Zambezia (1989), XVI (i).

MEDICINES AND SYMBOLS*

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THERE ARE DISAGREEMENTS about the status and efficacy of indigenous[1] African medicines. On the one hand, traditional healers are undoubtedly successful in helping people to overcome a variety of illnesses. On the other, people often assume that indigenous medicines are inferior to modern Western medicines.

I have recently discussed the logic of magic: I argued that, in magic, people confuse the logic of communication with the logic of material efficacy.[2] Some approaches to indigenous medicine provide a practical application of the argument.

Indigenous African medicine is a complex field, not susceptible to any single explanation, and the field is changing to meet the needs of modern Africa. This can be seen particularly in various attempts to give professional status to practitioners of indigenous medicine,[3] which in turn involves some control over standards and ultimately over training. Frequently we find an emphasis on indigenous herbal medicines in both the teaching and research of professional associations. In 1969, Professor Akisanya, a biochemist, called for research into indigenous African medicines, to be tested according to modern scientific principles, in order to utilize indigenous knowledge in modern healing practice.[4] This call has been repeated by other scholars in Africa.

To some extent at least, indigenous medicine adopts a cognitive model akin to that of modern science, and demands to be judged by standards comparable to those of modern science. If Foucault is right in arguing that empirical thinking in modern medicine is partly a result of the social and physical environment in which it is practised,[5] indigenous African medicine will presumably adapt in a

* I acknowledge helpful comments on this paper from Pamela Reynolds and from participants in seminars in Manchester and Adelaide.

[1] I use the term 'indigenous' rather than the more common term 'traditional' in order to draw attention to the fact that we do not know what changes have taken place in the indigenous healing tradition in the recent past. When identifying healers working in the indigenous system, I refer to them as 'traditional healers'.

[2] M. F. C. Bourdillon, 'Magic, communication and efficacy', *Zambezia* (1988), XV, 27–41. My argument is close to that of J. Skorupski, *Symbol and Theory* (Cambridge, Cambridge Univ. Press, 1976), esp. 125–59.

[3] See M. Last and G. L. Chavunduka (eds.), *The Professionalisation of African Medicine* (Manchester, Manchester Univ. Press, 1986).

[4] A. Akisanya, *New Wines in Old Bottles* (Lagos, Univ. of Lagos, inaugural lecture, 1969).

[5] M. Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A. M. Sheridan Smith (New York, Pantheon, 1973 [Originally published as *Naissance de la Clinique* (Paris, Presses universitaires de France, 1963)]).

parallel way. Is there any reason to propose a logical distinction between indigenous medical knowledge and that of modern doctors? To begin to answer this question, we need to take a closer look at indigenous healing practices. My focus will be on Zimbabwe, and the Shona peoples in particular, but the arguments have a wider application.

INDIGENOUS SHONA HEALING

Most traditional healers in Shona society claim to be guided in their art by a helping spirit who takes possession of the healer from time to time, when, according to Shona belief, it is the spirit who speaks through the body of the host. In keeping with this belief, it is rare for a traditional healer to admit to having been taught by another healer. Rather, traditional healers attribute their knowledge of indigenous medicines to the influence of their spirits, who reveal cures in dreams, or guide the healers in the veld to appropriate plants. Sometimes, the cures are revealed to the healer through the dreams of their patients (often themselves potential healers). Accounts of the histories of particular healers emphasize the power of the healing spirits imposing themselves on apparently reluctant hosts.

Practice does not, however, exactly correspond with the ideology that the power of healers comes simply from their spirits. A traditional healer usually comes from a family containing one or more established healers. The prospective healer is usually chosen by a senior relative, an established healer, who starts to teach the child about indigenous herbs from early childhood onwards. The child is likely to act as an assistant to the relative even, as the child moves into his or her teens, to the extent of treating patients in the absence of, though under the direction of, the healer. Such training requires the willing co-operation of the child.[6]

A knowledge of herbs has always been important in indigenous medicine. Practitioners build up their reputations and clienteles partly on the knowledge of a variety of herbs. Learning about herbs is an important part of the informal training of aspiring practitioners.

Professional associations which have been developing in recent times place an even greater emphasis on herbalism.[7] The Zimbabwe National Traditional Healers Association (ZINATHA), the largest and the officially-recognized association in the country, established two schools at which students were taught the use of plants and other medicines (together with hygiene and simple book-keeping), and also co-ordinates research on plants. After completing the one-year course in medicines, students served a three-year apprenticeship in one of the

[6] See P. Reynolds, 'The training of traditional healers in Mashonaland', in Last and Chavunduka (eds.), *The Professionalisation of African Medicine*, 165–87.

[7] Chavunduka and Last, 'Conclusion: African medical professions today', ibid., 262–5.

clinics run by the Association, but spirit mediumship (the dominant technique of traditional healers in Zimbabwe) was never taught.[8] In other countries, too, we find traditional healers' associations paying more direct attention to research and training in herbalism than to other aspects of indigenous healing techniques.

Professor Chavunduka and Dr Last attribute this trend to a number of factors. Herbalists were less organized than healers in cults, and so had more to gain from the formation of associations. Herbalism fits in better with a move towards empiricism induced by the modern educational system. Herbalism is more easily subject to scientific investigation. There is the further point that herbalism is more tangible than other aspects of indigenous healing and, therefore, is more easily taught, examined and controlled. We have seen a similar trend in Western medicine, in which training takes place largely in terms of chemical or surgical intervention in teaching hospitals: such an environment minimizes attention to social and environmental factors in health, and does little to prepare general practitioners for much of their work, which comprises dealing with people's personal and social problems. The medical profession has been aware of problems in the training system for thirty years at least, but has been unable to overcome them: knowledge of chemistry and anatomy can be objectively taught and examined, but it is not so easy to teach and assess objectively a bedside manner and an ability to help with social problems. Perhaps traditional healers' associations were falling into the same trap of focusing on what is easiest to control. It is, perhaps, significant that the schools of ZINATHA ceased to function on account of financial problems and problems over the structure and the curricula of the training programme.

Whatever the situation in traditional associations, a knowledge of herbs has always been important in traditional medicine. The long training of aspiring practitioners in the use of herbs has resulted in a considerable body of indigenous knowledge about herbs and their uses. A study of herbal medicines used by 250 traditional healers from all over Zimbabwe revealed that more than 500 different species were in use, comprising about ten per cent of flowering plant and fern species in Zimbabwe, and about half of the species which have vernacular names.[9] From standard published works, 234 of these medicinal plants are also used for medicinal purposes in other countries in Africa, though only 60 plants are used to treat the same kinds of complaints in different countries. The few that are used to treat the same complaints in different countries are used to treat other complaints as well.[10]

[8] G. L. Chavunduka, 'ZINATHA: The organisation of traditional medicine in Zimbabwe', ibid., 37–8. The schools and clinics had a short life, and were no longer functioning by the end of 1988.

[9] M. Gelfand *et al.*, *The Traditional Medical Practitioner in Zimbabwe: His Principles of Practice and Pharmacopoeia* (Gweru, Mambo Press, 1985), 76.

[10] Ibid., 240.

Professor Chavunduka emphasizes the common usage of a number of plants, and concludes from the data that traditional healers have built up a significant body of medicinal knowledge which could supplement the drugs used by Western medicine, especially in view of the difficulty in obtaining the latter on account of the problems of hard currency that the country faces.[11] The task of comparing usage across countries is difficult, bearing in mind the variations in flora and, more particularly, the sparsity of information publicly available. The fact that there is common usage of a number of drugs does indeed support the view that the properties of at least some herbs are worth investigating from a scientific point of view

The variety of uses of herbs, however, is more striking than the similarity of uses. Gelfand *et al.* found 168 plants which were prescribed for certain complaints in Zimbabwe, but which were prescribed for different complaints in other countries.[12] Even when plants are used for the same problems in different countries, they are used for other problems as well. To take one example, Gelfand *et al.* list *Swartzia madagascariensis* as being used in Zimbabwe, Zambia and Zaïre for treating diarrhoea and headaches: in Zimbabwe the root is commonly and widely used for treating diarrhoea, and the root and pod are commonly used for treating convulsions; on rare occasions the root is used for infertility in women and oedema; the pod is commonly used for syphilis and occasionally for wounds and headache; the fruit is commonly used as an emetic and as a fish poison, and occasionally for abdominal pains and cataract; the bark is occasionally used for earache.[13] Many herbs are used to treat a wide variety of complaints even within Zimbabwe. The medicinal uses of a single substance varies widely, and this suggests that any concept of chemical treatment is peripheral to most of indigenous medical practice.

Even when the same drug is used for treating similar symptoms in different countries, this does not exclude a common perception of symbolic rather than chemical properties. To take the example of *S. madagascariensis* again, V. W. Turner states that among the Ndembu of Zambia the roots of this tree are used to treat stomach illness in children (fitting in with the common usage just mentioned), and gives the Ndembu healer's explanation: *Kapwipu* (*S. madagascariensis*) medicine is used because it is a hard tree. Hardness (*ku-kola*) represents health and strength.[14] This explanation has little to do with the chemical properties of the root.

[11] G. L. Chavunduka, 'African Traditional Medicine and Modern Science' (Harare, Univ. of Zimbabwe, Symposium on Development of Drugs and Modern Medicines, 6 Aug. 1988, as reported at length in the *Sunday Mail*, 7 Aug. 1988).

[12] Gelfand *et al.*, *The Traditional Medical Practitioner in Zimbabwe*, 240.

[13] Ibid., 154–5, 286.

[14] V. W. Turner, 'Lunda medicine', in his *Forest of Symbols: Aspects of Ndembu Ritual* (Ithaca, Cornell Univ. Press, 1967), 316.

Turner gives a list of medicines used in certain rites of affliction among the Ndembu.[15] It includes roots and leaves from a strong, tough tree to impart virility and strength; a tree with a slippery surface, related to the way children have slipped away from the woman being treated, and the need to make diseases slip away; the bark and leaves of a tree, whose name derives from the word to reveal, and whose many small fruits make small animals appear to the hunter; roots and leaves from a tree with strong thorns to catch a child; and others. Some plants are used because their names associate them with the condition being treated or the desired effects of treatment. Other medicines fit in with the symbolism of hotness and coolness, and elsewhere Turner says that many medicines fit in with the tripartite Ndembu colour symbolism, chosen because they are, or they come from something that is, white or red or black.[16] He lists indigenous explanations of herbs used, which often refer to their bitter or hot taste. Other medicines are used because the plants, or sometimes animals, in some way characterize the symptoms of the patient. All the senses, sight, hearing, taste, smell and touch, are employed in the analogies between the medicines used and the disease or the desired effects. Some plants and objects used medicinally also appear in cultic rituals. Turner explains the use of Ndembu medicines in terms of their symbolic significance, rather than because of any chemical property, although he does point out that since Ndembu healers try many medicines it is likely that some become established because they are observed to bring relief. As E. H. Ackerknecht has pointed out, the knowledge and use of some medicines that are physically efficacious does not make the system of medicine a scientific one.[17] The knowledge of herbs, and of the symbolic system in which they are used, may be detailed and require much learning; but it does not necessarily involve a knowledge of drugs.

We are in the realm of what is often called sympathetic or homeopathic magic: the medicines have qualities which the healer would like to transfer to the patient. Although attempts to transfer qualities (such as heat or perhaps even disease) by contagion or consumption can in principle be quite empirical, the whole context of Ndembu medicine shows that the dominant associations are at the cognitive and symbolic level. As in much magic, it is a response to fear of what cannot be controlled empirically: people express their wishes and hopes with the cognitive associations they can control.[18]

Unfortunately, there is little published work on attempts to obtain and elucidate the symbolic reasons behind the use of indigenous medicines in

[15] V. W. Turner, *The Ritual Process* (London, Routledge and Kegan Paul, 1969), 24–7.
[16] Turner, 'Lunda medicine', 303–5.
[17] E. H. Ackerknecht, *Medicine and Ethnology: Selected Essays*, ed. H. H. Walser and H. M. Koebing (Baltimore, Johns Hopkins Press, 1971), 135–61.
[18] I have argued this more fully in 'Magic, communication and efficacy'.

Zimbabwe. The vast collection of herbal remedies by Gelfand *et al.* gives no details of texture, colour or smell of the plants used, neither does it give any indication of other symbolic usages of the plants. No attempt was made to obtain a symbolic exegesis of the use of herbs from the practitioners themselves. Indeed, there is some doubt about the usefulness of a collection such as this, in which herbs are taken out of the healing context, affecting both their symbolic value and their possible chemical value when used in conjuction with other herbs. Anyone who has seen the huge dominant baobab trees in the woodlands of the lower-altitude areas of Zimbabwe will readily see a sympathetic symbolism in the use of the bark of this tree 'to secure respect, prestige and security in one's job', or the bark and fruit 'to fatten babies'; the trees are also used for important land shrines in some areas. Nevertheless, as Turner points out, we should be wary of attributing a logic without reference to the explanations of people within the culture concerned.

We can notice again the point that many plants are used for a wide variety of complaints in different countries, and even by different healers in Shona country: this further suggests that treatment is determined largely by a variety of local, and even individualistic, systems of symbolic logic rather than by universal physical properties.

There is the further point that traditional healers often learn about medicines through dreams. One reason for dreaming about a herbal treatment may be a subconscious working on past training and experiences. The ability to call on past experiences in this way, and the reliance of healers on this skill, could in principle be developed in a tradition that is not able to rely on written textbooks. But besides a causative association that one may have come across, dreams call on a variety of associations and experiences. Psychoanalysis has shown us that what appears in dreams has a logic, usually through some kind of symbolic association. Medicines that come from dreams are more likely to be susceptible to the kind of symbolic analysis presented by Turner than the biochemical analysis suggested by Akisanya.

Turner points out that the use of medicines has to be understood in the context of the Ndembu cosmology of hidden powers which have to be exorcised or controlled. The medicines themselves have such powers, and it is the healer's task to rouse the powers within the medicines to perform their healing functions. This is clearly not the efficacy of chemical drugs.

Elsewhere, Turner points out that many healing rituals refer to conflict within the community. It is now generally accepted in modern Western medicine that psychological and social factors are significant both in the incidence of disease and in the healing process. Turner points to the skill of traditional healers in pinpointing areas of tension, and in organizing rituals to overcome tensions and restore some kind of order and harmony in the community.[19]

[19] V. W. Turner, 'A Ndembu doctor in practice', in his *Forest of Symbols*, 359–93.

Bacteria and viruses may be immune to complex symbolic systems, but people are not. In so far as an important part of the traditional healer's role is to influence the attitudes of his clients, especially their attitudes towards one another, involving them in symbolic gestures and rituals may well be the most effective way to do this. At the individual level, a patient's attitude may affect the ability of his own body to fight the bacteria and viruses, which are consequently indirectly affected by the use of symbols.

INDIGENOUS AND WESTERN MEDICINE

A variety of recent studies have pointed to the limits of modern medicine on the one hand, and the very real efficacy of indigenous practices on the other.[20] Nevertheless, what we have seen so far suggests fundamental differences between the two systems. It will be useful to look at some typologies of the differences.

In the early part of this century, it was customary for administrators, missionaries and others to dismiss indigenous healing practice as superstition and the practitioners as charlatans. To such people, the difference between indigenous and modern medicine is the difference between superstition and science. At worst such views were simply ethnocentric. Although such views have rightly been dismissed in the anthropological tradition, two points need to be considered. Firstly, these ethnocentric perceptions were given some apparent credibility by the use of deception on the part of traditional practitioners. Secondly, traditional practitioners have occasionally harmed their patients by administering toxic substances.

To take the first point, a common example in Southern and Eastern Africa is when a healer produces a worm or other object which he claims to have been the cause of sickness, and to have sucked this object out of the body of the patient, usually into a horn or similar vessel placed against some part of the patient's body. That such practice involves deception is clear from Evans-Pritchard's account of a Zande healer's reluctant teaching of such tricks to the anthropologist's Zande assistant, and the assistant's dismay in discovering that the practice simply depended on sleight of hand.[21]

Lévi-Strauss produced an interesting account of how an indigenous healer (in this case in North America) might at first be disillusioned about the deceptive aspects of the healing art, but might nevertheless continue to practise in the genuine belief that he offered some relief to his patients which they could get from nowhere else, and that his practice was less fraudulent than that of other healers.[22] It is no longer tenable to dismiss indigenous medicine as fraudulent. At best such a notion arises from a failure to see the necessary distinction in perceptions between the practitioner who

[20] See, for example, A. L. Strauss, *Where Medicine Fails* (New Brunswick, Transaction Books, 1979).

[21] E. E. Evans-Pritchard, *Witchcraft, Oracles and Magic among the Azande* (Oxford, Clarendon Press, 1937), 229–39.

[22] C. Lévi-Strauss, *Structural Anthropology*, trans. C. Jacobson and B. G. Schoepf (London, Penguin, 1968), 175–82.

manipulates symbols and the subject who is affected by the symbols: such distinctions can be used unethically as in much advertising or by a quack,[23] but the implied 'deception' can, and often is, used to benefit the subject (as in the use of a placebo).

A modern general practitioner who prescribes for material gain a drug that is not necessary would be considered as behaving unethically. But the same deed may be acceptable when the benefit of the patient is the motive. One doctor described to me how she prescribed a harmless but unnecessary drug to a patient who had problems at home which he clearly wished to discuss with her on a regular basis: it is socially acceptable to visit the doctor to have a prescription renewed, but not to discuss one's relations with one's spouse!

The point I am making is simply that the use of deception in certain situations by traditional healers to achieve their effects does not necessarily mean that these healers are charlatans.

On the administration of toxic substances, a number of cases of harmful results of the use of poisonous herbs by traditional healers have come before Western medical practitioners for remedy.[24] We could simply dismiss these incidents *post factum* as incompetence on the part of the individual practitioners involved: indeed, we have no comparative statistics on harm done by professional healers in either the modern or the older African tradition — and there are those sceptics like Ivan Illich who regard modern medicine as doing more harm than good in society.[25] The question of error and testing is more complicated than this; the point at this stage is that the existence of error does not itself condemn a system which has many beneficial results.

While the limits of modern medicine and the efficacy of traditional healing are widely accepted in academic circles, there remains a popular characterization of the two systems which associates the modern Western system with science and progress, while indigenous systems are associated with ignorance and backwardness. We notice that champions of indigenous medical knowledge, such as Chavunduka and Akisanya, want scholars in the modern scientific tradition to examine the herbs, to isolate the active ingredients and to verify the most effective form of dosage. It is true that Chavunduka wants scientists to do this mainly in order to restore confidence in indigenous medicines, which he assures us have been fully researched by indigenous healers and are effective. Nevertheless, the need to restore confidence suggests that many people have more confidence in the

[23] Malinowski was right to see something common in the logic of quackery and advertising on the one hand and the logic of Trobriand magic on the other: see B. Malinowski, *Coral Gardens and Their Magic* (London, Allen and Unwin, 1935), 237–8. But there is reason to believe that the traditional healer, unlike the advertiser and the quack, usually himself believes in what he is doing.

[24] See Gelfand *et al.*, *The Traditional Medical Practitioner in Zimbabwe*, 294–5.

[25] See I. Illich, *Limits to Medicine: Medical Nemesis: The Expropriation of Health* (Harmondsworth, Penguin, 1977).

ability of modern science to assess the chemical effectiveness of drugs than they have in traditional healers. Is this simply a result of cultural imperialism? Or is there some basis to common people's beliefs?

Turner suggests that indigenous medicine treats symptoms only, whereas Western medicine treats disease.[26] The idea is that a traditional medical practitioner might try to treat a headache or a fever, whereas Western medicine will aim to find out what in the body of the person is causing the headache or the fever and treat that. On the other hand, one could equally argue that Western medicine stops with the physical body, whereas indigenous medicine aims to discover and to treat whatever in the social environment makes the individual liable to succumb to disease. D. I. Ben-Tovim, in a study in Botswana, cites a psychiatric patient as saying, 'The Tswana doctor tells me why I am ill. Your medicine cures the illness as it affects the body.' Ben-Tovim interprets this as a view that Western medicine suppresses the symptoms of disease, but indigenous medicine offers answers to 'why' in terms of indigenous beliefs.[27]

There is a problem over what counts as symptom and what counts as disease. Frequently the term 'disease' is used to apply precisely to a disorder as defined physiologically by Western medicine. If such a definition is accepted, it is neither surprising nor informative to state that Western medicine treats disease, and other systems treat something else.

Botswana has been relatively successful at organizing a primary health care system in which traditional healers have a role to play. They are involved in the local-level health committees, and even Western doctors are appreciative of the contributions that traditional practitioners can and do make at this level. But there is frequently a breakdown in communication when particular diseases are discussed. Traditional healers may frequently adopt the name of a disease from Western medicine, say, 'bilharzia' or 'AIDS', but the perception and definition of the problem that they call by that name has little to do with the cognitive system of Western medicine. Conversely, some complaints treated by traditional healers have no clear English translation.[28]

Even when traditional healers talk about diseases in terms of observable physical symptoms, and claim to treat them accordingly, we find that, in practice, diseases are defined and treatment is applied according to other factors. It has long been established that diviners using dice use the throws freely as a peg on which to hang their commentaries on the social situation which they are considering.[29]

[26] See Turner, 'Lunda medicine', 305.

[27] D. I. Ben-Tovim, *Development Psychiatry: Mental Health and Primary Health Care in Botswana* (London, Tavistock, 1987), 179.

[28] See Gelfand *et al.*, *The Traditional Medical Practitioner in Zimbabwe*, 77.

[29] See R. Werbner, 'The superabundance of understanding: Kalanga rhetoric and domestic divination', *American Anthropologist* (1973), LXXV, 1414–40, and M. F. C. Bourdillon, *The Shona Peoples* (Gweru, Mambo Press, 3rd edn., 1987), 154–6.

Similarly, healers freely interpret symptoms in the light of social problems and conflicts, irrespective of how particular symptoms are paradigmatically associated with specific problems: people may say that backache is typically a symptom of witchcraft, but, depending on circumstances, a particular case may be regarded as a sign from the ancestors or simply the advent of old age.

Traditional healers normally look at a problem in its total social and psychological context: the 'disease' as defined by Western medicine is simply the symptom of the problem. The detailed knowledge of anatomy and physiology which provides the parameters of a Western definition is, where it exists at all, peripheral to the indigenous cognitive system.

The problem is perceived, defined and treated differently in each system. The distinction in Western medicine between disease and symptom is applicable only to the Western system and is meaningless in the context of the indigenous system.

A third way in which I have heard the difference between the two systems characterized is that indigenous African medicine (at least in the region under consideration) has no coherent theory of the body. Again, this notion has superficial plausibility when one compares the detailed anatomical knowledge on which modern medicine is based with the very limited knowledge of anatomy of traditional healers. But again there are problems when one examines the notion more closely, problems that relate to the whole debate about modes of thought.

One problem arises over what might constitute theory in a non-literate tradition. Although many, if not most, traditional healers are now literate, their knowledge and training have been acquired in a tradition that has until recently had no writing, and which still does not rely on writing. Indeed, a fairly common feature in accounts of young persons being chosen by a healing spirit is mental disturbance involving neglect of school work, or even running away from school.[30] One does not expect to find in such a non-literate tradition a systematic enquiry and exposition of the logical basis for practical decisions. This does not negate the possibility of a logical basis which does in fact systematize practical decisions. Can one talk meaningfully about implicit theory?

Some non-Western medical traditions do have their own theories of the body, Islamic medicine, for example, or many of the Eastern traditions. Such theories are built up in written literature, even if many or even most of the healers are in fact illiterate. But it is not clear that the existence of such theory is useful in differentiating indigenous and modern medicine in Southern Africa.

Take, for example, Kapferer's recent outline of 'exorcist theory' in Sri Lanka

[30] It is clear from the role of spirit mediums in the liberation war in Zimbabwe leading up to Independence in 1980 that spirit mediumship was an effective symbol of opposition to White culture; see M. F. C. Bourdillon, 'Religious symbols and political change', *Zambezia* (1984–5), XII, 39–54, and D. Lan, *Guns and Rain: Guerrillas and Spirit Mediums in Zimbabwe* (Harare, Zimbabwe Publishing House, 1985).

in terms of three fundamental humours: wind, blood/bile, and phlegm.[31] These should be in balance in a healthy person. Diseases, emotional states and afflicting demons are understood in terms of how they affect this balance, and treatment proceeds accordingly. Here we find an established theory of the body, on which treatment is based. Nevertheless, there is an overlap in the symptoms attributed to the different humours, and in the effects of various spirits. The understanding and treatment of illnesses within such a system seems closer to the understanding of affliction in terms of spiritual powers that we find in traditional Shona medicine than it is to modern medicine. It is the specific biochemical theory of the body, which was only recently developed, rather than the existence of theory as such, which distinguishes modern medicine from other traditions. It could be argued that such biochemical theory provides, in any case, only a limited understanding of disease.

Turner emphasizes the importance of spiritual powers and witchcraft as believed causes of disease in contrasting the Ndembu healing system with that of Western medicine. He argues that the Ndembu do not know of natural causes for serious diseases and resort to divination rather than diagnosis.[32] This is probably overstated; but the valid point remains that when a disease is serious enough to threaten life, or persists beyond normal expectations, it demands some kind of supernatural explanation.[33] The aim of healers is to make the invisible appear, and then to tame it, through the use of symbols.[34] The polysemic symbols used in turn relate to the fundamental values and ethics of Ndembu society, which are brought into play into such everyday matters as curing a headache.[35]

Turner is somewhat dismissive of the efficacy of indigenous medicines, though he does concede that they might help in mild psychosomatic illnesses. He attributes the continued resort to indigenous medicine to its intimate linking with the whole Ndembu cognitive system: to question the efficacy of indigenous healing would be to question the whole Ndembu world view. He also points to the fact that most ailments are self-curing, and may appear to be cured by indigenous treatment (or, we might add, equally by modern treatment). He argues that there is a danger of assuming that the Ndembu are able to cope with a poor health situation through their indigenous medicine, whereas improved diet and better hygiene, together with more modern preventive medicine and more widespread hospital facilities, are urgently required.

[31] B. Kapferer, *A Celebration of Demons* (Bloomington, Indiana Univ. Press, 1983), 49–52.
[32] Turner, 'A Ndembu doctor in practice', 360.
[33] See Chavunduka's category of 'abnormal illness' among the Shona, requiring explanation and treatment in terms of spirits or witchcraft, G. L. Chavunduka, *Traditional Healers and the Shona Patient* (Gweru, Mambo Press, 1978), 12.
[34] Turner, 'Lunda medicine', 353.
[35] Ibid., 356.

Now, more than twenty years after Turner wrote, we are inclined to be less confident about modern medicine and less dismissive of indigenous practices. Nevertheless, Turner was probably right in his assessment that improved diet and hygiene comprise important health needs for the Ndembu, although mental problems due to dislocation and other problems of contemporary life possibly require equal help from the traditional system. Turner was also right in pointing to a basic logic of Ndembu medicine which is radically different from that of modern medicine. Modern medicine is concerned with the inanimate world of nature. Ndembu medicine is concerned with personal relations and personal causes of illness, both of which can be manipulated through the use of symbols. Where indigenous medicine does provide physical treatment of disease, this is secondary to the main thrust and logic of the healer's practice.

To say that chemical treatment is secondary is not to deny that it is real. Work by Professor Chavunduka and Dr P. Reynolds suggests that physical properties of drugs used by traditional healers in Shona society are widely known and utilized in indigenous healing. Moreover, a number of herbs are invariably mixed in any medicine. Some healers explicitly test new medicines, often on themselves, before administering them to their patients.

Nevertheless, the testing in the traditional system is not as public and well developed as it is in the Western system, with its systematic use of controls and complicated statistical tests. It is true that sometimes new drugs are put on to the market without adequate testing, but such incidents are in breach of the norms that have been established. In contrast, when a traditional healer dreams up a new medicine, any testing of this will be simply on his own initiative. The amount of testing a healer can do on himself is very limited.

If we are to look at the logic of a system of knowledge, it is important to look at the generation and incorporation of new ideas. Old ideas are generally accepted on authority and learnt in any system: most human knowledge is in fact habitual.[36] The scientific tradition has developed techniques, which may not always be properly applied, for testing new ideas and expanding the body of available knowledge: the way in which new ideas are incorporated into indigenous medical knowledge needs to be examined. Here there is a problem in that there have been no studies over time to provide data on the incorporation of new ideas into the traditional indigenous healing system, although there has been some recent work on the use of Western medicine by traditional indigenous healers.[37] Nevertheless, the contrasting emphasis on revelations by spirits in

[36] My argument is more fully expressed in 'Magic, communication and efficacy'. I do not agree with the characterization of traditional medicine as only habitual, by Ackerknecht, *Medicine and Ethnology*, 156.

[37] See C. Peltzer, *Some Contributions of Traditional Healing towards Psychosocial Health in Malawi* (Frankfurt, Verlag für Psychologie, 1987).

dreams on the one side, and on observation and systematic testing on the other, suggests two different cognitive systems.

This is not to suggest that the traditional system is inferior because it is not scientific. There are differences between the two systems, but any correct characterization of these differences must allow for the advantages and shortcomings of each.

TWO TYPES OF EFFICACY

In the healing process, there are two distinct types of efficacy.[38] One is the inanimate physical efficacy of chemical or surgical treatment. Secondly, there is the efficacy of communication, communication to patients and their associates of appropriate attitudes for the healing process to take place.

Communication of factual knowledge (what Sperber calls encyclopaedic knowledge[39]) is often obscured by the polysemic nature of elaborate symbols, which rarely have a very precise meaning. But the communication of attitudes is enhanced by the use of symbols which often derive their power from repeated use in a variety of contexts, and which have an effect on the psychology of individuals.

This second type of efficacy is used in modern medicine in the use of placebos. A combination of the two types is frequently used in modern psychiatric treatment, and in some other traditions communicative treatment is reinforced by the use of psychoactive drugs.[40] But generally in the modern system, medical practitioners are aware of which type of efficacy they are trying to manipulate. The testing of drugs and treatments has controls, precisely to enable scientists to distinguish between the two types of effects. And it is clear that, apart from in psychiatry, it is the physical efficacy of various treatments that is emphasized in modern medicine.

In the indigenous system, some medicines are administered because of their known physical properties. Others are chosen because of some symbolic association, and their use based on the logic of communication rather than that of physical causality. The emphasis on dreams and revelations in indigenous medicine, together with the ways in which herbs are used, suggests that this tradition pays more attention to symbolic efficacy. Such symbolic usage may comprise a realistic attempt to control the disposition of the healer's clients; or in some cases it may comprise 'magic', trying to control the material world through symbolic associations.

[38] The two types of efficacy correspond roughly to the two types of medicine discussed by H. Ngubane, *Body and Mind in Zulu Medicine* (London, Tavistock, 1977), 109. My suggestion is that particular medicines may involve one or other type of efficacy, or both, in different circumstances.

[39] D. Sperber, *Rethinking Symbolism* (Cambridge, Cambridge Univ. Press, 1974).

[40] See D. H. Efron, B. Holmstedt and N. S. Kline (eds.), *Ethnopharmacologic Search for Psychoactive Drugs* (Washington DC, US Govt. Printing Office, Public Health Service Publication 1645, 1967).

Failure to differentiate between the logic of communication and the logic of physical efficacy is a cognitive error, resulting in what can conveniently be called magic. The use of symbolic medicines as if they were physical drugs is magic. Turner argues that in Ndembu medicine no attempt is made to distinguish between the different types of effects that medicines may have, and that symbolic medicines are mixed indiscriminately with herbal drugs. Against this one might argue that, although no explicit distinction is made between the two types of efficacy, indigenous healers use both types of logic effectively; consequently, there is no reason to assume that traditional healers are unable to make the distinction, even though the distinction does not appear explicitly in their body of knowledge. Elsewhere, traditional healers are explicitly aware of the two types of medication, although they deliberately confuse the two as far as their patients are concerned,[41] since their status depends on a certain mystification of their techniques. The fact, however, that the distinction is not explicit in traditional expositions of their practice means that errors are likely to occur from time to time.

Perhaps the greater confusion is in the minds of academics rather than in those of the healers. Perhaps biochemists interested in possible chemically-active ingredients of traditional medicines need to learn something of anthropology in order to see in what circumstances and combinations the medicines are supposed to work. Indeed, the precise combinations of herbs may be important for an understanding of their chemical efficacy.

As I mentioned at the beginning of this article, Foucault has argued that the perspective of modern medicine has evolved in response to the situations in which it is practised. The role of medics as advisers and counsellors increased with the decline of the standing of priests. An emphasis on environmental factors in health, together with state control of large city hospitals, turned the attention of medicine to diseases rather than to patients, and to what can be seen and examined. Patients began to be taken out of their home environment, and to be treated as cases in hospitals. At the same time the state began to take a greater interest in the training and practice of medicine. The emphasis in medicine consequently turned away from invisible forces to the details of what can be seen.[42]

If his insight is correct, we should expect to see indigenous African medicine moving in a parallel direction as the society in which it is practised changes. People move from rural communities, in which everyone knows everyone and healers can be chosen according to personal reputations, into large urban populations, in which relationships, including those with healers, are simple and functional rather than complex and personal. Accordingly, the impersonal state takes control over many institutions, including those surrounding health.

[41] Personal communication from T. Allen, from his recent field research in Ethiopia.
[42] Foucault, *The Birth of the Clinic*.

Indigenous healers find that they are having to treat patients without having detailed knowledge of their social backgrounds. The numbers of patients are such that healing becomes a full-time occupation, and 'clinics' are set up for the more efficient processing of patients. The confidence of the public is furthered by membership of formal organizations, and perhaps by formal training. The power of the healers must now depend more on the power of their medicines.

Does this turn indigenous medicine into becoming a primitive and inferior form of modern medicine? One could argue this case, claiming that it remains in common use largely because it is more accessible in terms of cost, both in training (allowing for a greater number of practitioners charging little for their services) and in the materials it uses. On the other hand social institutions do not change suddenly and absolutely. There is still much demand for the traditional role of the indigenous healers in the rural areas. The resurgence of alternative medicines in Western countries shows that Western medicine is unlikely ever to fulfil all people's health needs even in industrialized urban areas.

CONCLUSION

I have wandered away from my original subject. Where does all this leave the status of the indigenous medicines used by traditional practitioners? Let me summarize my conclusions.

There are two kinds of logic involved in healing practice. There is the logic of communication, affecting people's attitudes through symbolic associations; and there is the logic of physical cause and effect. Both forms are utilized in both modern and indigenous medicine, though with very differing emphases.

The explicit use of subconscious associations through dreaming, and the total immersion of indigenous medicine in indigenous culture, give traditional practitioners skills in manipulating social and psychological states with which modern practitioners in Africa are unable to compete.

Some indigenous African medicines may well have chemically-effective ingredients which are worth researching. Useful drugs in the past have been obtained from similar traditions. Nevertheless, academics involved in such research should be aware that many medicines are symbolic rather than physical in their efficacy. Academics who assume that all herbs, or even the majority of herbs, are to be treated as equivalent to Western drugs are making the error of magic.

Although indigenous knowledge includes chemical drugs, the way in which the body of indigenous knowledge is built up, and the way in which new ideas are initially assessed, is more appropriate to symbolic medicines than to chemical drugs. In the field of chemical drugs, the modern scientific tradition is clearly superior, with its more developed theories of the chemistry of the body, and its

more explicit testing techniques (even if they are not always used by the pharmaceutical industry). In this field, indigenous knowledge is rightly subordinated to Western medicine.

The question arises as to the possibility of the professionalization of indigenous practice, at least according to the modern model. It seems likely that this can be fully achieved only at the cost of reducing the emphasis on communication and the social side of healing. The most effective part of indigenous healing is hard to teach and examine and control.