This book is about medicines – substances used in the treatment of sickness. Because medicines are material objects (we speak of *materia medica*) and because there is a ‘natural science’ of medicines (pharmacology), they appear to be natural aspects of the real world. And so they are. But like every aspect of human experience, they always exist within particular cultural and social realities. Various systems of cultural understanding endow them with specific qualities and powers; that is to say, they have culturally defined meanings as well as bio-chemical properties. As objects, medicines are produced, distributed and appropriated through institutions and interactions of various kinds. They are socially transacted from the time they are gathered in the bush or produced in a factory until they are rubbed on by a concerned mother or injected by a helpful neighbor. If we want to understand how medicines are actually used, we must go beyond the bio-chemistry of the substances themselves, to the situations in which the substances are perceived and applied.

The term ‘pharmaceutical anthropology’ may serve to distinguish the approach we advocate here from that taken in what has come to be known as ‘ethnopharmacology’. The latter is concerned with the ‘natural’ biochemical properties and effects of indigenous medicines. We wish to emphasize the ‘context’ of medicines, by which we mean the constellations of cultural meanings and social relations within which medicines exist in a given time and place. While ethnopharmacology concentrates on ‘indigenous medicines’ of Third World people, pharmaceutical anthropology is concerned with the co-existence of Western and indigenous medicines and with the issue of how each affects the perception and use of the other.

**MEDICINE AND MEDICINES**

Medicines have come to be perceived as the most typical representation of the therapeutic enterprise – so much so that they have given their name to the totality of therapeutic interventions: medicine. Both patients and curers generally regard the use of medication as the most crucial part of therapy. So it is important to ask what is so special about medicines and how they differ from other modes of dealing with suffering.

We suggest that there are two distinctive qualities of medicines. The first is that they are substances. The second is that they are believed to contain in themselves a power to transform the human condition. Drugs have a greater concreteness than most other types of therapy. In medicines, therapy is reified; a *thing*, a healing token is passed from one person to another and
applied directly to the suffering body. The substance itself is perceived as efficacious, allowing therapy to be separated from the skill and knowledge of the therapist.

As substances, medicines can become objects of exchange. As things, they have a life. We can speak of the biography of a drug: its production, distribution, marketing, interpretation and use. The life of a drug often involves transaction from one context of skill, meaning and control to another. The assumption that some substances contain an innate power seems to be very widespread and it is an important reason for the diffusion of medicines from one culture to another. Yet even though people of different cultures share the basic idea that a medicine is powerful, the specific nature of that power may be conceived quite differently. The characteristics that indicate potency, the expectations about how a medicine works, notions about suitable uses of a medicine's power – all these are culturally shaped in various ways.

We have used these two central characteristics of medicines to organize this collection of papers into two parts. The first section on the transaction of medicines emphasizes pharmaceuticals as commodities that are produced and distributed. The second section deals with the meaning of medicines as powerful substances. We must stress however that these two aspects of medicines – transactability and meaning – are inextricably linked. People produce, sell, desire and buy medicines because, like all commodities, they have culturally ascribed meaning and value. Sick people do not acquire particular drugs simply because they need them only in the 'natural' sense – the mysteries of biochemical effects are remote for us all. The need for medicines which is the basis for their production and transaction is evident – but it is equally evident that this need is in part culturally constituted. We learn what to need, and it makes no sense to consider the commercial aspects of medications without recognizing this basic point. On the other hand, the meaning of medicines cannot be appreciated without considering the ways in which they are transacted. Typically a drug is not valued simply because it works, but also because it came from a certain source – witness the difficulty in getting people, or governments, to buy 'generic'. It is part of the meaning of a medicine that it was recommended by an authoritative doctor, or manufactured in Switzerland, that it was expensive or that it was advertised and packaged in a particular way. A striking example of how people are taught to need new products from special sources is provided by MacCormack and Draper in this volume. They tell how Jamaican mothers are urged to use imported 'medicine' to treat diarrhea, instead of the herbal tea and coconut water they used to give.

As tangible substances imbued with healing power, medicines raise a very central issue for medical anthropology. They require us to consider the matter of self-care by means that are not self-produced. Other forms of therapy are administered by specialists (surgery, exorcism) or they are created and
administered by the sick person or family (meditation, rest, loving attention). But medicines do not require a therapeutic relationship to a practitioner; they permit autonomy. One can acquire and use them independently, thus assuming responsibility for one's own health. (In the Third World, this even holds for prescription drugs, as various contributions to this volume show.) At the same time, insofar as medicines are commodities, one must obtain them through transactions. Most people are not self-sufficient in the medicines they use for self-care. When those medicines are pharmaceuticals manufactured under technologically specialized conditions, according to principles very few of us understand, another type of dependence is created. Instead of intimate dependence on therapists, the user of medicine has a more impersonal and distant dependence upon the market. This is the paradox of self-care by medications. It implies greater self-reliance in one sense, and less in another.

A number of the papers in this volume describe the way that medicines, especially Western pharmaceuticals, are acquired and used for self-care quite outside of what we usually think of as therapeutic institutions and relationships. People reflect upon symptoms, talk to neighbors and drug vendors, and obtain the substance they find appropriate. This is probably the most common form of treatment in both Western and non-Western societies— and the least studied. Pharmaceutical anthropology requires us to shift our gaze from the relation between patient and healer, to the popular sector of the health-care system, where people treat themselves by substances they believe have particular effects.

THE TRANSACTION OF PHARMACEUTICALS

The term pharmaceutical relates to the preparation, dispensing and sale of drugs. According to the Oxford English Dictionary, it means 'pertaining to or engaged in pharmacy', which is defined as: 'the art or practice of collecting, preparing and dispensing drugs, especially for medicinal purposes'. If the word seems to imply Western manufactured medicines, it is no doubt because it emphasizes medicines as products which are made to be sold— and Western drugs are commercial products par excellence. But because medicines are things, any medicine, whether chemically synthesized or herbal, may be transacted.

Pharmaceuticals are commodities of a very special kind. They are goods which have the capacity to affect the person in a direct way— a power which is at once beneficial and potentially dangerous. The Greek root of the word pharmaceutical referred to poison and witchcraft as well as healing medicines; this double image of medicines is also found in many African cultures, as Whyte's article in this volume suggests. In a somewhat different way, this point about the double potential of medicines runs through much of the discussion of the distribution of pharmaceutical commodities. As powerful substances, medicines are always potentially dangerous; they can always be
misused. The issue of control is central in analysing transactions of medicines. The question in the minds of policy makers is: How can the dangerous potentiality of drugs be limited? The question in the minds of users is: How can I appropriate the beneficial potential of drugs most directly?

There has been very little published concerning the ways in which Western pharmaceuticals are actually disseminated in the Third World. Therefore we feel that the case studies from the Dominican Republic, Mexico, El Salvador, Ethiopia, Cameroon, Mauritius and Sri Lanka are important as descriptions of the contexts in which people obtain drugs. They describe the ways the Western pharmaceuticals are exchanged outside the clinical institutions of Western biomedicine. The roles of drug company salesman, pharmacists, shopkeepers, and 'traditional' practitioners are elucidated. An important theme here is how information is conveyed about the dangerous and beneficial powers of drugs. How do distributors understand the qualities of pharmaceuticals and what explanations about use accompanies the transaction? It is clear that the instructions worked out by manufacturers often do not reach users. Other kinds of information and cultural understandings are transmitted instead.

THE MEANING OF MEDICINES

However capitalistic the production and marketing of drugs may be, we cannot understand the way they are used in purely economic terms. We must assume that people consume goods as signs and symbols. They attribute meaning and value to differences in products and to different ways of utilizing them. They make choices on the basis of what such differences mean for them as members of a particular cultural milieu. This is as true of the use of medicines as it is of clothes, rock music, and household furnishings. And it is as true of the use of herbal medicines as of manufactured pharmaceuticals. The fact that medicines are applied to the distressed body makes it particularly important to be alert to the ways they carry meaning and mark identity for the sufferer. They are consumed more intimately - and in more stressful situations - than most other kinds of products.

There is no simple strategy for uncovering the meaning of medicines. In the chapters presented here, several approaches are used to examine the ways people seem to understand medicines. One approach is to look for attempts to relate substances to conceptions about the nature of health and the causes of disease. Unschuld does this in showing how the classification of materia medica in China and classical Greece was conceptually related to the classification of forces and elements whose imbalance caused disease. A number of the other chapters also suggest that people think about medications in terms of their ideas about disorders and their causes - cough medicines for coughs and cooling medicines for distress caused by too much heat.

We have suggested that a central characteristic of medicines is that they are
thought to have the power to produce an effect. Thus one important part of
the meaning of medicine is its efficacy. The term efficacy may seem unpro­
blematic enough within a natural science framework. But an awareness of
cultural context calls for an examination of the ways people in different
situations actually perceive efficacy – what effects they look for and how they
evaluate them. This is the task which Etkin takes upon herself, criticizing the
biomedical standards with which ethnopharmacology has measured the ef­
effects of medicines and reminding us that efficacy, like other aspects of
medicines, is culturally constructed.

Another way to approach the meaning of medicines is to focus upon their
relation to other kinds of therapy. Whyte suggests that in East Africa
medicines may be constrained with the ritual adjustment of relationships – a
form of therapy that necessitates dealing with spiritual and social situations.
In Western culture, this kind of meaning is recognized when it is said that
people 'pop pills' instead of dealing with the real social and psychological
causes of their distress.

Finally, people give meaning to particular qualities of medicines in terms
that are generally significant in other realms of culture. For example the color
or taste of medicines may be meaningful because of connotations of particular
colors and tastes in a given culture. Yellow pills are suitable against depres­sion in Europe; red capsules are appropriate modes of strengthening the blood
among the Mende of Sierra Leone. As Bledsoe and Goubaud point out, such
qualities of medicaments may be reinterpreted as transactions are made
across cultural boundaries.

Because this book focuses upon Western pharmaceuticals in the Third
World, special problems in the analysis of meaning arise. Many researchers
report that commercial packaging, and 'high tech' modes of application,
especially the hypodermic needle, have a particular appeal. Obviously the
meaning of medicines is not a simple matter of consistency with established
patterns of 'tradition'. Plastic capsules in two bright colors and slick, shiny
products can be just as meaningful as time-honored potions and secret herbal
recipes. Buying factory-made products may be a way of identifying oneself as
'modern'. More than that, conceptions of power and efficacy may be tied to
'foreignness' and elaborate processing. Provenance and packaging seem to be
important dimensions of meaning for many people. The fact that medicines
have been produced in distant places or unfamiliar ways may add to their
value. (The Oxford English Dictionary gives an obsolete meaning of the word
'drug' as 'spices and other commodities, brought from distant countries, and
used in medicine, dying and the mechanic arts'.) What one cannot make
oneself may be able to accomplish what one cannot do oneself. The expecta­
tion that remote peoples have extraordinary knowledge that can be harnessed
for therapy is a theme in Western cultures as well as in many others.
METHODS FOR CONTEXTUALIZING MEDICINES

In their efforts to examine medicines in context, the contributors to this volume have employed a variety of methods. Context implies a whole of which something is a part; but holism is a myth, not a method. Choices must always be made as to what aspects of a context to examine. Those choices determine what methods are appropriate.

Participant observation is usually regarded as the most important tool for the working anthropologist. It involves living in a local community, interacting in whatever ways one can, and observing the situation (and oneself within it). The idea is to be an insider and an outsider both. As an insider, one should try to grasp ‘the native’s point of view’ about medicines, the particular cultural meaning and type of social transaction that seems ‘natural’ to the people involved. As an outsider, one should attempt to ‘de-naturalize’ medicines by translating, and comparing those conceptions and arrangements to others.

For the study of pharmaceuticals, the important point is the presence of the researcher on the local scene and the effort to involve oneself enough to be able to describe how medications are transacted and interpreted there in (implicit) contrast to elsewhere. In the chapter by Burghart, we sense the researcher involving himself with one member of another community. In the one by Bledsoe and Goubaud, interactions with many members of a community are described. Both are examples of the rich potential of participant observation for the study of pharmaceuticals. Because the distribution of Western pharmaceuticals is often ‘informal’ if not illegal, living in the local community may be the only way to learn what is really going on.

Contexts have both a qualitative and quantitative character. Survey methods are necessary to illuminate patterns and frequency of pharmaceutical use and expenditures involved. A number of the research projects reported here relied, in part, on the use of questionnaires to collect information about who uses what type of medicine when. Logan’s study of pharmacists and their clients in a Mexican city shows the usefulness of quantitative methods, as do the studies by Kloos et al., Sussman and Ugalde and Homedes. In all of these studies, the local context of pharmaceutical choice is described in numbers as well as in more qualitative terms.

The context of pharmaceuticals is not only that of the local community however. National cultural contexts also provide settings for the distribution, use and understanding of medicines. In order to examine these contexts, other methods may be used – such as the examination of popular written material, as Afdhal and Welsch have done. Cultural historical contexts, which provide the general framework for a great tradition’s conception of medicines, require a study of the scholarly literature of distant times – of the sort Unschuld has undertaken.

All of these methods synthesize rather than analyse medicines in the sense
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that they place them together with relevant ideas, historical processes and social relations, rather than separating them into constituent 'natural' elements.

WESTERN PHARMACEUTICALS AND ANTHROPOLOGICAL AWARENESS

The impetus behind this book is the surge of interest in Western drugs on the part of Third World people being 'invaded' by them, policy makers attempting to control them, and researchers trying to grasp what is going on. People familiar with local communities in the Third World are aware that many kinds of Western pharmaceuticals are easily available in markets, from local vendors and even from 'traditional healers'. Drugs that are supposed to be 'prescription only' are obtainable over or under the counter. It is evident that one part of the technology of biomedicine, the medicaments, has been separated from the knowledge and practice in which it developed and is being diffused and used rather independently. There are clearly big commercial interests in this diffusion; profits are to be made from this extensive use of medicinal commodities. Governments and international organizations have discussed ways of regulating the situation; the most systematic and far-reaching attempt is the World Health Organization's Essential Drug Programme. It is against this background that anthropologists and their colleagues from other disciplines, who work in Third World societies, are concerned to make their research relevant and available to national and international policy makers. They are beginning to come forward with their local contextual perspectives on the 'pharmaceutical invasion'.

The issue is timely. But the very timeliness of the anthropological interest in pharmaceuticals in developing countries should give us cause to think. Why were we not aware of this phenomenon before? Western drugs have been present in most Third World societies rather longer than social scientists have been. And medicines in the more general sense have always been there. We believe that one important reason for this neglect of medicines can be found in the exotic bias of the anthropological enterprise. The study of foreign cultures involves an examination of how they are foreign — and a concomitant blindness to the elements which are familiar. This has meant overlooking the use of aspirin for headache while noticing the use of elephant dung for dizziness.

The exotic bias and the neglect of medicines as cultural constructions is related to the peculiar ability of culture to define what nature is. In Western culture medicinal substances are perceived as having natural properties which affect the human body in ways amenable to 'hard' scientific observation. Medicines belong to the domains of pharmacology and biomedicine, while anthropology has concerned itself with the more spiritual aspects of healing—the symbols, rituals and conceptions which are not only exotic but clearly cultural. One of the challenges of the present situation is to confront Western
notions of the naturalness of medicines and to place the study of medicines squarely within the cultural science of medical anthropology.

Just as anthropology itself grew out of the colonial encounter, so medical anthropology grew out of the spread of Western biomedicine to other cultures. The situation of medical pluralism raised the issue of cultural difference in the understanding and treatment of sickness. It brought us to consider conceptions of etiology, notions of therapy, interactions between patients and healers and the ways in which one set of medical institutions and traditions influences another. In the same way 'pharmaceutical pluralism', the presence of Western drugs in other contexts, focuses our attention on the issues of how medicines are conceived and exchanged in other cultures. It forces us to 'de-naturalize' our view of medicines — to reflect upon our own culturally determined assumptions as we try to appreciate others.

In situations of pharmaceutical pluralism, Western and indigenous medicines provide contexts for one another. People understand the one in relation to the other — whether they emphasize similarities or contrasts. Thus Sussman reports that Mauritians see Western pharmaceuticals as fast-working and potent, characteristics which make them suitable for the relief of acute disorders. Herbal medicines are perceived as slower and milder, better for chronic and recurrent conditions, and without the strong side effects associated with Western medicines.

However, the co-existence of different types of medicines is not simply a matter of division of pharmacological labor — assigning symptoms to one or another type of therapeutic substance. Processes of influence and change are under way; medicines are constantly being re-interpreted, channels of distribution are transformed, 'traditions' are re-worked. Afdhal and Welsch's description of the rise of the jamu (traditional medicine) industry in Indonesia is an instructive example of this aspect of pharmaceutical pluralism. The introduction of Western medicines created a new context for jamu medicines and presented new models for production, packaging and marketing. On the one hand, indigenous medicines were contrasted with Western pharmaceuticals and took on new meaning and value as an Indonesian tradition. On the other, they were made similar to Western medicines by being processed and packaged for greater convenience, and by being produced and marketed for mass availability. In her study of the use of traditional medication in connection with pregnancy and childbirth on the Indonesian island of Madura, Niehof provides another perspective on pharmaceutical pluralism. She elucidates the conceptions which underlie the continued utilization of indigenous medication in a pluralistic context, but notes that the packaged jamu purchased in shops may be used as an alternative to some of the 'homemade' preparations.

In situations of pharmaceutical pluralism, terms like 'traditional' and 'modern', 'indigenous' and 'Western' medicines are almost unavoidable. So are the quotation marks around these terms. There is an uncomfortable sense
that they are misleading, since the pluralistic context transforms both imported and native medicines. Thus we find 'modern' medicines being distributed by 'traditional' healers and utilized in ways never imagined by the manufacturers. Penicillin may become an ancient Ayurvedic medicine. And we see 'indigenous' medicine being manufactured on an enormous scale, advertised on television, and exported to other countries. Genuine jamu from Indonesia can be purchased in Europe. The nuances involved here may serve to remind us once more of the care needed in the use of terms like traditional and Western medicine.

In offering this collection of articles on Western pharmaceuticals in their Third World contexts, we have two objectives. The first is the relatively practical one of providing descriptions and analyses of a variety of local situations to policy makers, planners, health professionals and concerned citizens. We hope that they will be stimulated by these essays to examine other local contexts with more understanding. Our second objective is to contribute to a discussion within anthropology. We believe that there is much to learn from the ways in which Western pharmaceuticals are incorporated in other cultures. Here we have the opportunity to confront our ethnocentric notions of medicines as simply 'natural' substances with biochemical properties. We may correct the bias which has led anthropologists to study 'exotic' phenomena and the therapeutic practices of experts, while neglecting the seemingly familiar and prosaic activities of lay people. We hope that the concern with Western pharmaceuticals may serve to focus the anthropological gaze more steadily upon medicinal substances in general as cultural phenomena. An anthropology of Western pharmaceuticals may be a first step towards an anthropology of medicines, whose scope will include all powerful substances produced, exchanged, and used in order to achieve an effect upon human conditions and human projects. Then we may understand more clearly how the transaction and meaning of efficacious things fits with the rest of the therapeutic enterprise.

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