

Analysis of Ritual: Metaphoric Correspondences as the Elementary Forms

Turner's suggestive analysis of African ritual symbolism (1) enhances one's appreciation of the complexity of expressive phenomena. There are, however, methodological and theoretical cautions to be raised. First, the approach he advocates attacks the problem of representations at the most difficult point of analysis. Symbols of the kind singled out by this method are repositories of many, highly condensed meanings, and this polysemy, or multivocality, can rarely be explained by local peoples. Interpretation, therefore, is hindered by this great complexity of meaning and little confirmation in local culture. Second, there is a more direct approach to expressive phenomena, of which ritual is but one kind.

While exegesis of anything and everything is the order of the day in university culture, it is much rarer in traditional cultures. Empirical research, in fact, shows that it is usually quite difficult to obtain the significata of symbols. In studies of eight different African religious movements (2), exegesis was easy to obtain in only two, and in only one did it approach the completeness and clarity necessary to support empirically a complex theory of symbolism such as Turner's. This is not to deny the theory, but only to suggest that it is very difficult to tie down to local awareness and motivation. This difficulty applies even more to the ideological pole of symbolic meaning than to the sensory, or orectic, pole of meaning. The ideological components of the moral and social order to which ritual symbolism is said to refer—"the principle of matriliney," "the unity and perdurance of society," "the structural and communal importance of femaleness"—are all manifestly of much greater salience in anthropology than in the particular local culture. In most cases, in short, the explication of symbols rests upon an interpretation of observed usages rather than upon local exegesis.

One may find rare informants who will confirm the significata, but there is always the question of whether they are learning our culture or we are learning theirs (3). As a case in point, Turner holds that most African languages have a term for ritual symbol. Although his informants have agreed that this is what the terms *ififwani* (likeness) and *chijikijilu* (a landmark, or blaze) really mean, I suspect that the

ethnographer is here more the teacher than the taught. My own experience with the widespread African term "likeness" is that it means just what it says—a likeness, a resemblance, a correspondence of one thing to something else (4). One may extend that concept to cover the complex notion of ritual symbol, but that extension conforms more to analytic necessity than to local lexicon.

There is a more direct approach to expressive phenomena. This approach rests upon the recognition that a symbol is simply an abstract and autonomous metaphor (5) and that the ritual system is, in essence, a system of enacted correspondences. A metaphor (and related tropes) is the statement, explicit or implied, of a correspondence between some subject of thought in need of clarification and an object that brings some clarity to it. Metaphor, not symbol, should be considered the basic analytic unit of ritual because ritual and ritual symbols spring from metaphors. Ritual symbols may be complex repositories of correspondence, and doubtless they are important entities of orientation in ritual episodes; however, the effective cause of behavior lies in the metaphoric statements (the subject-object correspondences) contained in ritual symbols. A metaphor is an image predicated upon a subject by virtue of some sense of apt correspondence perceived in the culture, and it is this image which is efficacious in the subject's experience and in planning his performance in the ritual process (6). When metaphor is employed, one is directed to the subject upon which the image is predicated and to the motivation for selecting the likeness. This is true whether the metaphor is "the king is a lion" or "breast milk is the latex of the muddy tree." But a symbol, because it is abstract and because its meaning varies with its context, loses its clear relation to specific subjects. One loses hold of what means what to whom and ends up speaking of a symbol as referring to "the principle of matriliney." Consider the lion as the symbol of the British Empire. Upon what subject or set of subjects is it predicated? What is the motivation of the predication? Answers may be provided by careful analysis of observed usage in specific contexts (7), but in the end that analysis will come down to statements of correspondence.

The study of metaphor in respect to rituals and other expressive events involves one in the process in language by which subjects are related to objects and, more important, by which subjects gain identity (8). This last point is important, for one of the principal motivations of behavior is the gaining of a desired or the escaping of a feared identity. Moreover, the creation of metaphors is part of the earliest stages of language acquisition, in which the emerging awareness of the child struggles with subject-object relations and takes, in metaphoric predication, many diverse objects from many domains upon itself (9). The study of metaphor, much more than the study of symbols, relates to theories of image and identity formation, which are fundamental to the study of behavior. Studies of symbols have tended to have little relation to major developments in the behavioral sciences.

While, in respect to exegesis, the study of metaphor in expressive events is subject to some of the same problems as the analysis of symbols, in my experience informants speak more readily about ritual process—"Here we are the body of Christ," "There we are the army of the Lord"—as correspondences than about the meaning of symbols. In fact, the statements informants made about the *undumila* medicina, discussed by Turner as a ritual symbol of the Nyakyusa of Tanzania, come down to a set of metaphoric or metonymic correspondences: "Husband's penis is pungent root," "vagina is cup," "copulation is biting root and eating salt" "man and woman are penis and vagina." One often encounters resistance to the explication of symbols—a tendency to grant them ineffable, if not mystical, character. "They should not mean but be" is a response by no means limited to ritualists of the Western world. The concentration on ritual as a system of enacted correspondences leaves less to the imagination and leads more directly to the experience of participants.

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References and Notes

1. V. W. Turner, *Science* 179, 1100 (1973).
2. J. W. Fernandez, *Microcosmogeny and Modernization* (Occasional Papers, Centre for Developing Area Studies, McGill University, Montreal, 1969); *J. Relig. Afr.*, in press.
3. This question has repeatedly arisen in respect to the Griaule school in French ethnology and particularly in respect to Griaule's masterwork, *Dieu de l'Eau* (Les Éditions du Chêne, Paris, 1948), his extended interviews with the Dogon savant Ogotemmêli, in which the latter lays

out the Dogon cosmology. The problem is avoided in a structuralist approach of the kind practiced by C. Levi Strauss, in which, presuming on the universal structures of the "savage mind," ethnology becomes a form of intercultural instruction. Our contacts with other cultures are made not so much in the interest of learning other cultural ways as in seeing emerge, through mutual instruction, an understanding of universal mental operation. If informants fail to confirm structural interpretations, one is entitled to fall back on one's own. Thus the proposition of universal structures is not satisfactorily put to an empirical test!

4. J. W. Fernandez, *Am. Anthropol.* 67, 902 (1965).
5. W. M. Urban, *Language and Reality: The Philosophy of Language and the Principles of Symbolism* (Allen & Unwin, London, 1939); W. A. Shibles, *An Analysis of Metaphor in the Light of W. M. Urban's Theories* (Mouton, The Hague, 1971).
6. G. A. Miller, E. Galanter, K. H. Pribram, *Plans and the Structure of Behavior* (Holt, Rinehart, & Winston, New York, 1960); J. W. Fernandez, in *Social Use of Metaphor*, C. Crocker and D. Sapor, Eds. (Cornell Univ. Press, Ithaca, N.Y., in press).
7. S. B. Ortner, *Semiotica* 4, 324 (Spring 1973).
8. Metaphoric or metonymic statement can appear in other than the X is Y form (the king is a lion), as C. Brooke Rose [*A Grammar of Metaphor* (Humanities Press, New York, 1958)] shows, but that form is primary.
9. J. W. Fernandez, *Daedalus* 101, 39 (Winter 1972).

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I endorse Fernandez's championship of the study of metaphor in respect to the study of expressive culture; indeed, I have a book in press (1) that sets out several ideas concerning the role of metaphor in the social sciences. Here I wish merely to correct some misapprehensions about my position that readers might obtain from Fernandez's comment.

My schema posited that ritual symbols may be investigated in three ways: cultural actors may be asked to say what their "meanings" are; anthropological observers may note how symbols are manipulated, who manipulate them, and how actors interrelate as they manipulate; and observers may find "positional meaning" in spatial and temporal relations among symbol "vehicles" (the sensorily perceptible objects and acts held by the actor-observer to be "meaningful"). Positional meaning also operates in the relationship between vehicle and symbol. My article focused on symbol, not metaphor. From that perspective, metaphor and metonymy may be studied in the "positional dimension" of meaning. Fernandez imputes to me an excessive reliance on indigenous exegesis. A glance at my article will rebut this. I devote considerably more space to discussion of operational and positional meaning than to exegetical meaning. Nevertheless, as more work is done, more native exegetes are discovered. It is not merely "university culture" that produces articulate thinkers, as Fernandez asserts. One thinks of

the African anthropologist Asmarom Legesse's recent stricture (2): "How often have Western writers used Africa as the great primordial continent whose prodigious backwardness demonstrates by contrast the greatness of European civilization?" Fernandez's fashionable preoccupation with metaphor as the key to "anything and everything" may, indeed, be an instance of cognitive ethnocentrism, although I do not think so in this particular case.

There is no reply possible to Fernandez's "suspicion" that in my fieldwork "the ethnographer is . . . more the teacher than the taught," except to say that his suspicion is unfounded. He has found that African terms for "likeness" mean just that. We have found that they mean that and "ritual symbol" as well. I urge Fernandez to consult a good dictionary of English; he will find that many words are multivocal. *Chijikijilu* ("landmark" or "blaze") is a term that cropped up unsolicited in the comments of my Ndembu informants, and they applied it to the objects and acts that I have classed as ritual symbols. I did not compel or persuade them to do so. They were women and men with intelligences at least as trenchant as my own. If anything, I was the pupil, they the teachers. Nor were they "rare" informants. I do not cherish suspicions about why Fernandez could find exegesis in only two of eight African religious movements. Undoubtedly personality factors play their part among actors and investigators in many forms of social research; so also do cultural, political, and religious constraints, as well as a multitude of other considerations. We are still at the very beginning of this mode of investigation, both as fieldworkers and as analysts. We learn the contours of the terrain as we explore it. It is a fascinating problem why some cultures have rich exegesis and others hardly any, and why some have exegesis at one period and not at another. This has little to do with "universality" as against "African" skills and abilities, for it is found around the globe.

Fernandez is somewhat disingenuous when he mentions that "the ideological components of the moral and social order to which symbols are said to refer . . . are all manifestly of much greater salience in anthropology than in the particular local culture." He knows quite well that my article is a summation of much detailed observational work, published in several books and

articles, and that space did not allow me to publish in *Science* the basic data from which my generalizations were drawn; any more than he could do likewise in rebutting me. I do not think, moreover, that he was trying to deny the "salience" of their moral and social orders, components of which are mediated through symbols, for the actual African actors. Let me illustrate this by citing a portion of a text recorded from a male informant about the "milk tree":

Mudyi diku kwakaminiyi nkakulula ha-kumutembwisha aninkakulula mukwawu nimukwawu ni kudi nkaka ni kudi mama ninetu anayana; diku kumuchidi wetu kut-watachikili ni amayala nawa chochu hamu. [Milk tree is the place where slept the (founding) ancestress, where they initiated her and another and (then) another down to grandmother and mother and ourselves the children; it is the place where our tribe (or "kind") began, and also men in just the same way.]

The notion of continuity through the maternal line is here powerfully expressed in terms of an immemorial sequence of ritual initiations. "Sleeping" is here a metaphor for the ritual "death" and "rebirth" of the girl novice who is laid at the base of the tree by specified female kin ("operational" meaning at a crucial phase of the ritual process), wrapped in a blanket (like an infant or a corpse), and adjured to remain absolutely motionless until noon, when she is turned over from her left (feminine) to her right (masculine) side. Each of the acts and objects mentioned has exegetical, operational, and positional meaning. I refer the reader to *The Drums of Affliction* (3) for a fuller account of the girls' puberty rites, with an interwoven analysis of texts and contexts. Ndembu know that these rites are "salient" in their culture and personal experience, and they know how and why they are salient and in what respects they represent a "meta-social" commentary on Ndembu society, to use Geertz's illuminating phrase (4).

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References and Notes

1. V. Turner, *Dramas, Fields, and Metaphors* (Cornell Univ. Press, Ithaca, N.Y., in press).
2. A. Legesse, *Gada: Three Approaches to the Study of African Society* (Free Press, New York, 1973), p. 285. Legesse, in a book of great technical expertise and subtlety, uses computer simulation to show how the con-

tradition between social structure and demography in the central institution of the Galla of Ethiopia, *Gada*, generated change and how the combined social-demographic system underwent orderly transformation for several centuries. Legesse, himself an Ethiopian, sees clearly how Western anthropology is in many ways a "construct" of intellectuals observing the Third

World from the privileged Western corner of world culture.

3. V. Turner, *The Drums of Affliction* (Clarendon, Oxford, 1968), pp. 198-268.

4. C. Geertz, *The Interpretation of Cultures* (Basic Books, New York, 1973), p. 448.

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Nonspecificity of Hepatitis B Antigen Detected with Iodine-125-Labeled Antibody

The state of the art in hepatitis B antigen (HBAg) testing was reviewed a year ago (1). Counterelectrophoresis (CEP), the technique routinely employed by blood banks for the detection of carriers of HBAg, was recognized to be insufficiently sensitive. The most sensitive procedures under investigation involved radioimmunoassay (RIA). Although RIA procedure by the double antibody technique described by Hollinger (2) is both sensitive and specific for the detection of HBAg (1), a commercially produced solid phase RIA procedure, based on the "sandwich" principle, in which ¹²⁵I-labeled antibody specific for HBAg is used (3) has been licensed for sale by the Food and Drug Administration (4) and has been placed in routine use by many blood banks.

The relative sensitivity of this licensed RIA technique is unquestioned, but direct proof of *specificity* could not be shown when the reactive samples were negative by other techniques. The report by Ling *et al.* (5) appeared to validate the specificity of the RIA-reactive samples by demonstrating that they could be subtyped into ad and ay as had been established by LeBouvier (6). However, the implication of that report that all RIA-positive reactions can be considered specific for HBAg is now contradicted by evidence obtained in this and other laboratories (7). The data presented here illustrate the problems encountered with the RIA test and include evidence that most of the RIA-positive, CEP-negative results are false positives, not related to the presence of HBAg.

A total of 9249 serums of consecutive voluntary blood donors were screened for HBAg by CEP and subsequent RIA testing according to the directions of the manufacturer of the kits (8). Table 1 presents the results obtained with the 9249 consecutive blood donor samples. Each of the 12 samples positive by CEP were also positive by RIA. No samples have been found to be CEP positive and

RIA negative. Of the 121 RIA-positive, CEP-negative samples only 30 were consistently positive at 2.1 times the control, and 1 sample was consistently positive at 1.5 times the control. In large part this poor reproducibility was caused by variable sensitivity of different lots of reagents, as judged by two RIA-positive serums weakly reactive at 2.0 times the control and by a reference standard whose titer was checked with different lots. With the 306 serums where the initial reaction was 1.5 to 2.1 times that in the control range, reproducibility of results was so poor (2 out of 36; 6 percent) that no further studies of these serums were carried out. The manufacturer of the RIA kits became aware of the false-positive problem discussed below (9). The following studies were done with the new materials supplied by the manufacturer.

The reproducible RIA-positive samples from our original studies were combined with reproducible RIA-positive samples from other laboratories (10) to provide a total of 52 samples. The specificity of the RIA-positive reactions was investigated by an inhibition technique (7). Inhibition of the reaction by human antiserum to HBAg (titer 1 : 2000 by hemagglutination) was considered to validate the specificity of the reaction for HBAg. Inhibition of the reaction by normal guinea pig serum was taken as evidence that the positive results were caused by a reaction between the test serum and guinea pig proteins (the antiserum to HBAg used in the RIA test are of guinea pig origin). In the

control incubations we used normal saline and human serum in which HBAg and antiserum to HBAg could not be detected. The technique was as follows: 0.1 ml of test serum was incubated with 0.1 ml of inhibiting material overnight at 4°C. The entire mixture of 0.2 ml was then transferred to the RIA test tube, and the test was then carried out as usual.

The results are shown in Table 2. The test serums were divided into four groups; within each group the reactions were closely similar. Only 4 of the 52 samples (7.7 percent) were inhibited by antiserum to HBAg (group 1). In contrast, 32 samples (61.5 percent) were completely inhibited by normal guinea pig serum (group 2). An additional three samples (group 3) were significantly inhibited by guinea pig serum (more than 5 standard deviations), but the counts per minute were still slightly higher than the 1.5 times control considered to be true reactive results. Combining groups 2 and 3, there were 35 samples (67.3 percent) whose reactions may be attributed to antibody to guinea pig protein. Group 4 consisted of 13 samples (25 percent) whose reactions were very close to the 1.5 times control counts. Addition of antiserum to HBAg or guinea pig serum either had no effect or produced minimal and nonreproducible inhibition. No conclusions can be drawn as to the cause of the reactions in this group.

The conclusion that only 7.7 percent of the RIA-positive, CEP-negative results were true positives is in conflict with that of Ling *et al.* (5). However, in their investigation only 24 of the 85 serums studied were CEP negative, and most of these specimens had count rates (4.2 to 7.2 times the normal control) much higher than those we observed in unselected RIA-positive, CEP-negative samples from normal blood donors (generally less than 3.0 times the control). The specimens reported by Ling *et al.* reflect a distribution of ad and ay subtypes normally not found in unselected donor populations, and in their report there is no indication of how they selected the 85 samples.

Recognition that RIA-positive, CEP-negative reactions in a volunteer blood donor population are almost all false positives has important practical implications. Unnecessary permanent rejection of a healthy donor impairs the ability to provide blood from volunteer donors. More important, the donor

Table 1. Results of consecutive testing of 9249 blood donors and repeat test to confirm the first positive results.

Serums	First test	Repeat test +
Total tested	9249	
CEP positive	12	12
2.1 × negative control	133	43
1.5 × negative control	306	2*

* Thirty-six consecutive samples were repeated.