

RITUAL, TIME, AND ETERNITY

by Roy A. Rappaport

Abstract It is argued here that the construction of time and eternity are among ritual's entailments. In dividing continuous duration into distinct periods ritual distinguishes two temporal conditions: (1) that prevailing in mundane periods and (2) that prevailing during the intervals between them. Differences in the frequency, length, and relationship among the rituals constituting different liturgical orders are considered, as are differences between mundane periods and ritual's intervals with respect to social relations, cognitive modes, meaningfulness, and typical interactive frequencies. Periods, it is observed, relate to intervals as ever-changing to never-changing, and close relationships of never-changing to eternity, eternity to sanctity, and sanctity to truth are proposed. In the argument that ritual's "times out of time" really are outside mundane time, similarities to the operations of digital computers and Herbert Simon's discussion of interaction frequencies in the organization of matter are noted.

Keywords eternity; hierarchy; orders of meaning; ritual; sanctity; time

I shall be concerned with the ways in which time and eternity are organized by ritual. Because this discussion is part of a more general one concerning the entailments of the ritual form, some introductory remarks locating it in its larger context will be helpful.

I take the term *ritual* to denote *the performance of more or less invariant sequences of formal acts and utterances not encoded by the performers*. This definition is devoid of any functional or substantive stipulations, neither asserting what ritual is "made of" nor stating what it does. It is, rather, formal or structural in nature, taking enduring relations among the features that lead us to identify events as rituals—formality, invariance, performance, encoding by other than performers—to be definitive.

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These features may be obvious in the sense that they are directly perceptible, but they and the complex relations prevailing among them have less obvious entailments. I have, to begin with, argued at length elsewhere (1979a) that participation in a ritual signifies, not symbolically but *indexically*, the *acceptance* of whatever is *represented symbolically* in that ritual. I cannot develop this matter fully here. Suffice it to note the following:

To perform a liturgical order (or ritual), by definition a more or less invariant sequence of acts and utterances specified by authorities other than the performers themselves, is perforce to conform to it. It follows that authority is intrinsic to ritual. But the relationship of performers to the orders they perform is more intimate and binding than such terms as *authority* and *conformity* suggest. Rituals are composed, as we have noted, of acts and utterances. The orders encoded in them are enlivened or realized—made into *res*—only when those acts are performed and those utterances are voiced. This relationship of the act of performance to that which is performed—that the performance brings the order performed into being once again—cannot help but establish as well the relationship of the performer to that which he or she is performing. Performers are not merely transmitting messages they find encoded in the ritual's canon to themselves and, possibly, to others. They are *participating in*—that is to say, becoming *parts of*—the orders to which their bodies and breaths give life.

That ritual is a mode of communication is a truism among its secular students, but they have not always paid sufficient attention to the significance of its semiological or semiotic peculiarities. We need only touch upon certain of them here. The notion of communication implies, minimally, transmitters, receivers, messages, and channels. That, in ritual's channel, senders and receivers are often one and the same has already been implied. Indeed, performers, as transmitters of messages *they themselves did not encode*, will *always* be among the most significant receivers of those messages. We may also note a further fusion: in performing a ritual the transmitter-receiver becomes fused with the message he or she is transmitting and receiving. As already suggested, in conforming to the order that comes alive through their performance the performers become parts of that order, and *thus indistinguishable from it*, for the time being. For participants to reject an order enlivened by their participation while they are participating in it would be self-contradictory. Therefore, *in performing a ritual the participants accept, and indicate to themselves and to others that they accept, the order encoded in that ritual.*

Acceptance of an order *may* be a consequence of belief in it, but acceptance does not require such belief. Belief is an inward state knowable, if at all, only to the believer. Acceptance, in contrast, is a public act, visible both to the acceptor and to others. Nor does acceptance guarantee future compliance with whatever rules—social, moral, or devotional—that the accepted order encodes. Ritual acceptance is, nevertheless, binding in that it *establishes obligations* to act in ways conforming to the accepted order. It is obviously possible to violate one's obligations. Less obviously, it can be argued that one cannot violate obligations that have not been accepted, because there are no obligations in the absence of acceptance (Searle 1969, 189).¹ Obligations are accepted in, through, and by participation in ritual, which is to say that social contract is intrinsic to the form that constitutes ritual. Furthermore, inasmuch as breach of obligation is always and everywhere regarded as immoral, and may even be the essence of all acts taken to be immoral, morality is *intrinsic* to ritual.

I have further argued elsewhere that the concept of the sacred, the sense of the numinous, and the notion of the divine are also products of ritual, and that the ritual form is at least isomorphic with a widespread paradigm of creation (1979a). I shall now suggest ways in which conceptions of eternity are also implicit in ritual, and propose ways in which liturgical orders construct temporal orders composed of alternations of time and eternity.

LITURGICAL ORDERS AND THEIR DIMENSIONS

I use the term *liturgical order* to refer not only to individual rituals, but also to the more or less invariant sequences of rituals that make up cycles and other sorts of series. Although my terminology differs from that of Van Gennep (1909), my usage is similar to his, for he too was at least as concerned with such sequences as he was with single rituals.

I refer to rituals and sequences of rituals as liturgical orders because I take them to be orders in virtually every sense of the word. First, they constitute orders in the sense of "systems," as exemplified in such phrases as "the moral order" or "the economic order" or "the natural order"—more or less coherent domains within which generally commensurable processes are governed by common principles and rules. As such they constitute order, as opposed to disorder or chaos. In doing so they may distinguish orders of persons—for instance, those "in orders" (such as Benedictine monks) from others. These orders may be ranked, and rank or hierarchy is implicit in

some usages. Architects, for instance, speak of elaborate arches composed of four or five orders, one above the other. Further, inasmuch as liturgical orders are more or less invariant sequences encoded by other than the performers their performance entails conformity. This is to say that, although their words may not be cast in the imperative mood, they constitute orders in the directive sense. Finally and most obviously, they are orders in that they are more or less fixed sequences of acts and utterances, following each other "in order."

We are led here to the dimensions, analogous to the length, breadth, and height of rooms, in which liturgical orders are realized.

The first and most obviously temporal, which may be likened to the length of a chamber, is the *sequential dimension*. As rooms vary in length, so do liturgical orders. Some rituals are fleeting, some fill hours or days; it is common for liturgical orders to mark years, and it is not unusual for them to organize yet more protracted durations. Long or short, all "take time," as we say, time during which one act or utterance, or one ritual, succeeds the one preceding it in established order. Although nothing might seem more banal than the observation that one thing follows another, the implications of one thing following another are not all obvious or banal, as Van Gennep long ago showed us.

If the sequential dimension can be likened to the length of a chamber, the second, which we may call the *synchronic*, can be likened to that chamber's breadth. At each successive moment during a ritual's performance an array of varied significata may be *concurrently* represented to participants by single objects or acts. Conversely, a single significatum may be *concurrently* represented by a plethora of *simultaneously* performed acts or perceived objects. An example of the latter is Carnival (Babcock 1973), during which overwhelming arrays of acts and objects simultaneously signify the same thing: inversion. A famous instance of the former is provided by the Ndembu people's *Mudyi* tree, for which Victor Turner identified nineteen simultaneously represented significata (Turner 1967; 1973). The general meaning or significance of the *Mudyi* tree, we may note in passing, is not the sum of these more or less distinct significata but a product of their union in a single, instantaneously grasped "sign" or "representamen" (Peirce 1955). This dimension, which is emphasized in symbolic analyses of "multivocal" ritual signs, is also variable. Some of the acts and objects constituting any liturgical order represent broader or narrower arrays of significata than others. Some bring together meanings from all varieties of

experience, others are more highly focused, and the breadth of a ritual may vary from moment to moment as its performance progresses. The synchronic dimension, like the sequential, has a temporal aspect, constituting a continuous “now” in the movement, intrinsic to all successions and sequences, of future to past.

The third dimension, the *hierarchical*, which may be likened to the height of our analogic chamber, has received less attention and is less well understood than the others. The matter is difficult and complex. There is time here to do little more than note that all rituals and ritual elements are not equivalent in import. Some rituals, to begin with, are both instrumental and contingent upon others, which are taken to be fundamental. For instance, politically instrumental coronation ceremonies in Catholic kingdoms are contingent upon another ritual, the Mass, whose fundamental office is to accept the divinity of the God in whose name the king is to be crowned. Hierarchical relations of contingency may be several levels deep. The efficacy of the ritual for curing the disease called the King’s Evil (scrofula), in which Catholic kings healed sufferers by touching them, was, in turn, contingent upon the anointment of the king’s hands in the coronation ceremony. Such hierarchical relations of contingency point to hierarchical relations of sanctity. Some elements of liturgical orders are ultimately sacred while others are merely sanctified by association with the ultimately sacred. Thus, the Jewish statement of faith, called the Shema (“Hear, O Israel, the Lord our God the Lord is One”) postulates the ultimately sacred, whereas the 613 commandments in the Torah are not ultimately sacred but merely sanctified by association with the ultimate sacred postulate. Elsewhere (1979b, 117ff.), in dealing with the matter at greater length I have argued that the multiple understandings represented in and organized by liturgical orders differ not only with respect to relations of contingency and degrees of sanctity, but, correspondingly, with respect to authority, logical typing, the ways in which they are meaningful, and along several other continua: from highly general to highly specific, abstract to concrete, absolutely irreversible to easily reversible, absolutely immutable to highly labile, and perduring to evanescent. The last of these continua indicates that the hierarchical dimension has temporal characteristics, to which we shall later return. This essay will, however, be mainly concerned with aspects of sequence. Whereas Van Gennep was primarily concerned with the social transformations effected in ritual’s times, we will be primarily concerned with temporal organization itself.

THE CONSTRUCTION OF TIME

Time is mysterious, and will remain so long after the words of this discussion have been absorbed into the silence of an ever-retreating past. I will simply note that anthropologists and psychologists (Hall 1984; Ornstein 1969) tend to agree that, although various “biological clocks” exist, there seems to be no universal temporal sense guiding all humans through the durations of their lives at apparently similar rates. It would, on the other hand, be an exaggeration to claim that the sense of time is fully constructed *ex nihilo* by each culture for itself, for all normal humans (past infancy) must distinguish, at least during the waking state, *now* from past and future, and—*pace* Edmund Leach (1961, 126)—past and future from each other as well. They also perceive some events to be further in the past or future than others, and they recognize that although some sorts of events are periodic and recurrent, others are not.

The chronicles of memory and anticipation are, however, private and idiosyncratic, and they may be bent or reordered by regret, nostalgia, pain, delight, foreboding, and hope—or disarranged by disease, age, and simple forgetfulness. The sense of passage that all normal humans possess, being idiosyncratic and unreliable, or at least subject to distortion, not only cannot serve as the ground for temporal ordering, but may even create a demand for public ordering. All societies, in consequence, are faced with the task of constructing time, not simply for the coordination of social life but to provide roads for each individual’s temporal experience to follow.

Nature is a source of temporal raw material, and societies may, of course, found time upon the periodicities of nature; but this does not propose that human time is simply natural. While it may be *founded upon* natural processes—the circle of the seasons, the waxing and waning of the moon, the alternation of day and night—it is not *established* by those processes themselves. It is of interest that the only natural cycle that seems universally significant is that of day and night. Although cultures may make use of a range of natural cyclicities in their construction of time, time needs always to be constructed. The materials out of which it is constructed, moreover, are not limited to natural recurrences. There are olympiads, five-day “weeks,” seven-day “weeks,” nine-day “weeks,” and ritual cycles of variable duration, such as that of the Maring of highland Papua New Guinea, which takes anywhere from eight to twenty or so years to come full circle (Rappaport 1968).

Aristotle (*Physics*, bk. 4, chap. 10, in McKeon 1941), and many since Aristotle, have suggested that the experience of time and,

indeed, time itself, is fundamentally a matter of succession, recurrent or nonrecurrent. Whitehead (1929, 158) took it to be the “sheer succession of epochal durations”; a little earlier in the century J. S. Mackenzie (1912), in a discussion of eternity, defined it as “simply the form of succession in a developing process.”

This may *sound* clear, but succession of what? When we speak of successions we must be speaking of more or less distinct events or states of affairs. But what is “a state of affairs” or “an event”? Each of us interprets the occurrences we separately experience in more or less idiosyncratic ways, and each of us punctuates continuous experience differently. Furthermore, even such natural transitions as spring turning into summer are vague, for nature does not mark such transitions sharply. Most natural processes are continuous rather than discontinuous, and continuity generates both vagueness and ambiguity.

The formal characteristics of ritual contrast sharply with the indistinct character of “natural” events. Rituals are more or less invariant from one performance to the next, and great emphasis is often placed upon punctiliousness of performance. This is to say that they are among the most perfectly recurrent of cultural events. As such, the fact of a ritual’s occurrence—that is, that a ritual is, in fact, occurring—is among the clearest of all humanly constructed events.

Clarity of occurrence suits ritual admirably for the task of imposing on natural processes discontinuities much sharper than those intrinsic to the natural processes themselves. It may even be claimed that the occurrence of ritual imposes discontinuities upon processes that are themselves seamlessly continuous. As such, ritual can be relied upon to distinguish succeeding from preceding unambiguously, thus distinguishing, in continuous processes, what may be called *phases*—that is, *stages*—in what can now appear as *series* of distinct states of affairs. These phases—whether parts of “developmental” or recurrent processes—may then serve as characterizations of the *durations* during which they unfold and, in effect, transform those durations into *periods*. Periods, to put it conversely, are temporal durations within which phases are encompassed—such phases as spring/summer/autumn/winter, childhood/youth/manhood/death, night/day. Thus, through the series of rituals comprising them, liturgical orders sever seamless durations into distinct periods and may also invest those periods with significance. Moreover, as liturgical orders distinguish periods from one another, so may they unite them into larger, meaningful entities. Childhood, youth, manhood, and old age are joined into coherent and orderly

lifetimes, and spring, summer, autumn, and winter into years. If, as MacKenzie said, in general agreement with many others, time is “simply the form of succession in a . . . process” (1912)—developing or otherwise—then liturgical orders impose form on processes to make succession. There can be no succession without things—periods—to succeed each other. It is of interest that the English word *time* derives from the Indo-European root *di*, or *dai*, “to divide” (*American Heritage Dictionary* 1969, 1511). In dividing continuous duration into distinct periods, liturgy provides the wherewithal of succession and further provides for those successions to be joined into larger wholes. This is the beginning of temporal construction.

But only the beginning. No ritual is instantaneous. The ritual of, say, Midsummer Night’s Eve lasts from dusk until dawn, thereby comprising a duration of sensible length. This duration is neither in the preceding springtime nor the succeeding summer but constitutes a significant *interval* between those periods. In distinguishing periods from each other, liturgy cannot help but distinguish periods as a class from the intervals separating them as a class. These intervals may be confined within boundaries of single rituals, or they may be more protracted, beginning and ending with distinct rituals; and complex patterns of nesting are also common.

The distinction between intervals and the periods they separate corresponds to a frequently remarked distinction between two kinds of time, or, to be a little more formal and correct, two “temporal conditions.” On the one hand, what is called “ordinary” or “mundane,” or “profane” time prevails in periods, but intervalic “time” is said to be different. Mysterious phrases, such as “extraordinary” or “sacred” time, or even “time out of time,” are used. Van Gennep (1960), Turner (1967; 1969), Leach (1961), Wallace (1966), and others have been concerned with the peculiar characteristics of actions and events occurring in these liminal intervals, emphasizing that transitions are effected in them and that neither quotidian logic nor ordinary social relations prevail during them. We shall return later to these matters and also to something with which they were not importantly concerned, namely, the peculiar characteristics of extraordinary time itself. I will argue that “time out of time” really is out of time.

There is something, however, to say about this now. It is of interest that in distinguishing two temporal conditions from each other, ordinary periodic time and extraordinary intervalic time, liturgical orders operate in a manner that bears a striking formal resemblance to the operation of digital computers. The introduction to a textbook on circuit design tells us that “the successful operation of a real

machine depends upon being able to separate the time intervals at which variables have their desired values from those *in which they are changing*. Logically, therefore, the passage of time is discrete where physically it is continuous" (Reeves 1972).

Before and after the moment of change the variables have their "desired values," which is to say the values that enter into the machine's computations. The intervals during which the values of variables are actually changing are *outside* the times during which the computer's operand logic prevails and are ignored in its computations. But although the processes of change are ignored in the machine's computations, the values of the variables that *do* enter into the computations are *contingent* upon those changes.

The logic of the machine, in sum, is digital. Computations take the values of components to be either 0 or 1. The transition from 0 to 1, taking place *in the ignored interval*, is not a digital but an analogical process. This is to say that the processes in the intervals are *governed* by a logic *other* than that in which computation proceeds.

The resemblance to ritual seems patent. As the values of variables in computers are contingent upon transformations in preceding intervals, so are social states in mundane periods in some degree outcomes of transformations in previous rituals, and while the states of affairs before and after ritual transformations can be distinguished by the digital logic of either/or (e.g., single/married, youth/man, war/peace), the logic of the interval, when transformation is actually effected, is that of neither/nor and analogical.

There are, of course, differences between computers and liturgical orders, one of the most obvious being duration. Intervals in computers were first measured in milliseconds, then microseconds, and now nanoseconds (billionths of seconds), and the analogical processes in them are of the temporal order of picoseconds (thousandths of billionths of seconds). The intervals marked by liturgical orders are, in contrast, hours, or even days, and occasionally weeks or months in length. They are always long enough to experience being in them. We shall return to this later; first, however, there is more to say about periods themselves, about the relationship of intervals to periods, and about what may be called "the shapes" of liturgical orders.

RECURRENCE AND NONRECURRENCE

To speak of the construction of time by ritual is, in part, to speak of its shaping in conformity to the shapes or forms of liturgical orders. There are, first, what Van Gennep called "rectilinear orders"

(1960), exemplified by the sequences of rites leading from those surrounding birth to those following death. Although the preponderance of the rituals composing such sequences may be, for any individual, nonrecurrent, they are oft repeated in any society, for many or most of its members will proceed through them.

There are also "closed" or recurrent orders—those that lead back, so to speak, whence they came. Cycles are familiar, and many liturgical orders, most obviously calendrical orders, take a "circular" form. Recurrence can, however, assume other shapes. In speaking of time generally, Edmund Leach proposed some years ago (1961, 126) that alternation, rather than cyclicity, is the form that recurrence takes in stateless societies, and even in archaic states. Leach's assertion was in some degree an expression of disagreement with Evans-Pritchard's facile assumption (1940, 95ff.) that recurrence virtually entails cyclicity, but the opposition between cyclicity and alternation as competing grounds of recurrence seems hardly worth fighting about. For one thing, an alternation *is* a cycle, albeit of the simplest possible sort, that is, one consisting of only two phases or states. It could be argued, of course, that even though alternation can be subsumed logically by cyclicity, they are experientially different. Even granted this, why should it be necessary to choose one or the other as fundamental? The matter is not of great importance but is worth bringing up for this reason: whereas the succession of *periods* may be either alternating or cyclical (e.g., as in alternations between war and peace on the one hand and the cycle of the four seasons on the other), the relationship of periods to intervals is *intrinsically* alternating.

Whatever the recurrence structure of mundane time may be, *overall* temporal structure, when constituted by a liturgical order, is an alternation between mundane time and "time out of time." It is important to note again, now with respect to this alternation between the temporal conditions, that rituals, which distinguish and encompass times out of time, are, as invariant sequences of formal acts and utterances in which emphasis is typically placed on punctilious performance, among the most perfectly recurrent of social events.

Recurrence is not confined to ritual, of course. Much of what occurs in mundane time is also recurrent. Spring comes every year. But mundane time is also the time to which the continuous, oriented, and nonrecurrent processes of nature are largely confined—the irreversible changes of growth and progress, to be sure, but also those of decline and death. The ceaseless and ineluctable changes of life and history are of mundane time.

In contrast, that which occurs in liturgical time out of time is characterized by punctilious repetition *and is thus represented as never-changing*. The relationship, then, of that which occurs in liturgical intervals to that which occurs in mundane periods is *the relationship of the never-changing to the ever-changing*. We shall return to this, but first there are some things to say about the organization of mundane time.

THE ORGANIZATION OF MUNDANE TIME

If history and death are of mundane time, so, we have noted, are the recurrent processes that sustain life and society. We cannot take up the full range of ways in which liturgy orders the periodicities of mundane time but can only note some possibilities for, and entailments of, such ordering.

We have already seen that liturgical orders may differ in shape. They also may differ in length. Some are elastic—as variable as the lengths of the lifetimes they mark at beginning and end or, as among the Maring of New Guinea, as variable as the amount of time it takes to acquire a sufficient number of pigs to perform the sacrifices necessary to conclude them. Others are precisely a year in length; some take one day, or seven days, or nine days, or a month.

All of this is obvious, but less obvious things lie just below the surface of these apparently unremarkable facts. The recurrences marked by some liturgical orders are external to themselves. They are properties of processes unfolding independent of liturgy. The moon waxes and wanes regardless of ritual. The recurring ritual may make it clear that at a given moment summer has overtaken spring, but the liturgical calendar does not itself engender the continuous changes in light, temperature, plant growth, animal sexuality, or celestial movement upon which the distinction it makes is imposed.

In other instances, however, the liturgical order *itself* provides the *grounds* of recurrence. In contrast to rituals that, let us say, greet the arrival of the new moon, Sabbath rituals do not simply reflect a rhythm intrinsic to nature upon social life. They provide an arbitrary periodicity in accordance with which society can organize its activities.

Of yet greater interest are noncalendrical liturgical cycles. The occurrences of the rituals constituting the Maring ritual cycle are a function of certain environmental and demographic processes. But this liturgical order does not simply reflect these processes, nor does it merely provide an arbitrary periodicity in terms of which

humans may organize management of them. *It itself reverses and imposes recurrence upon them* (Rappaport 1968, 153ff.).

This is a matter of considerable importance. To say that ritual imposes recurrence upon those processes is another way of saying that it regulates them. To regulate, in its very cybernetic essence, is to maintain the reversibility, and thus the recurrence, of processes that, if left to themselves, would move rectilinearly in the direction toward which the second law of thermodynamics points: toward environmental degradation, social disruption, political anarchy, and even biological annihilation.

Discussion of the imposition of the cyclicity inherent in liturgical orders upon the social and natural world external to them leads from the ordering of time *per se* to the closely related matter of scheduling, that is, to the temporal organization of activities.

First we may observe that those whose activities are organized by a common set of liturgical performances may form social entities of some sort. Indeed, such coordination may define social groups. Maring local groups are, in fact, distinguished from their neighbors by the coordination of the ritual cycles of their constituent clans. The history of their fusion from congeries of autonomous descent groups is a history of such coordination (Rappaport 1968).

Conversely, significant social distinctions may be established and maintained by adoption of and conformity to distinct liturgical calendars. Familiar examples are provided by differences in the holy days of the Jews (Saturday), Christians (Sunday), and Muslims (Friday). The history of early Christianity suggests that the change to Sunday may well have been part of a deliberate attempt to distinguish Christianity from Judaism, and it is probable that the observance of Sunday by Christians began among the predominantly gentile congregations established by Paul, who urged his followers to protest against having the Sabbath imposed upon them. Congregations composed mainly of persons of Jewish origin were slower to abandon Saturday for Sunday observance (Glazebrook 1921). The Muslim choice of Friday may also have been polemical (Margoliouth 1918).

The Quartodeciman heresy may be of even greater interest in the present context. The Quartodecimans—the first (or among the first) in Christianity's history to be anathematized—were those who celebrated Easter on the fourteenth day of the Hebrew month of Nissan, which is Passover. A few years before the year 200, Victor, bishop of Rome, anathematized them as “those who would celebrate Easter with the Jews” (Carleton 1910). Subsequently, the date of Easter was reckoned in ways so that it could not coincide with

Passover. It can be argued that the adoption of anti-Quartodeciman reckoning marked the full separation of Christianity from Judaism—setting the stage, by the way, for the Irish, Greek, and Roman churches to separate themselves from each other, also on the grounds of Easter's dating.

To return to the coordination of activities *per se*, liturgy's effects in this domain are most obvious and most significant when the cyclicities of the liturgical order are independent of seasonality. The Maring ritual cycle, which takes eight to twenty years to complete, is a good example. A sequence of rituals distinguishes a number of major periods, in each of which the dominant activity is different from the activities constituting the foci of the preceding and succeeding periods:

1. *Planting rumbim* terminates warfare and commences a period of six to twenty years during which gardening and pig husbandry are the foci of activities.
2. *Planting stakes* commences a period of several months during which trapping and smoking marsupials are the main activities.
3. *Uprooting the rumbin* commences the *kaiko* festival, a little more than a year in length, during which pigs are sacrificed to ancestors, friendly groups are entertained, payments are made to affines, and alliances are strengthened.
4. The *pabe* ritual terminates the *kaiko* and permits the local group to initiate warfare again, should its members wish to do so.

The Maring cycle, it is clear, not only coordinates production, exchange, and defense, it also provides all of these activities, or rather these activities taken together, with a rationale that goes beyond their immediate material effects. Ancestors and allies alike are repaid, the dead are avenged, and ever again the wounds of a world sundered by inevitable human strife are healed in accordance with *Nomane*, a Maring conception that bears a family resemblance to the Heraclitean conception of *Logos*.²

In light of this account it could be said that the ritual cycle constitutes, or at least codifies, relations of production in Maring society. By "relations of production" I mean the social relations organizing the material processes of production and the disposition of that which is produced. It is, as such, the locus of the assumptions in terms of which economizing behavior is organized and morality judged in that society. We can, I think, speak of a "ritual mode of production" in the Maring case. The ritual mode of production is probably confined to egalitarian societies. Because it can operate in the absence of discrete authorities, it is likely to be extremely ancient.

THE FREQUENCY AND LENGTH OF RITUALS

Liturgical sequences differ not only in shape, length, and the bases for the occurrence of their constituent rituals, but also in the frequency of the rituals composing them, in the regularity of their occurrence, and in the length of individual rites. Catholic monastics daily recite the "offices," seven rituals ancillary to the Mass; Orthodox Jews pray at least three times daily. In contrast, months or even years may pass between one community-wide Maring ritual and the next. Moreover, the occurrences of the latter are not calendrical. When they occur, however, they tend to be lengthy—all night is usual; some take three days. Anthropologists have paid little attention to these matters, and there is space here for no more than brief and tentative suggestions.

First, the frequency of rituals may be related to the degree to which the liturgical order attempts, as it were, not only to regulate daily behavior, but to penetrate to the motivational bases of that behavior. This may, in turn, be related to the degree to which the conventions or moral dicta the rituals encode are vulnerable to violations motivated by the pressures and temptations of daily life, and to the weakness or absence of other means for dealing with them. Thus, the frequency of ritual participation on the part of Roman Catholic clergy may be related to the austerity of restrictions upon their sexual behavior, that of Orthodox Jews to the maintenance of their social boundaries in societies in which they are small minorities and in which assimilation has its temptations. High frequency—to push this a little further—may be instrumental in rooting whatever dicta are encoded in the ritual so continually and routinely in everyday life that they seem to be natural, or at least of "second nature," rather than merely moral. To abandon them, if this is the case, would be painfully self-alienating.

In contrast, the infrequent community-wide rituals of the Maring are not so much implicated in the regulation of daily behavior, let alone the emotional and motivational bases of that behavior, as they are with processes we would take to be "political." In the absence of discrete authorities that are able to command the performances of others, these rituals, as we have seen, coordinate and effect transitions from one dominant community-wide activity, such as war, to another, husbandry.

Suggestions concerning the social and psychological functions of high frequencies of ritual performance should not lead us to dismiss their eschatological significance. The punctuation of daily life by the brief but frequent rituals and the continuing observance of the

prescriptions constituting *Halakah* represent an attempt by Orthodox Jews to realize divine order in the mundane world. Such an attempt, to bring the divine into *this* world, is, says Soloveitchik (1963, 17ff.), the inverse of mystical attempts to escape from this world to unite with the divine.

We are led by Soloveitchik from the frequency of rituals to their length. Mystical experiences (in a broad sense) may be encouraged by, or evoked in, less frequent rituals of greater length and intensity. To put it in the converse, the length of rituals could be related to the profundity of the transformations to be effected in them. Longer intervals allow fuller development of the peculiar characteristics of times out of time, resulting, possibly, in deeper transformations of consciousness and longer-lasting effects upon the psyches of the participants. In terms of this suggestion we might expect rites of passage in societies with radically demarcated ontogenetic statuses to be long. There may, of course, be alternatives to length for reaching psychic depths in such rites. Pain could be one. Among Australian aborigines, for whom the distinction between the initiated and uninitiated is sharp and wide, rites of passage are both long and painful.

Finally, we may note that there are liturgical orders in which the constituent rituals are both long *and* frequent. The proportion of time spent in ritual becomes very high and the times between ritual so short that the emotional afterglow of one has not fully faded before another commences. Such liturgical orders seem largely confined to cloistered communities of religious specialists who, in contrast to Soloveitchik's "Halakhic Man," do not attempt to bring the divine into this world, but try to spend their lives partway to heaven.

"COMMUNITAS" AND THE NUMINOUS

We have been led out of mundane time and into the extraordinary time of ritual's intervals. We earlier observed similarities, very general in nature, of temporal alternation in liturgical orders and in digital computers but also noted differences between them. Most significant for us is that the intervals encompassed by liturgical orders are, in contrast to those of computers, of sufficient duration to experience being in them—hours or even days, rather than nanoseconds, in length.

Long enough to experience *being in* them (I emphasize both "in" and "being"). To say that these intervals are long enough to experience being *in* them is to say that they are long enough to experience *being in* them. The states of both individual consciousness and the

social order may be very different during ritual from those prevailing in mundane time.

Participation in ritual encourages alteration of consciousness from the rationality that presumably prevails during daily life and, presumably, guides ordinary affairs toward states that, to use Rudolph Otto's ([1917] 1923) term, may be called "numinous." Although we do not have time here to consider the many varieties of numinous experience, they have in common the fact that they are not organized by syntactic or syllogistic logic; iconic representation seems important in them; and they are deeply emotional. More specifically, numinous emotions are often reported to be responses to a sense of some sort of extraordinary presence in which, although it is sometimes conceived to be "wholly other," ritual performers may feel they are participating. Perhaps most important here, being *directly felt*, numinous experiences seem often (if not always) to be construed by those experiencing them to provide direct and undeniable evidence of such presence.

Whereas psychiatrists might view the numinous state as *dissociated*, the experience (as often reported) might better be characterized as *reassociated*, for parts of the psyche ordinarily out of touch with each other may be united, or better, in light of ritual's recurrent nature, *reunited*. Reunion, furthermore, may reach out from the reunited individual to embrace other members of the congregation, or even the cosmos as a whole. Indeed, the boundary between individuals and their surroundings, especially others participating in rituals with them, may seem to dissolve. The extraordinary condition of mind and society that may develop during ritual has been called *communitas*. Victor Turner (1969, *passim*) has proposed ways in which the structure of relations when *communitas* prevails differs from that prevailing during mundane time, and I would add that the intimate, nondiscursive forms of communication, loosely called *communing*, are also characteristic of it.

TEMPO AND COORDINATION

I now wish to suggest that the achievement of such special states of mind and society in ritual is, in some instances or degree,³ an outcome of ritual's peculiar temporal characteristics. It is of interest, in this regard, that the reunion of "mind," "heart," "body," and "society" may well be most fully realized in ritual dancing, as Radcliffe-Brown proposed long ago (1964, 251f.). In dancing, the whole body enters into the computations of the prevailing consciousness, at the same time that the individual's sense of his or her

separation from others is submerged or overwhelmed as a function of continuous, tight coordination with them. Thus the *communitas* engendered by dancing is an outcome of heightened coordination; and heightened coordination, in turn, may be an outcome of imposing upon social interaction special tempos—tempos that may be difficult to achieve under mundane circumstances or that are inappropriate to all but a very few ordinary activities.

The tempos that are typical of such coordination are often quicker than tempos that are characteristic of ordinary social interaction. The rhythm of the drum may approximate the rapidity of heartbeats. That rhythm, furthermore, may entrain the breaths and pulses of the dancers, or at least may be experienced as if it does, as it synchronizes the movements of their limbs and unifies their voices into the unisons of chant or song. But even when tempos are not especially rapid—even when, for instance, the performers' voices join in the unison of a slow dirge, or they kneel or rise at the same moment—their coordination is likely to be much tighter than is usual in mundane social intercourse. To sing in unison not only requires that everyone sing particular notes, but that they do so *simultaneously*. As rapidity has its effects, so does simultaneity. It produces unison, and in unison performers may experience themselves to be united with other congregants as parts of the order that they together realize. In an earlier section it was suggested that “macro-coordination” of liturgical orders could effect the fusion of previously distinct groups. Now we note that “micro-coordination” of the actions of members of these fused congregations may unite them in *communitas* and further note that the tempos and degrees of coordination, in conformity to which congregations proceed through some rituals, *are more characteristic of organic processes than of ordinary social processes.*

Some of the activities of mundane time are also rapid and rhythmical and tightly coordinated. It is of interest that such activities seem to generate an *esprit de corps* among participants, which can be similar in some respects to ritual *communitas*.

But tightened coordination and quickened tempo are not the only distinctive features of the rhythm of liturgical orders. In emphasizing the organic frequencies of ritual's rhythms we must not lose sight of their much slower frequencies. Not only may there be repetition at organic frequencies *within* the ritual itself, but there is recurrence of the ritual *as a whole* from week to week or month to month, year to year, death to death. Therefore, that which is performed at a quick tempo and in tight coordination, and through that tempo and coordination unites participants more tightly than they are under ordinary circumstances, is *experienced as never-changing.*

ORGANIC TIME, SOCIAL TIME, AND COSMIC TIME

We are led by these considerations to a clearer understanding of what may be meant by some of the mysterious phrases used to characterize ritual time (such phrases as "time out of time") and through that understanding to conceptions of eternity. Herbert Simon's discussions (1969; 1973) of temporal aspects of complex organization is illuminating in this regard. He argues that we can approach the problem of distinguishing "levels of organization" in a complex reality in temporal terms:

If we observe the behavior of a system over a *total time span*, T , and our observational techniques do not allow us to detect rhythmical or fluctuating changes during [*brief*] *time intervals* shorter than t , we can break the sequence of characteristic frequencies into three parts (1) *low frequencies*, much less than 1 [per] T , (2) *middle-range frequencies* [$T < - > t$], and (3) *high frequencies*, greater than 1 [per] t . Motions determined by the low frequency modes will be so slow that we will not observe them—they will [appear to be] constants

Motions of the system determined by the high frequency modes will control the internal interactions of the components of the lower level subsystems but will not be involved in the interactions among those subsystems. Moreover, these motions will appear always to be in equilibrium. In their relations with each other the several subsystems will behave like rigid bodies, so to speak (1973, 9-10)

Let us say that the middle of the three temporal regions, that which lies between T and t , is the temporal region typical of mundane social interaction, and let us give to T a value corresponding to a society's historical memory. Among the Nuer, for instance, Evans-Pritchard (1940) tell us that six generations lie between the living and the first man. Among Polynesians, who carefully kept (and manipulated) genealogies, T was much longer, and of course literacy lengthens T by magnitudes (for Western civilization it approaches 5,000 years). Let us call this intermediate temporal region, within which social processes play themselves out over minutes, days, months, years, and generations, *the region of social time*.

The high-frequency region, characterized by frequencies more rapid than t (t being as brief as a minute or a second, or even less), is the temporal region characteristic of transient processes *internal* to the organisms comprising the social system. It is, this is to say, the temporal region characteristic of highly coordinated physiological processes—such as breathing, the circulation of blood, the secretion of hormones, the reactions of nerves—and of some related psychic processes—such as fluctuations of emotion and attitude. Let us call this high-frequency region *the region of organic time*.

The low-frequency region, in which change proceeds at rates of less than one per T and is *thus not likely to be observed*, will be taken to be the region of the never-changing. This is the temporal region of the cosmic.

We have, in sum, distinguished three temporal regions: the organic, the social, and the cosmic. Ritual performance involves all three, I suggest, in the following way.

First, individuals, whose obscure internal states are characterized by high and more or less idiosyncratic frequencies, enter into the ritual, thereby indicating that, despite whatever internal fluctuations of mood, attitude, or emotion they may be experiencing, they are, in Simon's terms, stable components of the social system. In terms proposed at the beginning of this essay, their participation in the ritual indicates public and binding acceptance of the order it encodes, whatever internal doubts or ambivalences may be felt.

As the ritual proceeds, however, the entire congregation, as its actions become more highly coordinated, moves, as a unified whole, back across the border, so to speak, into the organic temporal region. *The interactions of the social unit assume temporal frequencies and degrees of coordination characteristic of the internal dynamics of single organisms.*

But the pattern of action specified by the liturgy's canon is invariant and thus may be understood to be never-changing. A canon—the invariant spine of liturgical order—is of the temporal region characterized by temporal frequencies slower than one per T, the cosmic region. Thus, the order to which the congregation is at high frequency conforming is of the low-frequency region, the region of the apparently changeless. At one and the same moment the congregation moves out of social time toward both the quick and the eternal. "Liturgical time," "sacred time," "extraordinary time" is time out of ordinary social time. The temporal region characteristic of mundane social interaction is vacated in ritual.

ORGANIC TIME AND COMMUNITAS

A further observation of Simon's concerning the relationship of frequency of interaction to bonding strength also bears upon the *communitas* prevailing during "time out of time." He notes that, in nonliving matter, higher-energy, higher-frequency vibrations or interactions are associated with less inclusive subsystems, vibrations, or interactions of lower frequency, with the larger systems into which the subsystems are assembled.

Thus protons and neutrons of the atomic nucleus interact strongly through the pion fields, which dispose of energies of some 140 million electron volts

each. The covalent bonds that hold molecules together, on the other hand, involve energies only on the order of 5 electron volts. And the bonds that account for the tertiary structure of large macromolecules, hence for their biological activity, involve energies of another order of magnitude smaller—around one half of an electron volt. . . . Planck's Law prescribes a strict proportionality between bond energies and the associated frequencies (1973, 9f.).

I would not wish to argue that social processes, which belong to the general class of informational processes, conform to Planck's Law, which is concerned not with information but with energy in physical systems. It may be, however, that as a social group moves as a coordinated whole into the temporal region of the organic, its members may sense that they are, for the nonce, bound together as tightly as the cells of a single animal. It may be that the relationship between frequency and bonding strength in living systems, on the one hand, and in nonliving substances, as specified by Planck's Law (or that aspect of it treated by Simon), could be subsumed by a formulation of such generality that it applies both to informational and energetic phenomena. If so, we may be approaching a principle in conformity to which all hierarchically structured complex systems, regardless of their content, must be organized. If, as Simon seems to suggest (1969, chap. 4), all complex systems not only may be, but may have to be, hierarchical in organization, it would be a fundamental ordering principle. If this isn't the case, at least we have a nice analogy.

THE QUICK AND THE ETERNAL

Let us return to the apparent paradox of a movement out of social time in two opposite directions simultaneously. At the beginning, I argued that in ritual performers fuse with the order they are performing. What considerations of clarity have led me to call a two-way movement out of the temporal region of social action is really not, for the quick and the eternal become one in the performers. The eternal is made vital as the living—that is, the quick—participate in, become part of, the never-changing order. And as the eternal is made vital, so the vital may seem to be made eternal. Intimations of immortality may be entailed in performances that are consonant with liturgy's multitemporal rhythms, and we may be uncovering here experiential ground for belief in immortality, or even for the idea of immortality itself.

I have, as it were, smuggled the term *eternity* into the discussion without definition. There is more than one concept of eternity, of course, but at least two seem intrinsic to ritual's form.

The first is recurrence without end—ceaseless repetition. We may note, in passing, that recurrence without end may, in itself, seem to negate death. Van Genep (1960, 194, *passim*) observed that in rites of passage representations of birth typically *follow* representations of death, the implication being that the rectilinear liturgical orders leading from birth, baptism, and naming through death are really not rectilinear at all but cyclical, and that physical death is followed by some sort of rebirth.

If recurrence without end is one conception of eternity, it is hardly the only one, nor is it even self-sufficient, for recurrence is inconceivable without an assumption of changelessness. That is, for anything to recur it must be assumed to be changeless, for if it were not, the succeeding event could not be a recurrence of the preceding. And so there is a yet profounder sense of the eternal, not as endless repetition, but as the sheer successionless duration of the absolute changelessness of that which recurs, the successionless duration of that which is neither preceded nor succeeded, but which always was and will be. In ritual, one returns ever again to that which never changes, to that which is punctiliously repeated in every performance.

We come face to face with another apparent paradox, that between the changelessness of whatever is represented in the invariant recurrences of ritual and the transformations effected in the selfsame rituals. We are concerned here with points of articulation between the never-changing and ever-changing, between eternity and time. An image that comes to mind, perhaps brutally mechanical but enjoying the virtue of familiarity, is the revolving drum of a printing press. As the press imprints an apparently invariant message upon the paper passing through it, so a liturgical order imprints apparently invariant messages upon individual lives and upon society as a whole at intervals that it itself imposes upon continuous duration.

SANCTITY AND ETERNITY

That which is represented as never-changing varies from one society to the next, but in the quality of never-changingness itself we come close to the sacred.

Elsewhere (1971a; 1979a, 209) I have defined sanctity as “the quality of unquestionableness imputed by congregations to postulates which are, in their nature, absolutely unfalsifiable and objectively unverifiable.” I have argued that this unquestionableness is a product of ritual’s form, particularly its invariance. One ground of this unquestionableness was alluded to at the beginning: the

acceptance intrinsic to the performance of an invariant order encoded by others, which constitutes an agreement on the part of the performers not to question the order they are performing. A second ground, also intrinsic to invariance, follows a lead of Anthony F. C. Wallace (1966, 233ff.), who argued that ritual is, in terms of information theory, a very peculiar mode of communication. Information in the technical sense is understood as that which reduces uncertainty, the minimal unit being the "bit," the information required to eliminate the uncertainty between two equally likely alternatives. To the extent that a liturgical order is invariant, it is devoid of information because, in the absence of alternatives, there are no uncertainties to eliminate. He noted, however, that informationlessness is not tantamount to meaninglessness, for the meaning of informationlessness is certainty, and it is but a short step from certainty to unquestionableness. The third ground of unquestionableness is the self-evident or even undeniable nature of numinous experience, to the special meaningfulness of which we shall shortly return.

An unbroken set of steps leads from ritual's invariance to certainty, acceptance, and conviction, from them to the unquestionable, and from the unquestionable to its special cases—legitimacy, propriety, correctness, and truth. Sanctity, then, is a product of invariant recurrence in ritual of that which is taken to be never-changing. Sanctity and eternity, although not quite one and the same, are both generated by the performance of invariance, and as such are, as it were, brother and sister. That which is sacred is not only true but *eternally* true, and conversely, the eternal verities represented in ritual are sacred.

TIME, ETERNITY, AND HIERARCHY

We have been largely concerned with the part played in the construction of time and eternity by ritual's sequential dimension. In touching upon eternal verities, however, we articulate with the hierarchical dimension of liturgical orders, which, we observed at the beginning, also has a temporal aspect.

The understandings represented in liturgical orders are not merely heaped together. They are organized, and their organization is necessarily hierarchical (Simon 1969, chap. 4). At the apex are expressions that we may call *ultimate sacred postulates*. These verities, taken to be forever true, and exemplified by Christian creeds and the *Shema* of the Jews, are the apparent sources from which sanctity flows through corpora of discourse, sanctifying sentences of lower

order. These include, at the next level, “cosmological axioms” expressing general structural principles in accordance with which the universe is organized. More specific rules for realizing these principles in action are of lower order and are less sanctified than are cosmological axioms. Information concerning current states of the mundane world is sanctified as it enters liturgically organized discourse at yet lower levels. It is in response to such information, concerning fluctuating and transient states of social, political, and environmental conditions, that rules conforming to cosmic ordering principles, sanctified by ultimate sacred postulates, are invoked and acted upon (Rappaport 1979c, esp. 117–26).

We observe that in the descent from ultimate sacred postulates we descend from the eternal, fundamental, immutable, nonmaterial, nonspecific, and sacred to the ephemeral, instrumental, changeable, concrete, specific, and mundane. The temporal structure of this hierarchy has profound implications for orderly adaptive processes, about which I have written at length elsewhere (Rappaport 1978; 1979d; 1984).

LEVELS OF MEANING

A special form of meaning or meaningfulness is associated with the state of being prevailing when the quick and the eternal are fused in ritual.

We may, in a rough-and-ready way, distinguish three “levels” or “types” of meaning.⁴ First, there is what may be called *low-order meaning*, the semantic meaning of everyday. If it is not coextensive with what is meant by “information” in information theory, it is close to it, for *it is grounded in distinction*: the meaning of *dog* is dog, which is distinct from cat, which is designated by *cat*. The paradigmatic form for the organization of low-order meaning is taxonomy.

Whereas distinction is the ground of low-order meaning, there is a *higher-order meaning*, based not upon distinction but upon *the recognition of similarities* hidden beneath the differences distinguishing apparently disparate things. If taxonomy provides a paradigm for low-order meaning, metaphor does so for higher-order meaning. Higher-order meaning, typically condensed into single metaphors, is much lower in information in the technical sense than is low-order meaning generated by ever-multiplying distinctions. We have seen, however, that information and meaning are not one and the same, and higher-order meaning, possibly because it is based in some degree upon nondiscursive pattern recognition, seems more

affect-laden, more “meaningful,” than does low-order meaning. It is not surprising that the multivocal representations of ritual are meaningful in this higher-order way.

But not only in this way, for there is also what may be called *highest-order meaning* that is based upon neither distinction nor similarity but *unity, the unification of that which is meaningful with those for whom it is meaningful*. If taxonomy is the house of low-order meaning and if metaphor is the vehicle of higher-order meaning, then *participation*, particularly in ritual, is the way to highest-order meaning. Whereas low-order meaning is highly objective, highest-order meaning seems absolutely subjective, for in it distinctions between objects and subjects are dissolved. To the extent that participation in ritual annihilates distinctions, it is itself devoid of information, and we are faced with the possibility that information is the antithesis of the most meaningful of all meanings. Be this as it may, one grasps (or is grasped by) highest-order meaning by participating in—that is, becoming part of—that which is meaningful, as in the performance of a liturgical order. *Highest-order meaning is not referential, but a state of being*. It is this state of being that may enliven the eternal and sacred in some ritual performances, and may, in turn, engender a sense of the divine.

HISTORY AND NUMBER

We can ask, at the end, whether the recording of history may not be eternity’s enemy. Written history expands the scope of T, taken to be a society’s historical memory, from a few generations to thousands of years, thus letting us know that more and more of that which the nonliterate takes to be never-changing is, in fact, changing, albeit at rates or frequencies imperceptible in single lifetimes or even in the course of a few generations.

The numbering of years and days, and finally minutes and seconds, may also threaten eternity, even when the succession of the enumerated periods extends beyond imagining. If time is numbered, we can no longer escape its undoing by entering ritual’s eternity even for a little while, for when we return we can hardly avoid knowing that our sojourn in ritual lasted for, let us say, an hour and a half on a certain day of a certain month in a certain year. Endless time not only is not eternity but overwhelms eternity, reducing it to insignificance or to superstition. When moments of eternity are fully encompassed by a time that moves inexorably toward entropy, the intimations of immortality experienced in them are likely to seem no more than illusions, and eternity’s only plausible resting place

becomes an increasingly dubious hereafter. Number gives eternity, which once informed life and was infused by it, into the hands of death. We are left to the terrors of history (Eliade 1957) as the eternal is banished from life by the merely innumerable.

NOTES

1 That there is no obligation in the absence of acceptance is the strong form of the argument. A qualification of the strong form would recognize that a person may be obligated by acceptance on his or her behalf by a proper agent, for example, a child may be bound to conformity to the rules of a particular church as a consequence of its parents having it baptized. A weak form of the argument would hold that although an act of acceptance indubitably entails obligation and is likely to specify the nature of that obligation more or less precisely, obligation can exist in the absence of acceptance, some obligations (e.g., human mothers' care of their infants) even being "natural."

It should be clear that there is a distinction between *obligation*, which is *moral* in nature, and *legal responsibility* or *culpability*, which can be decreed in the absence of acceptance.

2 The *Logos* in Heraclitus is the principle, at once rational and moral, underlying or even constituting the world's general order. Although concealed, it is accessible, through effort, to human understanding because the human mind, as part of the world, is organized by the same *Logos* as the world as a whole (see Kahn 1979, Kirk 1954).

3 Other aspects of ritual may, of course, also contribute to these special states.

4 Since completing this article, I have been informed by Michael R. Jackson that he has adopted a taxonomy of codes from the work of the psychoanalyst Harry Stack Sullivan (1953) that seems to correspond to these three levels of meaning. *Syntactic* codes, which are "logical in structure and univocal in content," correspond to what I am calling higher-order meaning, *prototaxic* codes, "nonlogical in structure and radically ambiguous in content," correspond to highest-order meaning (Jackson, in press).

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