundamental causal variable.

Religious ritual and motivation

Participants' representations of ritual form, explicated in our theory of religious ritual competence, contain the variables that determine which rituals include comparatively higher levels of sensory stimulation and emotional excitement and which do not. Not only does the ritual form hypothesis offer *additional* independent cognitive grounds for why memory is important here, but it also insists that memory is not the whole story about *why* some rituals introduce sensory pageantry and arouse participants' emotions. Motivation (for lack of a better term) matters too.

We shall argue for two conclusions here: first, that those religious rituals that settle around the second attractor, containing increased sensory pageantry, stimulate participants' emotions in order not only to augment their recall for these events but also to motivate them religiously, and, second, that our general theory of religious ritual competence explains why those rituals that must produce enhanced episodic memories are precisely the rituals that must fortify religious motivation.

We do not mean to suggest by all of this that Whitehouse's theory of religious modes has nothing to say about motivational questions. He emphasizes that imagistic practices, grounded in episodic memories of face-to-face interactions with in-group members, promote intense local cohesion, which brings with it all sorts of social and military benefits. Our claim is only that the ritual form hypothesis points to uniquely *religious* questions about motivation and to a deeper account of the cognitive matters at stake (specifically, participants' sensitivities to aspects of ritual form and, especially, to the roles that putative CPS-agents play therein).

Before we develop our own views, though, we must add a sidebar about the notion of motivation. For two related reasons we use the term "motivation" reluctantly here. First, this is not an area where experimental psychology provides much help. Cognitivism has influenced few areas in experimental psychology any less than it has the study of motivation, where in many quarters behaviorist methods and concepts continue to prevail. They confer restrictive connotations on the notion of motivation that purchase it some precision, but do so at the cost of sacrificing the resulting technical concepts' connections with many of our intuitions about the underlying phenomena. We do not intend our informal talk of motivation in what follows to invoke any of these technical uses of the term.

The second reason for our trepidation about this term is the flip-side of the first. The term "motivation" is inevitably vague, and talk of *religious* motivation only magnifies this vagueness. Minimally, motivation concerns the complex connections that link emotion and cognition with action and with one another; *religious motivation* concerns such connections when the emotion, cognition, and action concern religious matters. We will use "motivation" not much more precisely than it is used in everyday discourse, but our use of the term will retain connections to widespread intuitions about these matters. For our purposes, then, "religious motivation" deals with the cluster of feelings, attitudes, beliefs, and behaviors that bear on the probabilities of participants' acting to transmit their religious knowledge or, at least, affirming an intention to do so. On its own that characterization will not clarify matters much,

but taken in conjunction with our theory's overall explanatory success, it is a step in the right direction. With these two hesitations in mind, we return to the main line of argument.

The ritual form hypothesis accounts for the interplay between
1 ritual
2 sensory pageantry (and the emotion that accompanies it)
3 memory, and
4 motivation.
It follows as an inference to the best explanation from our larger theory of religious ritual competence and the cognitive alarm hypothesis. We shall explore its connections with each.

The typology of religious rituals revisited

Our theory of religious ritual competence is rooted in the claim that participants' cognitive representations of their religious ritual acts result from the same system for the representation of action that we utilize in representing ordinary actions. The representations of rituals arise from a perfectly ordinary cognitive system expressly devoted to the representation of action, *not* (just) the representation of ritual action.

We mentioned empirical research in developmental psychology that shows that within the first year of life infants gain command of the categories "agent" and "action" and deploy them to make sense of their experience and guide their behavior. Other developmental research reveals that by school age children have mastered a "theory of mind" for managing in the social world – a theory whose basic principles, in the course of cognitive development, seem to undergo elaboration but, otherwise, little change thereafter.

The ability to distinguish agents and their actions, respectively, from other entities and events provides the child with all of the representational resources necessary for the operation of the action representation system that our theory of religious ritual competence proposes. Possessing a full-blown theory of mind permits their thorough-going entry into the world of religious thought and action (Boyer, 2001).

Chapter 1 provided an overview of our theory of religious ritual competence, which we first presented in *Rethinking Religion*. In the next few paragraphs, we provide an even more condensed account of the theory's critical claims.

The action representation system generates structural descriptions of actions. The structural descriptions of religious rituals take some entries for the three action slots that differ from those for ordinary actions. These special entries include CPS-agents (such as gods, ancestors, and saints),

categories of religious ritual practitioners (such as priests, witches, and bishops), sanctified objects (such as holy water, altars, and cemeteries), and unique ritual acts (such as baptisms, blessings, sacrifices, initiations, investitures, and so on).

If a ritual's immediate structural description does not include an entry for a CPS-agent, then it includes presumptions about enabling actions involving CPS-agents that bring inquiries about the rituals' causal and rational foundations to an end. A ritual's full structural description includes that immediate structural description plus the further structural descriptions of all of the enabling ritual actions the current ritual presumes as well as accounts of their connections with the current ritual's various elements. Recall that enabling actions are simply (earlier) rituals whose successful completion is necessary for the completion of the current ritual.

Knowledge about only two dimensions of participants' representations of CPS-agents' involvement in religious rituals' action structures accounts for a wide array of those rituals' features. The first dimension concerns whether a CPS-agent serves as a ritual element in the current ritual or, if not, to which of the current ritual's elements CPS-agents are ritually connected. Since more than one element in the current ritual may have such connections, the second critical dimension concerns the *number* of enabling rituals each of these connections requires to implicate a CPS-agent in the ritual's description. The connection involving the fewest enabling rituals defines the *initial appearance* of a CPS-agent in a ritual's structural description and, thereby, the element with the most *direct* connection with the gods.

The PSA and PSI provide bases for assessing variation on these two dimensions. These principles classify a ritual according to the *location* of the first CPS-agent implicated in its structural description, assigning each ritual a *type* on the basis of its *profile* and its *depth*. The PSA specifies a ritual's profile. It distinguishes special agent rituals from special patient and special instrument rituals. The important contrast here is between a CPS-agent serving as the agent in the current ritual, or having its most direct ritual connections with the agent of the current ritual, and the CPS-agent serving in one of the current ritual's other roles (such as its patient), or having its most direct ritual connections with one of the other elements that does.

A full structural description of a religious ritual, including all of its enabling rituals, may include many entries for CPS-agents (or the same CPS-agent). Not only are priests who perform weddings ritually connected with God through their ordination, the brides and the grooms are too by way of their confirmations. The PSI states that the element with the most direct ritual connection with a CPS-agent determines that ritual's *depth*.
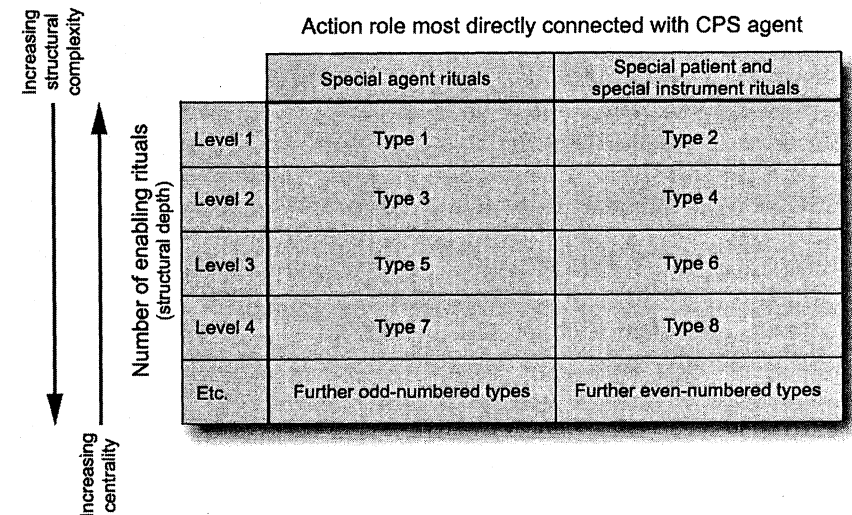
Figure 3.3   Typology of religious ritual forms

In religious rituals – at least from a formal standpoint – the buck not only stops with the gods, it might be said to stop with the *nearest* god.

Combining these two dimensions (profile and depth) generates the typology of religious rituals' structural descriptions, which summarizes the organization of the resulting system of classification. (See figure 3.3.)

The PSA distinguishes two basic types, designated by odd and even numbers. *Special agent rituals* are always odd-numbered types, since the initial entry for a CPS-agent is ritually connected with the role of the agent who is acting in the current ritual. The most immediate connection with a CPS-agent in the current ritual is by way of its *agent's* ritual history. By contrast, *special patient and special instrument rituals* are always even-numbered types, since the most immediate connection with a CPS-agent is by way of one or the other of the roles represented by the last two slots in the current ritual's structural description, accommodating the entries for the ritual's act and patient, respectively. Since the relevant elaboration of the acts in rituals involves the specification of instruments, this is to say that the gods' most direct connections with rituals of even-numbered types are either by way of the instruments or by way of the patients in the rituals.

The ritual form hypothesis

It is this distinction between special agent rituals and special patient and special instrument rituals that will concern us throughout the remainder

of this book. The PSA defines odd- and even-numbered ritual types at each level of structural depth. (For the sake of brevity, we shall henceforth refer to these as "odd-numbered rituals" and "even-numbered rituals," respectively.) At whatever level of depth the initial entry for a CPS-agent appears in a ritual's description, the question can always be raised as to whether it involves a connection with the current ritual's agent or with one of its other elements. If it is connected with the current ritual's agent, i.e., if it is a special agent ritual, then the PSA assigns it to the odd-numbered type for the level of depth in question; if it is connected with another of the current ritual's elements, then the PSA assigns it to the level's even-numbered type.

To keep things simple, we shall assume a scenario that places a wedding at the third level of structural depth. The priest has been ordained by the Church, which in a theoretical ritual is the bride of Christ. (To repeat, *far* more complicated scenarios are possible.[4]) Because the first appearance of a CPS-agent in its structural description arises in connection with the priest, who is the agent performing the wedding, it is a special agent ritual, i.e., a ritual of type five. (Again, see figure 3.3.) Although a priest presides at the celebration of the Eucharist too, an entry for a CPS-agent occurs at the very first level in the structural description of that ritual. When they are consumed, the body and blood of Christ (again – on the orthodox Catholic account) serve as the patients of this ritual. They constitute the initial appearance of a CPS-agent in its structural description. Thus, it is a special patient ritual at the first level of depth, which is to say it is a type two ritual.

That is a quick look at a few of the trees, but, ultimately, only a couple of the major ridges in the forest matter for what follows. To clarify how the ritual form hypothesis makes sense of which religious rituals gravitate, respectively, to the two attractors, i.e., to clarify how it makes sense of the place of sensory pageantry and emotional arousal in religious rituals, we must focus on the distinction between the special agent rituals and the two sorts of even-numbered rituals. Using this formal vocabulary, we can provide a preliminary formulation of the pivotal prediction of the ritual form hypothesis.

For all religious ritual systems, the *comparative* levels of sensory pageantry within *particular religious communities* will be higher in special agent rituals than in rituals whose forms exemplify even-numbered types (i.e., special patient and special instrument rituals) – regardless of the rituals' depths.

Let us unpack this claim.

Beginning with the first of the italicized qualifications, the ritual form hypothesis accounts for *comparative* levels of sensory pageantry between rituals. As our comments in the previous section suggested, quantitative

measures of sensory stimulation in something as fluid as a ritual are not easy to obtain and, once had, are extremely difficult to compare across modalities anyway. Emotional arousal is a many splendored thing. An ecstatic response to good fortune is every bit as much a kind of emotional arousal as is the profound sadness that typically accompanies the loss of a loved one. (See Tucker et al., 1990.) Even when they are possible, direct measures of emotional arousal (e.g., self-assessment) are not precise and precise measures (e.g., heart rate) are not direct. What is available for most of us here are a few first-hand experiences and lots of intuitions. But, as we argued before, comparative judgments that are accurate often do not require constituent judgments that are precise, and in this case, in particular, the differences are usually so substantial that the comparisons are non-controversial.

That leads to the second qualification. The ritual form hypothesis makes sense of comparisons of rituals' levels of sensory pageantry *within particular religious communities* only. The hypothesis does not predict differences either between different religious systems or even between different religious communities within the same religious system. Cultures and social classes can vary widely concerning the levels of sensory pageantry and emotional display that constitute the relevant base lines. (Contrast, for example, Baktaman and Scandinavian Protestants' sensibilities.) On this point, local differences matter. The ritual form hypothesis only addresses the comparative differences between the levels of sensory pageantry and emotional excitement that religious rituals possess within a specific religious community.[5]

With those qualifications in place, let us turn to explicating the import of the hypothesis. At the most general level, the hypothesis concerns ritual *form*, because it is participants' tacit knowledge of and resulting sensitivities to the differences in ritual form between two broad groups of religious rituals that are the crucial variables that account for the connections between religious ritual and sensory pageantry. So far, we have provided relatively technical accounts of these differences (within the framework of our theory). It will help to describe these two groups of rituals less formally.

The frequency hypothesis holds that frequently performed rituals require less sensory pageantry. This is the typical (though not universal) profile of even-numbered rituals, i.e., special patient and special instrument rituals. What are these rituals like? The first point to emphasize is that all of the religious rituals that participants perform frequently are even-numbered rituals. We will postpone addressing the question of *why* they perform them frequently until the next chapter, where we will take up the problem of *precisely* specifying the notion of performance frequency.

The forms of these (even-numbered) special patient and special instrument rituals permit participants to do them repeatedly. Participants perform these rites either with instruments or on patients that enjoy special ritual connections with the gods. Often the patient of an even-numbered ritual *is* a CPS-agent – a *special* patient indeed. Most offerings, including sacrificial ones, illustrate this arrangement. Consider, for example, the role of the ancestors to whom the food is offered in the Kivung temple rituals.

To put it the other way around, the agents in these special patient and special instrument rituals are more distant (ritually) from the religious system's CPS-agents than are either the implements they use (e.g., holy water) or the patients of their actions (e.g., the Baining ancestors). Whatever connections they have with the gods occur at a point of greater structural depth than do the connections of one or more of these other ritual elements. (For an illustration of a special instrument ritual, see the extended discussion of the basic Christian blessing in Lawson and McCauley, 1990, pp. 95–121.)

Under these circumstances the agents – whether they are priests or ordinary participants – usually *repeat* these rituals, since from the standpoint of ritual form, whatever connections they have with the gods are, quite literally, of secondary importance at best in these sorts of ritual contexts. The secondary status of their connections with CPS-agents in these rituals means that the ritual agents in special patient and special instrument rituals are not acting in the gods' stead, as they do in all of the special agent rituals. Consequently, these ritual agents do not bring about super-permanent religious effects. As we noted in chapter 1, the effects of special patient and special instrument rituals are always *temporary only*. Getting a second blessing can help; getting initiated a second time is simply redundant. The ancestors may be well fed today, but they get hungry again tomorrow. Note that this explains what is in some ways the theologically puzzling fact that consuming the body and blood of Christ does not absolve participants once and for all. This outcome turns on considerations of ritual form, theological assumptions to the contrary notwithstanding.

Special agent rituals

As we have noted before, even-numbered, special patient and special instrument rituals are *repeatable* (and, usually, frequently repeated). Odd-numbered, special agent rituals are *non-repeated* rituals. We need to say a bit more about what is at stake here. In one sense all rituals in which human beings participate are rituals they do repeatedly. However,

because a religious *community* repeats all rituals (given enough time), it does not follow that particular *individual* participants do them repeatedly. Non-repeated special agent rituals are rituals, such as initiations or ordinations, in which participants fill the patient's role in the ritual only once in the course of their lives. By contrast, even-numbered, repeatable rituals are rituals, such as the Puja or the ritual Oban dances for the dead in Japan, in which none of the human participants' roles have constraints of this sort. People participate in these rituals time and time again. Though specific individuals – for example, those who are not priests – may only serve in some roles in these rituals, no role is one that eligible participants characteristically take only once in their lifetimes.

The *same* individuals do what we are calling "repeatable" rituals repeatedly, whereas at least the patients change with each performance of the odd-numbered, non-repeated, special agent rituals. So, although the same rabbi may officiate at scores of them, bar mitzvahs are non-repeated rituals, because the patient's role is one that each participant fills only once. It is different participants who undergo this initiation each time, and in each case it is their one and only bar mitzvah.

Characteristically, these odd-numbered, non-repeated, special agent rituals are rituals that ritually certified religious practitioners perform, which have the profiles that they do precisely because of those practitioners' ritual certifications. Priests can perform baptisms, blessings, weddings, funerals, and more, *because* they are priests. Through earlier rituals, e.g., their ordinations, they have gained a more direct ritual connection with a CPS-agent than most of the people and many of the things that they will act upon ritually. So, when they act ritually in those cases, they act in place of the CPS-agent with whom their ritual certification connects them. They act as ritual intermediaries with no less than what constitutes a CPS-agent's seal of approval. The agents in these rituals *must* have such connections with the gods.

When they are religious rituals (and they usually are), the classic rites of passage are paradigmatic examples of odd-numbered, special agent rituals (Van Gennep, 1960). Typically, the rituals that mark entry into this world at birth, into the adult world during adolescence, and into another world at death are rituals participants only go through once. Exceptions, for example in the case of multiple rituals at death (Hertz, 1960 and Metcalf and Huntington, 1991), invariably involve peculiarities in the accompanying religious conceptual schemes that conform to this general account.

Why does the connection with CPS-agents that religious ritual practitioners possess by virtue of their certification *not* dominate in even-numbered rites? After all, religious practitioners perform sacrifices or

Holy Communion just as they perform initiations or baptisms. Nothing about the even-numbered rituals abrogates these previously established ritual relationships. The difference with special patient and special instrument rituals is that some other element in the current ritual, the patient or the instrument, either has a more intimate relationship with a CPS-agent or, even more straightforwardly, *is* a CPS-agent, for example, in the Puja.

As we noted before, when the gods act, either directly or through their intermediaries, the effects are super-permanent. Of course, the psychological causation could be in just the opposite direction. Participants regard some religious arrangements as super-permanent. Transparently, these are not arrangements that mere humans can establish on their own. Consequently, the human mind inevitably implicates CPS-agents in the rituals that bring about these states of affairs. In either case, the powers of the gods and their abilities to project those powers through their intermediaries are such that these rituals need only be done *once* with each patient to establish such effects. When the gods do something – either directly or indirectly through the agency of their certified representatives – they do it once and for all. There is no need to repeat these rituals. This is why participants undergo these rites only one time. This is also the key to why the rituals filled with sensory pageantry are always rituals of this sort.

If a ritual establishes a super-permanent arrangement, it must *convince* participants that something profound is going on. Since mere humans – limited as they are in time and space – cannot inaugurate super-permanent arrangements, the gods must have had a hand in them. So, in addition, participants need to know that it is the gods who are ultimately responsible for those profound goings on. These special agent rituals often include direct indications that it is CPS-agents who are responsible for what is transpiring. For example, it is no coincidence that so many initiations include opportunities for candidates to confront particular CPS-agents directly, whether as masked dancers such as the *awanga* and *ilotka* or as skulls (Gardner, 1983) or as skulls whose eye sockets are illuminated (Fernandez, 1982) or as icons (Apuleius, 1989) or as figurines (Pfeiffer, 1982) or as images of CPS-agents in cave paintings (Mithen, 1996), etc.[6]

The *cognitive alarm hypothesis* holds that extreme emotions signal to human beings that the current objects of their attention are particularly significant. That contention has implications for more than just memory. The high emotion of some religious rituals establishes convictions about the significance of both those events and the agents who are putatively responsible for them, especially when they appear to be directly involved. Usually, it is in the grip of such convictions that participants are subsequently *motivated* to transmit such information to others (as appropriate).

Religious rituals' manipulations of sensory pageantry and participants' emotions are not academic exercises about proving the gods' existence. The comparatively high emotion such rituals instigate helps to persuade at least some of the participants involved not only that they have undergone fundamental changes but also that the CPS-agents, who are ultimately responsible for those changes, are *vitally* important to them and, often, to their community as well.

To summarize, then, the ritual form hypothesis differs from the frequency hypothesis both about *which* religious rituals contain elevated levels of sensory pageantry and, at least in part, about *why*. The ritual form hypothesis maintains that heightened sensory pageantry arises only in odd-numbered, special agent rituals, which characteristically spawn super-permanent effects. Ultimately, only the gods can bring about such effects; thus, in these rituals the gods either act directly or certify the action indirectly. Consequently, each individual needs to undergo these rituals only once. Although we have some differences about the details of the processes involved, Whitehouse and we agree that the comparative emotional arousal these rituals produce contributes to enhanced memory for aspects of these events. What we have argued, however, is that enhanced memory is not the whole story here. Rituals of this sort must persuade participants both of the importance of these events and of the gods' involvement. Stirring their emotions so much helps to contribute to this end. The resulting convictions play a critical role in increasing the probabilities that participants will transmit these ideas subsequently.

In the next two chapters we shall compare the merits of the ritual form and ritual frequency hypotheses. We shall examine especially closely their abilities to account for the events in Dadul and Maranagi on which Whitehouse has reported. We shall argue that the ritual form hypothesis provides not only a consistently superior explanation of this specific set of cases but a far more penetrating causal account of much larger patterns that hold both within and among religious ritual systems across cultures and through time. In other words, before we are through with this expedition we aim to stalk much bigger game.