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MAGIC, COMMUNICATION AND EFFICACY

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Academic debates about the logic of magic may sometimes appear as the ethnocentric speculations of the members of certain societies, purporting to justify their belief in their own cultural superiority. Or such debates may be perceived as the idle intellectual games of academics, irrelevant to the world in which people struggle to improve their lives, or simply to survive. Nevertheless, it is true that magic was once more dominant in the thinking and practice of Europe than it is now; and many people associate the movement away from magic with the advance of technology and greater control over our material life.

The growth of knowledge depends on being able to criticize (in both positive and negative senses) what we receive from our various cultures. It is difficult to produce objective criteria by which we can assess different facets of our own, or other people’s, culture. That it is difficult does not excuse us from trying. This article represents one such attempt.

In this article, I look at a confusion that sometimes arises between the logic of communication and the logic of material causality. My argument is that certain types of magic arise from such confusions, and that it is worthwhile trying to sort out the confusion when it arises.

I am not, however, prejudging the efficacy of the traditional religious rites of any society, still less the efficacy of traditional modes of healing or the potions used by ritual or healing specialists. Much of our knowledge is received on trust, from elders or experts or friends or others who are thought to know. When a person puts on a copper bangle as a cure for rheumatism, or takes a modern drug, or a herbal remedy prescribed by a traditional healer, usually he has no idea of how the attempted treatment might work. The question of the logic of magic or the logic of technology does not apply to the sufferer. As far as he is concerned, the logic is the same in all cases: someone has told him that this remedy might work and he is prepared to give it a try.

Logic is involved in the origins of a treatment. The logic of science is to try and sort out what causes the affliction at the micro level, and to deduce what kind of chemical structure might be introduced to offset the trouble. It is based on a

1 I am grateful to my colleague, Professor A. P. Cheater, for her comments on an early draft of this paper, and to participants at the conference on ‘Religion and Magic in Everyday Life’ organized by the African Studies Centre, Oxford, for useful points and criticism.
theory about how the world is structured. This logic is combined with the
common logic of experience: people notice a repeated association of two
phenomena, and deduce a cause and effect relationship, with little idea of how it
works. Much conventional wisdom comes from such observations. Thirdly,
phenomena can be symbolically associated, and this is what I shall be discussing.

Logic is usually involved in why a practice is repeated and accepted into
conventional wisdom. There are many ways in which practices become accepted
and customary, three of which are particularly common. Most things are accepted
simply because they are observed to work. Certain practices might also be
accepted because they are put forward by someone of influence, even though they
do not work. No doubt certain practices in modern medicine come under this
category; but people with political or religious influence may also be able to
persuade others that certain things work, in the face of patent failures. Thirdly,
people may accept certain practices in the face of frequent failures because of
symbolic associations which accord with the way they think: here we are dealing
with what I shall call the logic of magic.

It is time to start looking at examples. In the early 1970s, when I was doing
my field work on a collection of Korekore (northern Shona) communities in the
north-east corner of what is now Zimbabwe, there had been a couple of poor
harvests as a result of poor rains and various pests. The people in the area
depended largely on their crops of bulrush millet for subsistence: not all could rely
on financial support from absent migrant workers, and those who could received
little since very few families (perhaps a couple) had members sufficiently
educated for white-collar work, and unskilled work was the norm for people from
this area. The rains of the following season were good, and the crops looked
promising. Then people began to notice the presence of young corn crickets — an
insect that had taken a heavy toll of the millet a couple of years previously. This
was a worrying development. No one had money to spare for large quantities of
insecticides, but there were other strategies people could try.

The head teacher at one of the schools found a successful way of averting
the danger. He had pupils of his school clear a three-yard strip around his field. Every
morning and every evening certain of the school children were assigned the task
of going around the strip and killing any crickets trying to cross it. Since the
crickets are very slow moving, this tactic effectively prevented crickets from the
veld reaching his crops. The few that hatched in the field did not do too much
damage.

Others approached the spirit guardian of the land for help. These were spirits
of ancient members of the chiefly lineage, who, in the local ideology, from time to
time took possession of their chosen mediums in order to speak to the people now
living on their land, or to hear the problems of these people. In two sections of the
chiefdom where I was working, leading men went to the home of the local medium. In each case, the spirit (the possessed medium) told the audience that each family should collect a few crickets from each of their fields, and that these should all be collected together in a container and brought to the spirit.

This was done, and in each case a container of crickets was brought to the medium one evening. The mediums kept the crickets in their huts overnight. In one case, the possessed medium threw the crickets in front of the chicken house just as the chickens were being let out early the following morning. He announced that birds would eat the crickets in the fields. The people would have no further problem from the pest this year.

In the second case, the possessed medium took the crickets to a place where two paths crossed in the veld, and released the crickets there. He announced that now the crickets would not be able to find their way to the fields. In other ritual situations, the crossing of paths symbolizes losing one’s way: at funerals, the procession often stops where the paths meet, and the bier is turned around several times there, in order that the spirit may not find its way back to the homestead to cause trouble.

The threat of a plague of corn crickets subsequently died away. People happily explained that they went to their spirits to ask for help, and the spirits had looked after them.

Nobody has any difficulty in recognizing that the activity of the teacher is of a different order from the consultation with the spirit mediums and the subsequent rituals. It is not so easy to determine precisely where the difference lies.

One could say simply that the latter is a religious act, in the sense that people sought relief by supplicating some spiritual power. Such supplication never has the predictable result we expect from technical action (such as the teacher organized). I wish to pass over actions which attempt to persuade or command spirits or some other power to produce results in the material world. The rites I have introduced contain a more interesting point: in the belief of the Korekore it was the spirits themselves (the possessed mediums) who threw the crickets to the chickens, and released them at a crossroad. What is the significance and the logic of these actions? How were they believed to be efficacious?

What I am considering is the ritual action of the possessed mediums. It is easy to understand what rites mean. The symbolic association between crossroads and losing one’s way is clear: but why should people think that a symbol which they understand should affect the behaviour of the crickets? Why should people think that seeing chickens eat the crickets in the medium’s homestead should have any influence on those that were left behind?

It is possible to interpret such actions as emphatic and dramatic communications from the spirits about what would happen, and not as an efficacious action
at all. The people concerned, however, appeared to consider the rites as an essential and efficacious action on the part of the spirits. They would not have been satisfied if the spirits had simply dismissed them and told them everything would be taken care of. The dramatic action was assumed to have some kind of material efficacy.

It becomes clear that these are actions which some people believe to be efficacious and I do not. The difference in belief has to do with the relationship between communication and efficacy. In magic, as I use the term here, people fail to distinguish between the dramatic expression of desires, and efficacious action. Magic is using ritual and the logic of symbols and communication, in order to obtain a material effect. Although I (or anyone else) may be wrong in particular instances when we judge the efficacy of a particular action, the general axiom is correct that dramatic expression is often efficacious with respect to people and perhaps more complex animals, and not normally so with respect to the inanimate world and lesser living things. I do not believe that throwing the corn crickets to the chickens had any effect on the threatened plague.

Notice that the last remark refers specifically to throwing corn crickets to the chickens (or at a crossroad). It is not a statement about the power of spirits to control the world. Whether or not we accept that spirits have such powers, we can still ask the question why the symbolic rite was deemed necessary.

Notice, too, that it is the logic rather than the efficacy that I am discussing. When someone tries to keep horses from worms, by treating bits of their hair, on the theory of ‘radionics’ according to which the treatment creates some kind of radiation which affects the horse, I expect the theory to be proved wrong, but it is not magic. I suspect that the theory is a rationalization of what arose as magic, an attempt to justify certain types of treatment in a vaguely scientific mode of thinking, and I am extremely sceptical of whether it works. Nevertheless, the action now claims to be based on a theory of the way the material world works, supported by appeals to experience. Under such a theory, the logic of the action is no longer the logic of communication.

Similarly, for the purposes of this discussion, I am not considering those actions which attempt to transfer through contact certain properties from one substance to another. If a man chews the sprouts of a fast-growing plant and spits them on to his child in order to make his child grow faster, I hold that he is wrong to think that the property of fast growth can be passed to the child in this way. But this is not magic as I am using the term: some properties (heat, sickness, etc.) can

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2 The distinction between communication and efficacy is not, however, trivial — contra E. R. Leach, ‘Ritualization in man in relation to conceptual and social development’, Philosophical Transactions of the Royal Society of London (1966), CCLI (Series B, Biological Sciences), 772.

be passed on through contact and there is nothing wrong with the logic that tries to facilitate such passage.\(^4\) I am limiting this discussion to actions which depend on the meanings of symbols.

Although my use of the word 'magic' may coincide with the classification of people who employ magic, my concept is essentially a concept of an outside observer. Insiders may recognize magic from the type of language used or the uncertainty of its outcome or the ritual status of the performer. I recognize magic by the attempt to use the logic of communication to affect things that are outside the sphere of communication. Although, in particular instances, I may not correctly perceive the boundaries of the sphere of communication, these are in principle determinable on criteria which are not simply ethnocentric.

**POLITICAL CONTROL**

'Magic', as I use the term, involves the use of ritual, and mistaken assumptions about the nature of things and control over the material world. We are looking at the difference between the logic of the rituals of the spirit mediums on the one hand, and the practical, technical logic of the teacher on the other.

Early attempts by anthropologists to explain magic in terms of a simple logical error, or a special type of rationality based on a special logic, have rightly been rejected on the grounds that people who use magic are perfectly capable of using technical logic without error on other occasions. An approach that is based on stages of psychological development\(^5\) is no more helpful: we note that it is sophisticated adults, and not children, who develop and use magical rites; and these adults are quite capable of seeing the difference between magic and the logic of technology, which they are perfectly able to use when it seems to them appropriate. Magic cannot be explained simply in terms of a 'primitive' system of thought. What, then, is the basis of magic?

Bloch recently revived a distinction made by Marx between practical knowledge derived from experience, and ideology, which derives from social history and legitimates the social order.\(^6\) Bloch argues that ideology is built up and reinforced through ritual, and supports his argument with reference to certain rites of passage — in particular, marriage and circumcision among the Merina of Madagascar.

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The ways in which ritual can support positions of authority have been illustrated in a variety of studies of initiation rites,\textsuperscript{7} which are precisely concerned with the social order. Certainly, issues of power and control should always be considered when examining ritual. If in the case in question a medium were to send the people home and say he was unable to control corn crickets, he would lose standing in the eyes of the people. Politically, the mediums had to do something dramatic, which is one explanation of performance of the rituals.

We could argue, following on from Bloch's idea, that the pretended ability of the mediums to cope with pests in the land served to shore up traditional authority. One can find links between the rituals to get rid of the threat of corn crickets and the chiefship. The guardian spirits of a chiefdom are associated with the chiefship. The senior possessed mediums of these spirits elect a new chief from a number of pretending heirs. The traditional chiefship derived some of the status from the spirit guardians of the land. Apart from the election procedures, the most important spirit guardians were ancient members of the chiefly lineage, and the chief frequently confers with the senior mediums in his country.

Nevertheless, there are problems with a political interpretation of the rites in question. Among these peoples, as among other Korekore peoples, the political power of the chief had traditionally been very limited. It is said that the chief should never compel his subjects to do what they did not wish. The people were scattered in small hamlets, and could move easily from place to place. There was no standing army. Historical evidence suggests that groups in the chiefdom felt free to join or not to join their chief even in military campaigns. There is every reason to believe the people when they point to the political weakness of their traditional chiefs. In the colonial period to which I am referring, the political power of the chiefs came largely from the White-controlled administration: there were cases of mediums deferring the appointment of a chief until they could ascertain that their candidate would be accepted by the administration. The point is that the power the chief acquired from the spirit mediums was very limited.

Even the standing of mediums was frail when political issues were concerned. I have described elsewhere how readily people contradicted and abused spirits (that is, the possessed mediums) when they appeared to favour an unpopular candidate for the chiefship.\textsuperscript{8} But in the rites we are looking at, people assumed that actions of the mediums were helpful in removing the threat of corn crickets.

A further point is that the chief was in no way involved in the rituals I have described. The elders who approached the mediums and organized the collection


of crickets for rituals had virtually no political authority outside their own households: their role in the proceedings corresponded with the role of village headmen in secular life — they facilitated administration. They simply co-ordinated the collection of crickets from different fields. It may be that one or two of them were trying to curry favour with mediums, which might become useful in future chiefly elections. It could be argued that the rituals assume and assert male authority within households, but this seems peripheral to the people’s interests. The prime concern of everybody associated with these rituals was the threat of corn crickets, not relations of power.

Relations of power were, however, central to the action of the schoolmaster who used non-ritual means to control the plague on his fields. His strategy depended on having school pupils dependent on him for their progress, and on whose services he could call at any time. His action used his position of power to increase his wealth, which would later be used to spread his power. And one could argue that all this helped to mystify the status of schoolmaster, as someone superior who should be obeyed at all times.

In the case in question, relations of power were more germane to the technical than to the ritual procedures. We have to look elsewhere for an understanding of the rites.

There is a further problem with applying Bloch’s approach to magical rites, in that both technical and ritual knowledge are very often received, rather than learned from experience. When one looks at such institutions as Japanese sword-making, we find that the technology of producing fine flexible steel is contained precisely in traditional rituals: here ritual and technology go together. When ideas are simply accepted from tradition in any way, the logic of such acceptance is unproblematic, based on the experience from childhood onwards that much can be accepted from one’s elders. The logic of magical rites is only problematic when one looks at how they became established initially.

The rituals of magic cannot adequately be explained in terms of political power and control.

SYMBOLS AND SIGNS

Neither is it adequate to argue that because ritual activity is dramatic or artistic, it should not be compared with the kind of logic behind technical activity. Certainly ritual is dramatic and artistic and can be appreciated on aesthetic lines: as Beattie rightly points out, it is precisely the expressive, symbolic element that distinguishes magic from technical action. The problem lies in the assumed
efficacy of such dramatic action. In the eyes of the participants, the rites of the mediums were performed in order to get rid of the crickets. I am reminded of Cheater's account of farmers giving up traditional magical practices to improve crops when they got consistently good results from organic and artificial fertilizers: in this case, ritual action and technical action were clearly seen as parallel and as straight alternatives. It is possible that mediums are sometimes simply concerned to put up a dramatic show which leaves the observers duped and satisfied; but there is no evidence that mediums normally see things in a way so totally different from the perceptions of the communities they serve. It is a reasonable assumption that when one medium threw crickets to the chickens, and the other took crickets to a crossroad, they were trying to get rid of corn crickets in the fields.

Leach has suggested a logic of magic that at first sight seems sophisticated and plausible. He takes from Sir James Frazer the example of a sorcerer who takes a piece of his victim's hair, and performs a rite over it (including a verbal spell) in an attempt to harm the victim. Frazer assumed that the magician confused expressive acts with technical acts. Leach claims to go beyond Frazer by drawing attention to the distinctions between metaphor and metonym (in which a part represents the whole), and between index and signal (which I shall explain below).

In Leach's view, the magician makes a triple error. Firstly, he mistakes a metaphoric symbol for a metonymic sign. Originally, the hair was part of the person, and then might have been a metonymic sign, standing for the person: at that stage, if you saw the person's hair over the top of a wall, you could justifiably take it as a sign of the person's presence. Leach argues that if you damage a metonymic sign, the whole which it signifies is damaged. If you destroy the person's hair, the person is damaged.

Leach is only partly right. A person need not be damaged when their hair is damaged, unless there is a symbolic element thrown in — as when a convict's hair is shaved off. Even a society woman who loses her hair can wear a wig! Nevertheless, Leach's point is that while attached to the person the hair is part of that person. Once separated from the person, the hair is no longer part of him and becomes a symbol. In Leach's argument, the symbol is the label 'this is the hair of x', and labels are metaphors rather than metonyms.

To apply this to the rites we are discussing, if you saw birds eating corn crickets in a field as you passed, you would assume that the event was not unique and take it as a sign that the birds were significantly reducing the population of

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corn crickets. Once a few crickets had been collected and taken away from the fields, they became symbols rather than signs: the link with the whole is broken.

Leach, however, offers no explanation of why the magician should make this logical error. Normally people do not mistake metaphoric symbols for metonymic signs. I have never come across anyone trying to save himself trouble by taking a few representative weeds from his field and throwing them into a fire.

There is a confusion in the mind of Leach, well illustrated by his example that the crown is a metonymic sign for royalty or kingship. He argues that if you destroy the sign, the residue is destroyed: if you destroy the crown, the royal regalia without the headpiece are indecipherable. This is undisciplined argument: the crown is certainly a metonym of the royal regalia, but it is a symbol of kingship or royalty. If the crown were accidentally destroyed, the regalia are damaged, but kingship and royalty would normally be left intact. Leach certainly mistakes a symbol for a sign. Other people do not usually make this mistake; rather, they legitimately select metonyms for use as symbols, which simplifies certain kinds of communication. One part of the royal regalia is used as a symbol of royalty, in a variety of ways which I do not need to list here.

The point I wish to draw from this is that the use of metonyms is a frequent convenient means of communication. Metonyms relate to the logic of communication rather than the logic of technology. And metonyms are frequently found in magic.

The sorcerer's second error in Leach's theory is to treat the imputed sign as if it were a natural index. A natural index in Leach's terminology is something that is associated by nature with what it points to, and is selected as an index by human choice: so smoke is an index of fire. The significance of the distinction between sign and index in Leach's argument, and the grounds for saying the two are confused in the mind of the sorcerer, remain obscure to me.

Thirdly, Leach argues that the sorcerer interprets the supposed natural index as a signal capable of triggering off automatic consequences at a distance. Again, Leach's meaning must not be confused with the meaning conveyed in ordinary English usage: tokens or effects to transmit messages, such as semaphore, are metaphor, and not signals, in Leach's terminology. For Leach, a signal involves a biological response, but it is not fully automatic because of the unpredictability of the senses of the receiver. The smell of food cooking is a signal which triggers off salivation. In a conditioned reflex, according to Leach, an index is treated as a signal: Pavlov so conditioned his dog that the bell, an index of food, caused salivation and so was treated as a signal.

Leach's argument appears to be that through habitual associations, the
sorcerer, like Pavlov’s dog, treats a supposed index as an automatic signal. Indeed, he draws a parallel with switching on an electric light: you interpret the switch on the wall as a sign that the room is wired for electricity, and then you treat the sign as a signal — you press the knob in the expectation that light will come on somewhere.\textsuperscript{15}

It is true that magic can occasionally be automatic and unreflective. When people touch wood at a suggestion of danger, or perhaps when a Dinka man ties a knot in the grass to delay something,\textsuperscript{16} this might be as unreflective as switching on an electric light in a modern home. In any case, much magic is received uncritically from the conventional knowledge of society, as is much technical knowledge. When there is no reflection, there is no logic applied and, therefore, no logical difference between magic and technology. But the actions of the spirit mediums to control corn crickets were clearly not habitual nor unreflective.

Switching on an electric light becomes habitual and unreflective because it works. When the switch does not produce the expected result, the person’s actions are likely to become deliberate and reflective, and there is no question of confusing mechanical causality with communicative signals. The logic, when it is applied, is the logic of mechanical causation. When through habit there is no reflection, this involves an absence of logic rather than the logic of magic.

In contrast, when the medium threw the crickets to the chickens, it was a deliberate and very occasional action, performed in response to a particular crisis, because there was nothing else available to produce the desired effect. Magic is very often a particular response to a particular crisis, rather than some habitual action. A further point to notice is that people who are specialists in magic are often the more reflective members of a community, with a poetic ability to create rites full of symbolic meaning for the participants. These are not the people most likely to make logical errors through unreflective habitual action.

Although Leach’s analysis at first sight seems plausible enough, I argue that there is no reason to believe that the mediums did in fact mistake symbols for signs, supposed signs for natural indices, and the imputed indices for signals. All we can be sure of is that the mediums used dramatic expression, of a kind that would be appropriate in the context of communication, and hoped that such expression would carry some material efficacy. For all his pretentious jargon, Leach has told us very little about magic.

\textbf{SOME CLUES}

Skorupski provides a more convincing analysis of the magical use of symbolic

\textsuperscript{15} Ibid., 32.

He points to parallels between such magic and 'operative actions', that is, actions which create a new situation through the use of symbols. When the appointed person cuts a ribbon and states, 'I declare this road open', the road thereby becomes open to public use. Similarly, a wedding ceremony is an operative action by which a couple becomes married, with all the rights and obligations that this status involves. A cabinet minister has to be sworn in before he can exercise his role.

Such actions involve the use of symbols which have publicly-accepted meanings. They achieve their effects in the social order through their conventional meanings, and directly through their performance. Skorupski further points out that, like magic, and unlike technical activity, operative action normally requires to be performed by a person with appropriate social status in order to be efficacious. The appropriate functionary must open the road; an appointed official must register a marriage; the President must swear in ministers. Operative action is appropriate to control the social order. The suggestion is that much magic comprises attempts to use such action to control the material world. Material efficacy is attributed to actions which are primarily communicative.

In the social realm, symbolic action frequently achieves what it symbolizes. In magic, people try to get material results from the use of symbols.

Skorupski points out that there is a whole class of what is usually called magic that does not fit his analysis, including a belief in the magical power of numbers and the use of various charms. He suggests that there is no reason to classify such behaviour with the magical use of operative action. I suggest that when such action is habitual and unreflective, it is not problematic from the logical point of view. When we look at the origins of such action, or its deliberate and reflective use, we are likely to find an attempt to control the material world through symbols.

The question remains as to why people sometimes try to control the material world through symbols, when for most of their lives they are quite able to understand the limited scope of symbolic behaviour. Malinowski suggested an answer when he pointed out that magical rituals are used in situations which involve elements of unpredictability and danger, and which are not in the control of available technology. Among the Trobriand Islanders in the South Pacific, magic was used for ocean-going canoes and ocean fishing, not for canoes used in the protected lagoons nor for lagoon fishing for which the techniques were predictable and reliable. For crops, magic is used in an attempt to control weather and pests, not weeds.

17 Skorupski, Symbol and Theory, ch. 9.
Malinowski’s observation about the context of magic is valid. In traditional African systems, magic is used mainly to control sickness, the weather and enemies, none of which is entirely predictable and none of which can be controlled by mechanical devices.

Malinowski followed Frazer in calling magic a ‘pseudo-science’, and contrasted it with science:

Magic is based on specific experience of emotional states in which man observes not nature but himself, in which truth is revealed not by reason but by the play of emotions upon the human organism… Magic [is founded] on the belief that hope cannot fail nor desire deceive. The theories… of magic [are dictated] by the association of ideas under the influence of desire.

Finally, he comments that magic, in contrast to science, lies in the realm of the sacred.19

In fact, people do not believe that hope cannot fail nor desire deceive. Nevertheless, one can accept that there is an emotional response to hopes and desires in the practice of magic, and often an element of some kind of duress. One could argue further that the symbolic associations of magic rites precisely express these hopes and desires. The logical problem is why people should regard such expression as efficacious in this context. Why should anyone think that expressing a wish might have an effect on the material world?

In his later work,20 Malinowski went further. He argued that magical formulas derive from a legitimate use of language, and in the very origins of language. A child learns to control its environment by expressing its wishes; and mankind rose above other animals by co-operating and communicating with one another. In social contexts, such as a formal marriage ceremony, a verbal formula achieves an effect. ‘The knowledge of right words, appropriate phrases and the more highly developed forms of speech, gives man a power over and above his own limited field of personal action.’21 Here Malinowski offers an explanation in line with Skorupski’s later exposition, although Malinowski goes on to emphasize a belief in the mystical influence of words as fundamental to magic, a point which Skorupski convincingly denies.

Malinowski suggested two areas in his own culture which derive from the magical pole of linguistic effectiveness (as opposed to the pragmatic pole). One is advertisements, which express desirable associations supposedly coming from the product being advertised. Here Malinowski raises a valid point, but the parallel is

19 Ibid., 87.
21 Ibid., 235.
not close. The logic of an advertisement derives from a deliberate attempt to form associations in people's minds: it is the logic of communication. The magician is trying to achieve an effect. Both, however, might produce similar reactions from their clients who wish to believe that the advertised article or magician's rite will have the effects pronounced. The language of magic is certainly manipulative rather than simply descriptive. Although the words and actions may be communicative, expressing hopes and desires, the symbols are manipulated to achieve an effect. Throwing corn crickets to the chickens is not simply an expression of the medium's hopes: the drama is created to produce an effect — and may well succeed in producing an emotional effect on those who are present.

There remains a fundamental difference between magic and advertising. The advertiser tries to create and to communicate an association which he does not necessarily believe in himself, but which makes his product more attractive — say, the visual association between romantic girls and a particular brand of cigarettes. The magician, on the other hand, tries to achieve an effect on the material world through a symbolic association. In order not to be taken in, observers must critically distinguish between the visual association of an advertisement and any causal connection between the cigarettes and the girls. A magician's clients should equally scrutinize the difference between symbolic associations and causal connections.

Malinowski also associated magic with healing in Christian Science and certain types of medical 'quackery' in his own society. It is worth noticing that the use of symbols is particularly dominant in many traditions of healing. In Shona society, the most important traditional healers are spirit mediums; and they are believed to be able to turn their expertise to witchcraft and sorcery. Magic and healing go together.

Communication is often an efficacious factor in healing. That mental states can affect physical health is now well established. Even when disease is caused by an outside agent, the patient's mental state affects the body's ability to cope with the disease: psychological stress apparently adversely affects the body's immune system. The dramatic use of symbols in healing rituals may well be able to achieve appropriate effects in the attitudes and psychology of patients, and so produce physical results. Important in this respect is the removal of social causes of stress, and the restoration of the patient's confidence. In the context of healing, the manipulation of symbols is often efficacious and, therefore, not strictly magic as I am using the term. Most of us, I think, hold that corn crickets are not readily

susceptible to symbolic stimulation, and attempts to communicate attitudes to them are inappropriate and not efficacious.

One image that comes to mind is that of a male chimpanzee aggressively beating his breast in the face of an approaching thunderstorm. Guthrie refers to such behaviour in his argument that religion extends human relationships to the non-human world. There is much to be commended in Guthrie's argument that humans frequently interpret ambiguous phenomena in terms of human-like models, since humans generate such a wide variety of phenomena and are so central to the environment in which any individual lives. But his discussion focuses on religious beliefs in personal forces controlling natural phenomena. When the possessed mediums performed their rituals on corn crickets, the only believed personal forces involved were the spirits, and the belief was that the spirits were themselves performing the rites.

Guthrie argues at the cognitive level: when chimpanzees threaten storms, they suppose that these, like chimpanzees, are capable of being frightened. Perhaps such behaviour shows better how in desperation animals try things which work in other contexts, and apply them to the desperate situation. A show of aggression in the context of an approach by a threatening outside male might serve to disperse the threat. Nothing can be done about the approaching thunderstorm, but fear produces the response which works when the threat is another chimpanzee, and in this case perhaps serves to allay the fear a little. Perhaps a similar form of behaviour in the human context is a mechanic swearing at a recalcitrant engine: he does not really expect the insult to make any difference to his engine — it does not reflect an interpretation of the engine in personal terms, but swearing is a form of behaviour which sometimes produces results in frustrating situations, and it gives some relief to his frustrations in this situation.

When a mechanic swears at an unresponsive engine, and perhaps gives it a clout and a kick, this action is based on frustration rather than reflection. The mechanic, however, has probably not been unreflective. He has been reflecting a great deal on what the problem might be, and resorts to swearing when his reflections are no longer helpful.

The parallel with the mediums and the corn crickets is not exact. When the medium threw the crickets to the chickens, this was a direct result of his reflection on the topic. The state of consciousness of the medium is somehow altered when he goes into his possession trance (I do not even try to say precisely how it is altered). In this altered state, he faces yet again the threat of hunger to himself and to the people who have come to him for help. The subconscious mind has been working on the problem overnight. In the morning it produces a symbolic ritual,

expressing his desires and hopes. Such symbolic action can be effective in other (that is, social) contexts. The medium accordingly performs his dramatic ritual, hoping that it might work.

A further point is that in the context of social relations, dramatic expression adds to the efficacy of communication on solemn or important occasions. Marriage vows would seem to carry less weight without a ceremony surrounding them. Vague statements of intention or support are not normally acted out in ritual, but a solemn promise is, and the ritual clarifies precisely what is promised. Similarly here it is hoped that the dramatic expression of the people’s hopes in a symbolic rite will enhance the efficacy of the power of the spirits to protect their people.

Horton contrasted the emphasis on personal causes among the Kalabari of the Niger delta and other small-scale African societies, with the emphasis on impersonal causes in modern science. He explained this in terms of the different experience of the two societies. For the Kalabari, the natural world is changeable and unpredictable: order comes from the established pattern of social relations, and so explanations are modelled on personal relations. In a modern urban society, social relations become chaotic, and order is found in the inanimate world of nature; explanatory theories come to be based on inanimate forces and the ordered structure of the natural world. We might modify Horton’s argument slightly by pointing out that the attempt to get communicative associations to work in a situation of fear is much more likely to arise in those societies which lay greatest stress on human relations and human communication.

I have argued that magic is based on logical error, but an error that is neither habitual nor simple. The error involves a confusion of the logic of communication with the logic of physical causation. It is not, however, simply a question of interpreting reality on a human model; nor is it an error simply deriving from a failure to reflect on habitual associations. The error, when it occurs, is frequently made under some kind of duress. When the usual techniques and the usual logic fail, people dig around in their minds or their unconscious for something in their wider experience, from other contexts, which might work. In the case of magic, they try the kind of association which works in the context of communication.

If the direction of this discussion seems unhelpful to you, it certainly would seem so to most of my Korekore informants. To them the matter is simple. They went to their spirits for help, and the threat of corn crickets died away. But if we left the matter there, there would be little growth of knowledge.

