Western Minds, Foreign Bodies: The Anthropologist in Third World Health Development.

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by

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ABSTRACT

Efforts to lower the high mortality and morbidity rates of poor children in Nepal are impeded by political processes that favour elite interests. Many poor people are aware of this. The biomedical world-view locates sickness within individual bodies and gives little attention to the influence of social processes on the distribution of sickness and health care. The discussion and planning of health development in Nepal, by anthropologists and others, is guided by the assumptions and priorities of the biomedical world-view. This perpetuation of the biomedical discourse helps maintain a system that has the effect of inhibiting change conducive to improving the health status of the poor; it also delegitimizes a grassroots critique of that system. It is suggested that despite obstacles anthropologists should -- through direct dialogue with the poor -- plan and promote programs that explicitly benefit the poor and give legitimacy to their knowledge.

RESUME

Des processus politiques favorisant les intérêts d'élites entravent les efforts de baisser les taux élevés de mortalité et de morbidité parmi les enfants pauvres au Népal. Beaucoup de pauvres reconnaissent ce fait. La perspective biomédicale situe la maladie à l'intérieur de chaque corps et elle accorde ainsi peu d'attention à l'influence des processus sociaux sur la distribution de la maladie et des soins de santé. La discussion et la planification visant une amélioration de la condition de santé du peuple au Népal, par les anthropologues et autres, sont guidées par les suppositions et les priorités de la perspective biomédicale. La perpétuation du discours biomédicale aide à maintenir un système qui empêche des changements contribuant à une amélioration de la condition de santé des pauvres; elle dénigre aussi une critique de ce système par les pauvres du peuple. On suggère que, malgré les obstacles, les anthropologues devraient, à travers le dialogue direct avec les pauvres, planifier et promouvoir des programmes qui sont réalisables politiquement, qui sont avantageux aux pauvres, et qui accordent une légitimité à leur connaissance.

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Dedicated to the Memory of

John William Jones Hepburn

INTRODUCTION

A. GENERAL OUTLINE

For anthropologists working to improve the health status of the poor in the Third World, performing this function usually involves what I shall call the "medicalization of anthropology". An underlying principle of much of anthropology is that one sees other cultures mediated by the categories and ideologies[1] of one's own. When anthropology or an anthropologist becomes "medicalized", this principle becomes secondary to a premise of the biomedical world-view which holds that biomedicine is an objective, culture-free body of knowledge and practice. The anthropologist then looks at the problems of health development in terms of the biomedical discourse, locating these problems in the bodies, beliefs, and lifeways of the to-be-developed population.

In this essay I wish to argue for the usefulness, in fact the necessity, of an alternative approach in applied anthropology, one that reverses the direction of the investigation and examines the social-historical-cultural background of the initiating end of the development equation, Western culture. Specifically, I will examine biomedicine and its accompanying ideologies as a product of social, cultural, and historical processes. It will be argued that many of the obstacles to improving the health status of the poor in the Third World reside in our ideologies in connection with biomedicine, and how these translate into policies and their means of implementation. It will be shown that not recognizing this leads to inappropriate plans based on misplaced priorities. More strongly, it will be emphasized that discourses in the biomedical idiom about the causes and treatment of sickness are not, as popularly thought, ideologically or politically neutral: they embody a very specific view of the nature of disease, one that "mystifies" the relationship between political and economic conditions and patterns of morbidity.

These issues will be discussed using the case of Nepal as an example. It will be demonstrated that in addition to the proximate,

physical causes of disease, political influences are important determinants of whether the health status of the poor improves, stays the same, or worsens. These political factors in the explanation of disease etiology are not incorporated in the biomedical model of disease. Accordingly, I will argue that by supporting the pervasive biomedical discourse in Kathmandu, medicalized anthropologists (and others) aid the process whereby the critique of political factors that influence the distribution of sickness in Nepal is deferred or invalidated. In doing so medicalized anthropologists may actually be working against improving the health of the poor in Nepal.

This essay will begin, in Parts I and II, with a general discussion of how health development in the Third World has been impeded by false beliefs about the nature of biomedicine.

Integral to the popular perception of biomedicine is the belief that it is objective and not influenced by social processes. There is, however, a large discrepancy between this hypothetical model and the reality of socially embedded theory and practice. In Part I biomedicine as a form of practice and knowledge will be analysed in terms of the intellectual milieu from which it emerged. This discussion will be based on the works of historians of medicine and science, the post-empiricist philosophy of science, and the sociology of Weber and Habermas. Biomedicine will be shown to be socially constructed principally in terms of its subject matter, its epistemological basis, and its accepted mode of practice. It will also be shown that biomedicine, like other systems of healing, is formed in, reflects, and helps to create and re-create a social and cultural world.

In Part 2, the popular hypothetical model of biomedicine which holds it to be an objective system of thought and practice will be contrasted with the realities of medical practice both in the West and the Third World. Three assumptions of the hypothetical model will be analyzed: 1) the notion of the "medical system" both as a body of knowledge and an institutional framework, 2) the implicit model of the

ideal rational patient, and 3) the belief in the effectiveness of biomedical techniques. The last assumption will be emphasized. Through an overview of the literature on the political economy of health (to be presented later in this introduction), it will be argued that the effectiveness of biomedicine does not rest merely in the application of technology. Both recently and in the past, the effective use of biomedicine has required a favourable physical, economic, and political environment. Health planners' failure to acknowledge the difference between the three assumptions of the hypothetical model and the reality of biomedicine will be shown to have resulted in minimal benefits for the poor despite expensive, well-intentioned plans.

After this extended but general discussion in Parts I and II, the case of Nepal will be examined at length in Parts III and IV. An overview of the physical, cultural, political, and administrative context of development in Nepal will be presented in Part III. Building on this background, in Part IV one specific concern of health development efforts, the lowering of infant and child mortality and morbidity in Nepal, will be discussed. It will be argued that: 1) the distribution of facilities that lessen the incidence of children's morbidity (e.g. clean drinking water) and 2) the factors that promote a child's survival through a sickness episode (e.g. nutrition level) are greatly influenced by politics and economics. The improvement of all these conditions, and the consequent reduction of the morbidity and mortality rates of poor children, depends on a positive political will. It will be shown, however, that such political will as exists in Nepal is rendered ineffectual by administrative constraints and the force of traditional patterns of obligation and expectation. Returning to the themes of Part II, it will be argued that although the beliefs of Nepalis surrounding the sickness domain, specifically what constitutes appropriate treatment, may be important in determining the outcome of any particular sickness episode, it is the physical and political

environment of Nepal that determines overall patterns of children's morbidity and mortality.

Accordingly, I suggest that of the three obstacles to reducing the high rate of childhood mortality that derive from the acceptance of the assumptions of the hypothetical model of biomedicine, the largest obstacle is the denial of the dependence of biomedicine's effectiveness on the physical and political context in which it is used.

In Part V I will support the claim made earlier that many anthropologists working in health development in Nepal have become "medicalized". In light of my discussion concerning the political context of health development in Nepal I will argue that by addressing the problems of health development in the idiom of biomedicine, the medicalized anthropologist helps maintain, legitimate, and deter critique of the existing status quo that inhibits the implementation of programs that would improve the health status of the poor. It will also be shown, however, that this status quo mitigates against the anthropologist adopting alternative approaches.

In concluding, I will suggest what anthropologists can do in such circumstances to improve the health of the poor in Nepal.

B. THEORETICAL BACKGROUND: THE POLITICAL ECONOMIES OF HEALTH

It could be objected that in critiquing the biomedical model on the basis of a political economic argument I am merely substituting one Western belief system for another: that both viewpoints are equally inappropriate conceptual models for discussing sickness in Nepal as neither is a Nepali system of thought. On the basis of my fieldwork in Nepal I hold that this is not so -- many people in Nepal, even rural Nepal, are keenly aware of and interested in the influence of local and nationwide political and economic forces on their well-being and "health" (in our terms). I am not certain whether the Nepalis' awareness and interpretation of their situation is an ethno-political-economic "theory", a result of contact with Western ideas, or a blend of these. Whatever the case, I found an awareness I had not expected given the existing literature. The potential

objection noted above is based on a false dichotomy that assumes that, unlike the anthropologist, his or her subjects do not have an understanding of the political and economic forces that affect their lives.

My theoretical discussion here will be in two parts. First, as background to my argument in Part IV, I will present an overview of the literature covered by the label "the political-economy of health". Second, as much of my critique of medicalized anthropology (in Part V) is based on the assertion that many Nepalis do have an understanding of the effect of their political and economic situation, on their health and general well-being, I shall give an account of the fieldwork situation that directed my research and supports this assertion.

Writers in the political economy of health tradition claim that phenomena such as "disease" and "effectiveness of treatment" cannot be explained or understood without reference to political or economic forces (Frankenberg 1980; Young 1978). These issues are dealt with in two interrelated ways. First, the "political economy of illness" views patterns of morbidity and mortality as products of social forces; second, the "political economy of health services" looks for correlations between classes and access to medical treatment. It is argued that upper classes have both choice of environment (and can therefore choose a less hazardous one to work and live in), and the means to procure medical treatment should they need it. The poor do not have these options and historically and presently live and work in more dangerous environments and do not have access to health care (Baer 1982: 1, 2, 14).

The earliest widely recognized work in this tradition was F. Engels's The Condition of the Working Class in England. Engels relates the high morbidity and mortality rates among the working class during the industrial revolution to features of the workplace and living conditions: he argued that these were caused by overcrowding, poor ventilation, chronic malnutrition, insufficient housing, the

excessive drinking of alcohol, and the unequal distribution of medical facilities. He attributes these conditions to the social relations of British capitalism.

Commenting, too, on the conditions of the growth of capitalism in Europe, Rudolf Virchow, a German pathologist, attributed to economic deprivation and political powerlessness among the masses, their high rates of disease and premature death. Politics was, he claimed, "nothing but medicine on a grand scale", consequently the way to stop epidemics was to change the circumstances in which they occur (Waitzkin 1981:84-85).

More recently McKeown (1971) argues that in the control of infectious diseases, the contribution of medical technology compared to extra-medical factors such as large scale, political, social, and economic factors, is currently and historically small. McKeown (1971) argues that a more hygienic environment, the limitation of family size, and increased food supply, were far more important than specific preventative and therapeutic measures in contributing to health improvements in England and in Wales. From mortality statistics, McKeown argues that decreases in mortality from communicable diseases were correlated with improved nutrition and the introduction of hygienic measures, and were steadily decreasing when causal organisms were identified. With a few possible exceptions, such as smallpox, McKeown concludes that specific medical measures have not greatly influenced the trend of mortality from communicable diseases.

Summarizing this position and arguing that the same patterns persist in modern Western society, Waitzkin (1981:98) states that disease is not:

> the straightforward outcome of an infectious agent or pathophysiologic disturbance. Instead, a variety of problems -- including malnutrition, economic insecurity, occupational risks, bad housing, and lack of political power -- create an underlying predisposition to disease and death.

Modern studies in the political economy of health have examined the organizational structure of biomedicine in the West. Kelman's (1971) historical study of American medicine describes the medical

enterprise as one that is also a state and corporate enterprise, incorporating as it does not only hospital personnel, hospitals, universities, and research institutions, but also pharmaceutical, insurance and medical equipment companies (Baer 1982:13). Navarro (1976) examines the ownership, control, and operation of medical institutions, and demonstrates that the decision-making bodies of these institutions are monopolized by the economically favoured classes. In governments, those who have the power to legislate on matters of health are from this same group.

All the studies so far described concern primarily the political economy of health in the Western world. Another body of work takes the same approach to questions about health in the Third World. In this there are two main approaches. One of these discusses health within the political and economic situation of the country, town, or locale in question. One work of this genre is Djurfeldt and Lindberg's (1975) study of a Tamil village in India, Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Town. This work deals with both the political economy of illness and the political economy of health-care and concludes that of those who actually had access to biomedical facilities, well over seventy percent had conditions directly attributable to their poverty. Similarly, the worldwide study by Puffer and Serrano (1973) of causes of death in children under five years of age concludes that nutritional deficiencies and other conditions relating directly to conditions of poverty were the primary cause of most of these deaths. These works support Heggenhougen's (1984) conclusion that an individual's health status is determined more by his or her socio-economic situation than by curative health services.

The second approach to the political economy of health in the Third World has its major recent theoretical roots in Wallerstein's "world-systems theory" (Wallerstein 1979). The basic premise of Wallerstein's theory is that conditions in the Third World, or any other part of the world, can only understood in the context of the history of a capitalist world economy since its sixteenth century

beginning: they must be viewed in terms of world-historical events and processes. Wallerstein describes and discusses relationships between parts of the capitalist world system in terms of central, semiperipheral, and peripheral areas of world-political and economic development. It is argued that the development of the center is to a large degree at the expense of the periphery: this reasoning can be applied to relationships between countries, between blocks of countries (the Western and the Third World), and between groups within a single country).

From this general perspective, Navarro (1976) argues that poor levels of health in the Third World are in part a consequence of the disruption of indigenous subsistence economies by the colonial powers' removal of resources. Elling (1981) presents the case that the health of the people of the Third World has suffered as they have become the commercial dumping ground for unsafe drugs and potentially dangerous merchandise (for example, cancer-inducing flame resistant clothing). The results of the promotion of bottle feeding and milk formula is a well known example of the effects of incorporation of Third World countries into a wider market economy.

Within Third World countries there is also a center and periphery. The distribution of morbidity and access to health care according to Navarro (1976) are shaped by the same political and economic forces that shape relationships between the developed and underdeveloped world. The health resources of an entire nation may be invested primarily in facilities that benefit only a few: a large urban hospital with facilities to treat conditions other than the "diseases of poverty" may be built at the expense of the provision of basic services or a water supply at the periphery.

From the political economy of health position, both the health status of a population and the effectiveness of biomedical techniques in improving this are greatly influenced by political and economic factors. Given that within a country there are a range of physical environments to live in, with differing disease promoting potentials, any individual's particular living situation is in large part

determined by their economic position; their ability to seek and pay for treatment of disease arising from living in that environment is similarly determined by their economic power. Any individual's economic situation cannot be explained entirely by their own effort; economic and political forces stretching from the centre to the periphery limit and often preclude economic options. The corollary of economic power is political power and it is this which ultimately determines the conditions for the possibilities of health and sickness. It is political power at all levels that ultimately controls the possibilities for change that would improve the health status of the poor, and improve the likelihood that the techniques of biomedicine would be effective.

I lived in Nepal from October 1986 to April 1987. Three months of full time study of the Nepali language preceded the research period, and further lessons were taken during the first two months in Nepal. During ten weeks of residence in Kathmandu I met many people working in development; some were Nepalis, some expatriates, and some anthropologists. With these I discussed their perceptions of and experience in development. For one month I met daily with an anthropologist working for a major aid organization to discuss the everyday workings of such an institution, the problems of policy formation and implementation, and the problems of applying an anthropological perspective to the process of development given the realities of the present situation in Nepal.

Three months were spent residing in a large village outside the Kathmandu Valley. I visited many homes and taught English to the village children. Under the guidance of two expatriate and two Nepalese doctors I spent five days on the wards and in the clinic of a hospital in the vicinity, observing practices and conditions. I lived in the home of a high caste local family.

I had originally planned a "medicalized" anthropology research project: a study of Nepali beliefs about the etiology and treatment of childrens' diarrhea and dehydration. Guided by the biomedical view

of sickness and the aims of applied anthropology, I planned to identify obstacles to the introduction of biomedicine in the beliefs and lifeways of the village population. Like others before me (Devoka 1984; Stone 1976; Blustein 1976; Hofer and Shrestha 1973; Allen 1978), I found that people linked a large range of their experience to matters of health including belief in spirits, gods, ghosts, and hot and cold forces within the body. However, I also found what most others before me had not reported: people were aware that political and economic factors affected their health and well-being.

The timing of my period of research may have directed my perceptions towards the explicitly political. The political situation of the village will be presented in Part IV, but here it will suffice to say that two political events were the subject of much conversation during my stay. One was an upcoming election; the other was an administrative change that had occurred within the last several years. What people talked about with regard to these events was their potential effect on development in the village. What some people stood to gain from the likely outcome of these events was a reasonably clean water supply and perhaps increased wealth. What others stood to lose was some of their meagre income and some labour time. These potential gains and losses were determined by the effects of traditional patterns of obligation and expectation on political processes. People were very much aware of this. It seemed to me that they were also aware that these gains or losses would either positively or negatively affect their health. The people I refer to here are not an educated elite: I found a political awareness among farmers, small businessmen, and even the older children. Men talked more frequently about politics in my presence than did women, but some women were actively campaigning at election time.

Passing references in non-medical ethnographic accounts show that in other parts of Nepal, people cognitively associate landlessness (or landedness), low (or high) income, and political processes with physical health. Durkin-Longley reports an association between sickness, poverty, and death in the belief system of Kathmandu

Newars. She also found that some healers "treated" misfortunes such as business failure (Durkin-Longley 1982). Miller (1979), in his account of shamans in Nepal, found that for the shaman's clients, health was more than physical soundness; it was one aspect of a general good order. Pignede (1966) says that for the Gurung, the idea of "health" is strongly associated with economic well-being. Burghart (1984) reports that in the past, geographical areas in Nepal were believed to be associated with particular kinds of sickness and that moving predisposed one to new kinds of affliction. This is compatible with Daniel's (1984) finding that for people of another Hindu population in Tamil Nadu health is believed to depend to some extent on living on land compatible with one's inherited substance.

Based on my own field experience and the above ethnographic fragments, I hold that for some people in Nepal there is an awareness of a relationship existing between sickness, politics, and economics. As noted before, I do not know whether this awareness is derived from an indigenous Nepali political economic "theory", from imported ideas, or from a combination of these. Nevertheless, I hold that my analysis of sickness in Nepal in terms of politics, and to a lesser degree economics, is not inappropriate to the subject matter.

C. DEFINITIONS

Throughout this essay, for simplicity of expression, I use some general terms that imply homogeneity in very diverse phenomena. These are misleading. Most will be clarified later in the body of the text, but preliminary working definitions will be given now.

"Third World" is used to refer to countries whose governments receive foreign aid. This is perhaps a circular definition, as the concept of "Third World" did not exist as such before the concept of foreign aid. The Third World as a political entity was created by foreign aid and so this definition seems apt.

The term unfortunately implies homogeneity in countries that are extremely diverse in culture, political ambitions, resource base, and state of development: to talk about the "problems of development

in the Third World" is therefore problematic. The discussion of the case of Nepal in the second half of this essay is intended to give specific substances to a very general argument, thereby somewhat overcoming the problem.

When I use phrases such as "improving the health of people in the Third World", I gloss not only the diversity of Third World countries, but also the diversity of people within each of these. In each country there are very rich, rich, poor, and destitute people; there are men and women and children; there are the educated and the illiterate. The obstacles to improved health are greater for some than for others and the problems with respect to each group will be different.

A distinction that I am most concerned with in this essay is that between the rich and the poor of the Third World. I repeatedly refer to groups of people using these terms. There is obviously no clear-cut line between these groups, but general and important distinctions do exist. The problems involved in improving the health of the rich are very different from the problems faced in improving the health of the poor. In this essay I am concerned with the health problems of the poorest people in Nepal. The absolute definition of "rich" and "poor" as used here cannot be provided, but relative differences will be referred to by these terms.

I have presented a rather stereotyped image of a "medicalized anthropologist". In Nepal there are, of course, many kinds of anthropologists with differing roles, orientations, and motivations working in development. The stereotypical image is, however, representative of a pervasive overriding attitude amongst not only anthropologists, but also others working in development.

D. SOURCES

The validity of some of the published data I use is not certain. Much of the data is based on the results of surveys conducted in Nepal. The research of Campbell et al. (1979) show that the perfunctory nature of the interviews in which much data is

collected and the lack of any verification procedures results in errors up to the magnitude of 400 percent in some surveys in Nepal. Due to the lack of written records in much of the country and the physical difficulty of access to many areas, statistics of morbidity, death, and birth rates can at best be estimates.

Some of my argument and data in Part IV is derived from the reasoning and research of the members of the Overseas Development Group at the University of East Anglia, England, principally, Blaikie, Cameron, Seddon, Fournier, and Feldman. Their numerous combined and individual longitudinal projects and reports on the political and economic aspects of development in Nepal are used extensively as they to a large degree seem to have controlled for some of the problems noted above.

Endnote

1. Ideology is here used in a non-pejorative sense to mean the manner or content of thinking characteristic of a group or culture.

PART I

THE SOCIAL ORIGINS OF BIOMEDICINE

Biomedicine as a system must be understood in its cultural context. Medical systems as bodies of knowledge and accompanying practices are symbolic systems: they have referents to other aspects of culture beyond their ostensible boundaries. Although diseases have biological correlates, how they are recognized (if at all), expressed as illness, classified, understood, valued, and treated varies greatly from culture to culture. This is facilitated by the medical symbolic system which is embedded in and derives its signification from a wider cultural context (Comaroff 1983; Kleinman 1973). Biomedicine, like all other medical systems, reflects the dominant characteristics of the culture whose product it is.

Although Western culture is not an ideologically homogenous entity, it contains a dominant world-view, the product of the Enlightenment, in which biomedicine has its epistemological roots. Prior to the Enlightenment, Renaissance Naturalism, or vitalism, had prevailed as a dominant world-view. Renaissance Naturalism had emphasized the unity of spirit and matter: natural phenomena were manifestations and reflections of God's essence. Nature was believed to be best understood through reflection on God's purposes rather than through experimentation and investigation (Osherson and AmaraSingham 1981:222). During the Enlightenment, two streams of thought converged to produce the groundwork of a new dominant ideology. The first was the widespread acceptance of the distinction between superstition and reason, including the belief that the former could be transcended by the latter. That is, the natural world was to be understood as an amoral realm subject to laws, rather than as the domain of capricious gods and mysterious forces. The second ideological development was the emergence of positivism. According to this view, reason, based on "facts" attained through observation or measurement, was to be the foundation of knowledge. Positivist science thus became the authority, rather than an alternative form of reason and imagination

(Foucault 1966). Eighteenth century medicine reflected and contributed to this view of nature. Studies in anatomy demonstrated the usefulness of empirical investigation and explanation in terms of the principles of mechanics developed by Kepler and Galileo in the previous century (Osherson and AmaraSingham 1981:223). Viewed according to the new scheme, people, though assuredly rational, were also of nature; therefore they could be understood and controlled through science.

Weber and, more recently, Habermas and Marcuse argue that this world-view dominates Western society. The result, according to Weber (1958) has been the extension of means-end rationality to the conduct of all aspects of life, and, for Habermas (1970) and Marcuse (1964), the rise of scientism or technocratic consciousness. Scientism, reducing knowledge to that definable in its own terms, precludes discussion of values or social issues in any absolute sense, since these cannot count as knowledge. In its own terms this orientation also precludes the questioning of its own authoritative pre-eminence. This was the intellectual milieu in which modern biomedicine emerged.

Integral to biomedicine is a conception of the body as an entity separate from mind. From the seventeenth century onwards, Descartes' dualistic image of humans has predominated in Western culture. Mind and body are separate realms. In addition, the body itself is to be seen in parts, not as a whole. The distinction between mind and body became reified and remains so (Scheper-Hughes and Lock 1987).

Cartesian dualism combined with the emerging mechanistic orientation to lay the basis for biomedicine. The resulting "ontological" model of disease views the individual mechanistic body as a host to disease, which is perceived in turn as a specific entity independent of the patient's social circumstances and personal characteristics. Sickness in this model is an entirely biological phenomenon situated within an individual body as a completely natural process.

Reflecting this view of disease, until recently medical perceptions and treatment have largely been modelled on the acute bacterial model which focuses on the "final common pathway" that exists within the human body (Foster 1978). Some disciplines such as family medicine and psychiatry have always explicitly taken into account social and psychological, as well as physical, variables in disease etiology. In general, multicausal awareness has usually been replaced, in the exigencies of practice, by a model that emphasizes a single etiological cause of disease. Social factors have been assumed to be self-evidently distinct from medicine. When considered at all, it is only immediate factors such as "lifestyle", that is, factors for which the individual can be held responsible, that have generally been taken into account.

Treatment is generally viewed as technical intervention in an essentially mechanical problem. This technical orientation is learnt in medical education which begins with the study of the structure and function of the body, and then proceeds to the examination of selected sick people (McKeown 1971). Doctors are taught to view patients as a "case", the "... mere physical situs of warring bodies and antibodies" (Worsley 1982, p. 321). The clinician's job is usually taught as an objective process through which the patient's complaint is "decoded": a process of converting observed evidence into named disease entities, and to implement technical treatment based exclusively on causal biological processes (Feinstein 1973). This process, like all of medicine and science, is believed to be objective, its conclusions essentially irrefutable, of the same nature as those of a science experiment that can be repeated again with the same results. What is usually not included in the clinician's training is equally shaped by the dominant medical model: little mention is made of the patient's experience, or the history of either practice or medical institutions.

The practice of biomedicine today is still influenced by this mechanical model of disease; however, due to criticisms of this orientation and with biomedicine's increasing involvement in chronic care, treatment of the elderly and psychosomatic sicknesses, the

limitations of this model are being increasingly recognized. Some medical schools now explicitly include training in consideration of social and cultural aspects of sickness in biomedical physician training.

The assumptions of the biomedical model of disease are not universal. Other medical systems, also bearing the imprints of the cultures in which they are embedded, contrast with biomedicine in fundamental ways. The Western mind-body dualism, for example, can be compared with the Chinese yin-yang concept, in which elements of opposing phenomena, rather than being separate and distinct (like the mind and body), each bear characteristics of the opposite. The body in this system is composed of yin and yang, as is the rest of the universe. This is very different from the Western model of the body which emphasizes dichotomies such as those between the body and mind, individual and society (Scheper-Hughes and Lock 1987:12).

A major difference between the biomedical and other models of sickness is the emphasis placed on the body during diagnosis and treatment. As discussed earlier, the Western model locates disease within the individual. This contrasts with an orientation — a more common one throughout the world and through history — in which attention is centered on the social and symbolic aspects of sickness. Young (1976(b)) calls the biomedical model an extreme version of an internalizing discourse; its opposite would be an externalizing discourse such as that described by Lewis (1975) in which the sick body may be almost completely ignored in the process of diagnosis and treatment. An externalizing medical discourse locates the cause, meaning, and treatment of sickness in the social realm. For the individual it answers the questions "Why me?" and "Why now?" For the social group, the externalizing discourse allows explanation of why this particular person became sick in terms of wider social relations. An externalizing discourse relates sickness to the social order and also potentially allows for the questioning of that social order. The socially agreed upon treatment may, however, require both individual and social adjustment.

Externalizing medical discourses have been well documented by anthropologists. Evans-Pritchard (1937) reports that the Azande generally view serious sickness as the manifestation of a social problem. Belief in witchcraft and sorcery are fundamental to the Azande world-view. If a person becomes sick, this physical condition is usually believed to be the result of witchcraft performed by someone who is in an important social relationship to the sufferer and yet bears them ill-will. The cause of the sickness is seen to be physical, moral, and social. Through the process of divination, therapy must deal with all three levels of causation. Among the Tshidi-Barolong of South Africa Comaroff observed that for an individual sickness led to heightened self-consciousness and reflection; for the social group it led to a "detailed indigenous social analysis" through a process of divination in which the social cause and meaning of the sickness was sought (Comaroff 1982:52). In the New Guinea Highlands "an illness has meaning for a community, not just for an individual" and treatment is directed to solving "social and political competition, intra-familiar disputes, quarrels, conflicts, and crimes" (Glick 1967:52-53).

In the event of a disruptive occurence such as serious sickness, an externalizing medical discourse allows, or even demands, a discussion of the social context of sickness in such a way that context may be criticized or even changed. A dialectic ensues "between personal experience and cultural order" which is "held up for scrutiny in the healing processes" and this "gives rise to the reproduction of established symbolic forms and to their progressive transformation" (Comaroff 1982:54). During a sickness episode personal experience is interpreted in terms of the prevailing cultural order and vice versa. An externalizing medical discourse then, allows for both the critique of social relations and the critique of a sick individual's social functioning.

Biomedicine's internalizing discourse invalidates both explicit and implicit critique of social relations. Taussig (1980) argues that biomedical discourse, by explaining and describing sickness in a

physical idiom, objectifies social relations: the discourse reifies the signs, experiences, and outcomes of a sickness episode as desocialized facts of nature. This inhibits the critique of problematic social relations (such as those which govern the distribution of disease) because their manifestation (in sickness) is a fact of nature, part of an immutable physical order. Says Taussig "in denying the human relations embodied in signs, symptoms, and therapy, we mystify those relations and also reproduce a political ideology in the guise of a science of physical things" (Taussig 1980:3).

An internalizing discourse such as that of biomedicine serves the interests of those who benefit from any social situation in which economic and political factors influence the distribution of physical sickness. Biomedicine as practiced and discussed reinforces existing social relationships in two ways. First, it facilitates individual adaptation to the prevailing system (Waitzkin); second, by defining sickness in asocial terms it thereby renders critiques of the social relations of sickness invalid.

A large barrier to the widespread consideration of this critical view of the social context of biomedicine is the persistent belief in the objectivity of science and medicine. Obvious differences in how sickness is dealt with, as described above, permit us participants in the biomedical world to see non-Western beliefs as socially based or "superstitious" and certainly not as objective. Yet we hesitate to draw the same conclusions about our own beliefs. This is due in large part to the latent implicit meaning of biomedicine: that is, that it is free from the influence of symbol and value (Comaroff 1982) and is therefore "objective". This self-definition of biomedicine ironically precludes consideration of those of its aspects that would allow an objective evaluation of its scope and weaknesses. As products of positivist influence, science and medicine by their own conditions of objectivity are freed from scrutiny and criticism from other domains of knowledge.

Over the past few decades, however, it has been argued that the privileged epistemological position of science rests on social consent rather than intrinsic validity. Kuhn (1962), a major proponent of the post-empiricist philosophy of science, argues that contrary to the logical positivists' view, science is not a structure of objective knowledge, grounded in the certainty of sensory input and expressed in theory independent observational language. Science does not grow by the induction and verification of theories. Rather, says Kuhn, what counts as knowledge is institutionally defined, and major changes in orientation are effected by psychological and sociological factors (within science institutions) rather than only by rigorous experimentation. Viewed this way, science is not primarily objectively grounded and the form of any current paradigm is taken from wider social values, institutions, and beliefs (see also, Foucault 1966; Woolgar 1976; Barnes 1977).

If medicine claims its objectivity and freedom from social influence by its association with science, it is calling up a weak ally. Parallel to Kuhn's description of science, what counts as the objects of medicine, what its theories include and exclude, and how it is practiced, are inextricably integrated with wider values, interests, and world-views.

The biomedical orientation reflects, is created by, and helps re-create a larger world-view. Despite explicit claims to be objective and free from social influence, the reality of biomedicine is actually a complex web of socially embedded theory and practice.

PART II

WESTERN MINDS, FOREIGN BODIES

In Part I, I presented an historical account of how, as a result of social influences, a hypothetical model of biomedicine emerged which holds it to be an objective system of thought and practice. I will now contrast this hypothetical model with the realities of "medical" practice in both the West and the Third world and discuss the implications for health planning of not recognizing the differences that exist. Three assumptions of the hypothetical model will be analyzed: 1) the notion of the "medical system" both as a body of knowledge and an institutional framework, 2) the implicit model of the ideal-rational patient, and 3) the belief in the effectiveness of biomedical techniques. The later assumption will be emphasized. It will be shown that health planners' failure to acknowledge the difference between the hypothetical model and the reality of biomedicine has resulted in minimal benefit for the poor, despite expensive, well-intentioned plans.

A. SYSTEMS OF THOUGHT AND SYSTEMS OF PRACTICE

Health care projects in the developing world have frequently been based on false beliefs about biomedicine both as a system of knowledge and as a system of interrelated institutionalized roles, relationships, and organizations. Yet, by even conceiving that these systems exist, Western social scientists and health planners could well be reifying an artifact of our own social organization and thought. Since our particular institutional forms of legal, medical, political, and religious systems (so far as these actually exist as discrete entities) cannot be assumed to have parallels in other cultures, we cannot assume the existence of a "medical system" with a distinct domain of institutions and meanings (Comaroff 1983). In contrast to biomedicine's predominantly technical, instrumental theoretical orientation, the healing enterprise in other cultures is often on the theoretical level explicitly integrated into an

all-pervasive socio-cultural system. Although the physical aspects of sicknesses may be recognized, these are seen as just one part of a wider condition needing treatment. Lewis (1975) reports that the Gnau of New Guinea have no separate domain of knowledge and practice concerned with the understanding and treatment of physical sickness: sickness in general provokes an examination of social relationships either in lieu of or in conjunction with treatment of the physical state of the patient. Worsley (1982) observes that in Putzcuaro sickness is subsumed under the general category he translates as "misfortune". For the Azande of Africa the perception of sickness is bound up with ideas about witchcraft and social misconduct, divination, and propitiation (Evans-Pritchard 1937). From these examples and those given above in the discussion of externalizing discourses, it can be seen that many diverse things are associated with healing in diverse cultures: accordingly, the existence of a discrete medical system (as biomedicine is generally believed to be) with a corresponding narrow sphere of influence cannot be assumed.

It is not clear what constitutes the biomedical system of medical knowledge. Although there exists an orthodox body of current medical knowledge presented in the accredited medical schools, it is doubtful that the lay population or the average patient shares this system to any significant degree (Eisenberg 1977). For the layperson theoretical "medical" knowledge is derived from numerous sources: biomedicine, folk beliefs from a variety of traditions (see, for example, Helman 1978 and Snow et al 1978), heterodox medicine (such as homeopathy), and reflected upon personal experience, all exert a strong influence. It is also doubtful that most physicians practice with the current orthodox system in mind (Lock 1982). Upon graduating from medical school, most students have not mastered this body of knowledge. Three years later, due to specialization and the constant production of new medical knowledge, they are already out of touch with the most recent developments in specialties other than their own.

In South Kanara, India, Nichter (1980) has observed a similar discrepancy between the formal Ayurvedic medical system and

laypersons' comprehension of Ayurveda. The former is ideally expressed and practiced in terms of Brahmanic ideology, whereas the latter includes the names of a few illnesses and medicines, merged with ideas and practices from other (largely folk) traditions. In general, then, the existence of an orthodox medical system, whether in the biomedical world or elsewhere, is no indication of the medical knowledge held by either laypersons or medical professionals.

At the social level we can clearly delineate a biomedical system. Like other Western institutions (political, legal, etc.) biomedicine consists of hierarchical, bureaucratic organizations. A variety of practitioners including orderlies, nurses, pharmacists, doctors, administrators, and actual patients, all have clearly defined and regulated positions. Above all, it is organized with a separate function which is to treat individual patients in a systematic fashion through accepted procedure.

The existence of this institution is of course no myth: however, some points must be made here about the way in which it functions. First, the bureaucracies and hierarchies of hospitals and government departments are not the efficient machines Weber had in mind (Weber 1958) and often actually impede the provision of health care. Second, much of the practice of medicine is dictated by cultural expectations and beliefs, rather than the requirements of the technical practice of medicine. Third, despite the existence of an orthodox medical system, we are pluralistic in our treatment of sickness. Assuming an individual controls their own therapy (although in fact family and friends may), from the time the potential sickness has been recognized the patient will follow a treatment path that often includes therapy outside the biomedical world. Magazines, friends, the pharmacist, family, and alternative healers are all widely used as sources of advice and treatment. Home remedies, "common sense", and alternative medicine, may all be used with or without the concurrent use of the orthodox system (Riley 1980; Kronenfeld 1982). While we in the West may be pluralistic in our approach to the management of sickness, in contrast to most of the

world, our numerous consultations are framed within an internalizing discourse.

Treatment of sickness in the developing world takes place within a system markedly different from the institutionalized biomedical system outlined above. The pattern of healer consultation is usually more explicitly pluralistic, with many types of healer considered to be legitimate. As discussed earlier, externalizing discourses of sickness with referents outside the purely physical realm are common in the developing world. The prevalent medical pluralism can be seen as a means of dealing with all aspects of sickness. During a sickness episode a patient, either of her own volition or under the direction of a "therapy managing group" (Janzen 1978), will often consult all available systems of therapy for a single affliction. Biomedicine, if available, is just one stopping place in the round of treatment; it may, for example, pragmatically be seen as useful for treating symptoms (Gould 1965; Tarantola 1977) while the shaman treats the perceived social or spiritual cause of the sickness (Gonzalez 1966). Medical pluralism is a world-wide phenomenon documented, for example, in Tanzania (Feirman 1981), India (Colson 1971), Ecuador (Pederson and Coloma 1983), and Zaire (Janzen 1978). There is no pathway along which patients are channeled. The varieties of healers are not generally organized or controlled by official bodies. Even in a literate tradition like Ayurveda, at the village level the forms of treatment and the qualifications of practitioners are highly variable.

In contrast to the dyadic private interaction between patient and healer in Western medical practice, a traditional healer in the Third World often deals publicly with an entire "therapy managing group" as found by Janzen in Zaire (1978) and Feirman in Tanzania (1981). Illustrating the treatment consequences of an externalizing discourse, sometimes the patient is even ignored in the proceeding as Lewis observed in New Guinea (Lewis 1975). The traditional healer's authority might be derived from the religious world and the approach

to the patient is expected to be clairvoyant, rather than inquiring (Marriot 1955(a)).

In Western society the biomedical practitioner is preferably unrelated to the patient, and the treatment is accompanied by economic transactions in some ways like any other services offered and purchased in the market company. In contrast, non-Western healers are often, but not always, integrated members of the community in which they heal. Sometimes they have other occupations: in Tibetan society, for example, healers are often priests (Clifford 1984), in India they are frequently farmers (Marriot 1955(a)). Treatment often takes place within a web of interpersonal obligations and trust in which a series of mutual obligations are built up over time (Marriot 1955(a)); Gould 1965).

In short, biomedicine in the West is comprised of what I shall call a technical core. Treatment in terms of this technical core is implemented through culturally defined relationships and organizations that assume for their functioning that the layperson shares the medical practitioner's background knowledge and orientation sufficiently to "follow doctor's orders" without question or default. When health planners in the developing world have sought to promote use of the technical core of biomedicine, the cultural accoutrements of biomedical practice have been falsely assumed to be essentially related to the technical core and must therefore necessarily accompany it. This has led to the exportation of unnecessary aspects of biomedicine that have actually impeded its reception and have delayed consideration of how biomedical technology can be presented in a more socially acceptable manner.

A considerable body of literature indicates that there is a general acceptance of this argument. Gould (1965), for example, describes the problems that arose from the construction of Western style clinics and hospitals in India. He found that, although people sometimes wanted biomedicine, their previous experience with the institutional structures in which it was presented to them was sufficiently negative that further visits were avoided. On the

interpersonal level, problems have also arisen from incompatible role expectations for healers: Marriot (1955) contrasts villagers' perceptions of traditional healers as active and trusted members of a lineage or community, with (sometimes) religious authority, with perceptions of doctors as distrusted outsiders of low status, with dubious motivation and credibility (see also Boersch 1974; Gould 1965).

Though frequently traditional healers and local people are now recruited as purveyors of biomedicine, even elaborately planned and expensive programs continue to be based on a very limited consideration of social role expectations. Nepal's auxiliary nurse-widwife program illustrates this problem well (Justice 1981). The program trains young Hindu women from urban areas to work in villages, their primary duties being assistance in childbirth and the education of villagers in hygiene and contraception. The program has had very limited success, and most of the women quickly return to Kathmandu. There are two major reasons for this failure. First, the role of birth assistant, based on Western ideas about the objective nature of medical practice, is incongruent with local expectations of what should characterize a birth attendant. Traditionally, a young, inexperienced, childless woman does not even witness a birth, let alone advise or try to supplant the authority of older women. The role of the nurse-midwife thus requires behaviour inappropriate for young unmarried Hindu women and so it is readily abandoned. Second, living alone in rural communities leaves these women sexually vulnerable and diminishes their chances of a good marriage.

With regard to biomedicine as a system of knowledge, it seems that a belief that patients share the physician's viewpoint has been carried into the Third World. It has been shown in the West that inadequate communication between physicians and patients who do not share a common background and mutual expectations directly contributes to low rates of patient compliance (Zola 1981; Stimson 1974). Such problems are greatly magnified when Western trained physicians practice in the Third World with patients who don't understand biomedicine and may operate with a plethora of other theoretical

systems and expectations. Non-biomedical vs. biomedical interpretations and classifications of illness have proved to be a major cause of miscommunication in Nepal (Heller 1977), Tunisia (Creyghton 1977), India (Djurfeldt and Lindberg 1975), Thailand (Smith 1982), and America (Quesada 1976). Sometimes differences in assumptive worlds are so great as to preclude the patient's even formulating questions in the biomedical idiom (Boersch 1974).

To summarize this discussion of medical systems so far, people do not seek health care with an orthodox system as their guide, and knowledge of underlying theoretical systems cannot be assumed in interaction and treatment. The biomedical social system is a cultural product and the medical systems of other cultures do not necessarily parallel the Western model either in organizational form or in the range of experience they deal with. That these factors are frequently neglected by health planners is due in large part to an implicit cultural belief that biomedicine is an objective technical process. Our beliefs have limited the success of health projects in the Third World as they have led planners to introduce biomedicine in a form and style inappropriate to other social settings.

B. THE RATIONALITIES OF SICKNESS BEHAVIOUR

I shall now turn to a consideration of the model of the ideal-rational actor, whom I shall call "health man". Discussion of the rationality of behaviour during the treatment of illness assumes such an actor and the biomedical system is built on this assumption. Along with his counterparts "political man" who operates to maximize his political influence, and "economic man" who seeks to gain in the marketplace, "health man" is similarly single-minded: he is motivated in the pursuit of health, has a clear idea of what constitutes health, and promptly consults orthodox practitioners and "follows doctor's orders" should he fall below this standard. Health man is rational in Weber's means-end technical sense.

The Health man model does not closely reflect actual behaviour, and incorporating this image into any health planning is problematic.

I shall discuss the rationality of health man first by considering whether or not such behaviour is likely, given the nature of action in general, and secondly by indicating that the Weberian concept of rationality, though prevalent in our thinking, is culture-bound and excludes consideration of non-technical action as rational. It will be seen that, to the extent that health seekers in the Third World or wherever they be found, pursue other rational interests beyond the technical in their approach to the treatment of sickness, biomedicine will never completely supplant other systems of curing. To be realistic, health planners must expand the model of health man beyond that of the rational actor.

"Health man", the rational actor, does not exist even in the middle and upper classes of the industrial West: we are not rational about "health". Even assuming that rationality means acting within the orthodox biomedical system, with some knowledge of theoretical biomedicine, and pursuing the end of health in the most efficient way, we fall short of the ideal. Individual people are not consistently rational, and there is no consistency of rationality among members of a population. As noted before, knowledge of the theoretical system of biomedicine is not widespread; people act in accord with many ideas about health care. Even a fair degree of knowledge of, and belief in the efficacy of, biomedicine does not ensure compliance. Many factors such as emotion, taste, and habit can intervene between knowledge and action (Young 1981; Stoner 1985).

I suggest that even if members of a population were always to follow the advice of biomedical practitioners, this would not indicate universal rationality of thought processes or even rational minds; people are vaccinated against smallpox, cholera, and rabies because of traditional adherence to norms or law, rather than because of their own knowledge of viruses or immunology. Consciousness of reasons and understanding of process is important in assigning rationality to an action. In short, we in the West do not always conform to the health man model. It is not that we don't want to be rid of pain and

disease: we are just not consistent in behaviour or theoretically knowledgeable.

Most people's actions are non-rational only in terms of Weber's very narrow definition of rationality, which expresses the sentiment of his and our age that the most technically efficient action is the most rational. Weber argues that, with the development of means-end rationality, particularly in the marketplace and in science, other forms of rationality (such as ethics, aesthetics, etc.) greatly declined in development and became secondary. In opposition to this, Habermas (1971) believes that other forms of rationality have persisted and speaks of them as "quasi-transcendental human interests". These interests are primarily communicative (including social relations) and emancipatory (Habermas here intends a political meaning, but I shall expand this category to include spirituality).

Though the ontological status of these interests may be questionable, Habermas has a sound point: we have many goals. These may be pursued simultaneously or separately. Gellner (1985) claims that actions can be single or multistranded — that is, they relate to either one or more domains of life or, in Habermas's terms, one or more interests. Gellner further claims that we in the West have a greater frequency of singlestranded activities than do other societies, where domains of life overlap more readily. But this may be wrong: multistrandedness seems to be the nature of life. Even when we think we're being purely technical, we are expressing other concerns. We are constantly doing many things, and simultaneously serving many interests. In this light, the medical pluralism described earlier can be seen as an individual's rational process of seeking a full understanding of their sickness experience as it relates to their many diverse interests. These interests are as rational as technical interests. It is, then, perfectly rational for an Indian villager to visit a series of curers, especially if beliefs about sickness involve social relations and spiritual factors. It is reasonable to seek help for different aspects of a sickness and thereby to pursue different interests. We in the West often seek

technical help for sickness, but we, too, want a social interpretation of our condition. We want it defined in light of its meaning and its potential social significance and repercussions. In consulting medical professionals, our friends, employers, alternative curers, etc. about our ills, we are pursuing several interests, not just one.

Young (1981; 1982) examines the assumptions underlying many medical anthropologists' analyses of sickness behaviour and concludes that most anthropologists are interested only in their subjects' theoretical knowledge, and then only one of its variant forms: that which Rational Man holds and operates with. Young argues that Rational Man as seen and depicted by medical anthropologists is distinctive in that his means of acquiring, organizing, and holding knowledge are almost, if not entirely, linguistic. His knowledge about events is more or less non-contradictory, arrived at through reason operating either deductively or inductively. When sick, Rational Man perceives his condition in causal terms and tries to control the outcome of the sickness episode. Although Young admits that most medical anthropologists will grant that Rational Man is neither "a rigourous logician or necessarily a systematic thinker" (1981:319), he holds that most do, in fact, utilize the Rational Man model of the human subject.

Young acknowledges that this model is accurate to some extent but goes on to argue for the existence of non-linguistic medical knowledge. He emphasizes two kinds. First, are organizing principles "embedded in the behavior, social relations, and material equipment that people use in order to produce their knowledge of sickness and to shape sickness in socially recognizable and acceptable ways" (1981:323). Second is knowledge produced when an individual uses a sickness episode that he has experienced or witnesses, as a prototype for understanding and handling subsequent sicknesses. "Medical" knowledge is related to interests (as previously discussed) other than the purely technical.

Young's "Rational Man" and the concept of "Health Man" which I am proposing are comparable subjects. Although neither exists, both

medical anthropologists and health planners often assume the "Health" or "Rational Man" model as the basis of their investigation or planning. A health project that is so based is essentially misguided and may well be an inefficient use of resources. For the upper and middle classes of the industrial West who have more completely cut off the experience and definition of sickness from social conditions, for whom the health man motivation exists to some (albeit limited) degree, and who to some extent go health seeking with technical goals in mind, a medical system built around the health man assumption is feasible. However, when people explicitly pursue more than one interest when seeking health, where many factors can rationally influence the choice of healer, the biomedical system, explicitly designed to satisfy one interest only, will not predominate. Traditional healers will continue to thrive. Planners should recognize the limited appropriate role of biomedicine in these circumstances.

C. THE EFFECTIVENESS OF BIOMEDICINE: TECHNOLOGY OR POLITICS?

The appropriate role for biomedicine in the Third World is to provide effective services for the treatment of physical aspects of sickness. Given the present environmental and political conditions of the Third World, for the majority of the population this effectiveness could be very limited.

Biomedicine is widely believed to be effective in the cure of sickness. A corollary of this is the belief that if adequate facilities could be provided in the Third World, and native irrationalities and cultural obstacles could be overcome, the health problems of people in the Third World would largely be eliminated (see, for example, Grant 1987). This is no so.

The effectiveness of biomedicine is limited in three ways. First, many conditions within the official range of biomedicine (i.e. physical disease) cannot be treated effectively. Second, by concentrating on the purely physical biomedicine simply cannot treat the social aspects of sickness (i.e. illness). Third, potentially

effective cures can only be achieved given favourable environmental conditions: if these aren't present, biomedicine will be ineffective.

The realization of how little they can actually do dawns on many Western medical students during their training: they find that patients either die, or get better by themselves, with the physician giving symptomatic relief en route to either of these outcomes. This is perhaps an exaggeration: certain acute conditions like appendicitis can be cured, antibiotics and vaccinations do generally work, and symptoms can often be relieved. However, biomedicine cannot deal effectively with the majority of complaints: cancer, diseases of the musculo-skeletal system (rheumatism, arthritis) and other chronic conditions, "illness" (by definition untreated by biomedicine [Kleinman 1979]), the common cold. All of these ailments generally run their course unhampered by the physician's efforts (McKeown 1979; Comaroff 1982).

Many established procedures of biomedicine that are believed to be effective and are routinely carried out have never been tested (Cochrane 1972). Moreover, some that have been tested have been found to be ineffective. For example, Mather's (1971) assessment in Bristol, England, of hospital versus home treatment for acute ischaemic heart disease indicated that there is no medical gain from admission of patients to the hospital. Similarly, Knatterud et al. (1971) carried out a multi-centre trial testing of the value of oral anti-diabetic therapy, insulin, and diet in the treatment of mature diabetics and found that standard treatments were disadvantageous for some cases. Yet these and many other untested treatments persist. Many are institutionalized and even legally required to satisfy the "average competent physician" requirement. Despite appearances and dogma, biomedicine is of limited effectiveness, even on its home ground.

This limited effectiveness is more pronounced in the Third World, primarily because for most people, the conditions don't exist for even the potentially useful elements of biomedicine to be effective. By definition the Third World is poor. Malnutrition and

lack of even rudimentary sanitation systems are the norm. In such conditions, resistance to disease is low, antibiotics are only temporarily effective, many procedures that would be effective in more affluent countries don't work. Conditions such as measles frequently cause death rather than just a few days' sickness. In the Third World the physical, economic, and political environment has a large influence on the potential effectiveness of biomedical techniques. The literature pertaining to this third limitation on the effectiveness of biomedicine was presented in the Introduction.

PART III

THE CULTURAL, PHYSICAL, AND POLITICAL CONTEXT OF DEVELOPMENT IN NEPAL

Located in the middle of the Himalayan chain, Nepal is a small country averaging 800kms and 100kms in length and width respectively. Although topographically diverse Nepal can be divided into three major areas: the flat Terai bordering the Gangetic plain to the south, the Himalayan foothills in the center, and the parallel ranges of the Himalayas proper in the North. The country is divided latitudinally by three river systems: the Kosi in the east, the Gandaki in the central region, and the Karnali in the west.

Such a landscape has made access to many districts very difficult. There are only two major roads in the country. One runs from the north-eastern border through Kathmandu and west to the Indian border; the other runs from Kathmandu south to the Indian border. Other roads are dry weather surfaced and are virtually unusable during the heavy rains of the monsoon season. Beyond the irregular (and for most people prohibitively expensive) flights of Royal Nepal Airlines, in most areas travel is on foot. Rivers are uncrossable when high with monsoon rains and snow melt: many areas are isolated for several months each year. Deep snow prohibits travel for many months yearly in other areas. This situation has impeded the provision of health services to the 94 percent of the population who live in rural areas (Justice 1981:17).

Although 90 percent of the population lives primarily by agricultural work only 21 percent of the land is cultivable (Seddon 1987:91). Except in the relatively fertile Terai much of this land is is becoming poorer and poorer in quality. In the hills, where 60 percent of the population lives, fuel and firewood are scarce and the already extensive deforestation continues. With fewer trees to hold it, remaining topsoil is depleted yearly, washed away by monsoon rain (Justice 1981:16).

Ethnically and linguistically the people of Nepal are tremendously diverse. Nepali is the official language. There are,

however, many dialects and an additional thirty other indigenous languages. There are two major cultural-linguistic influences. Predominating in the Terai, Kathmandu Valley, and central hills are populations speaking languages of the Indo-European family related to Hindi and other languages of Northern India: these people, the most numerous of whom are the Brahmans and Chetris, are characterized by a variation on the type of social organization found through most of South Asia. In the north central hills and mountains and also in the Kathmandu Valley, people have a closer cultural affinity with Central Asian and Tibeto-Burmese linguistic and ethnic groups. The most populous of these groups are the Newars, believed to be the original inhabitants of the Kathmandu Valley. Broad classifications aside, much syncretism has taken place, due partly to the exigencies of trade. The closing of the northern boundaries due to the Chinese occupation of Tibet combined with King Birendra's effort to make Nepal truly the "One Hindu Kingdom on Earth" has intensified this process. Tibeto-Burmese ethnic groups are generally either assigned or claim for themselves a caste rather than tribal/ethnic status (von Furer-Haimendorf 1960).

A religious diversity accompanies, but does not necessarily coincide with, the ethnic diversity of Nepal. The influence from the south is Orthodox Hinduism and "little traditions" (Marriot 1955); that from the north is the central Asian tradition of Bon and the literate forms of lamaism or Tibetan Mahayana Buddhism. These traditions merge in countless variations throughout the country. It is normal to find "Hindu" temples with images of Buddhist deities inside and out, and vice versa.

Traditional medical practitioners are also very diverse. Many deal with sicknesses for which a supernatural etiology is suspected using combinations of animal sacrifice, mantras, singing, drum-beating, and the preparation of amulets. In the Tibetan tradition lamas as well as doctors trained in the literate tradition of Tibetan medicine, recite prayers and mantras, and prepare herbal medicines. Healers broadly classified within the Ayurvedic tradition

prepare herbal medicines. There are also traditional midwives and bonesetters. In addition to healers, "home remedies" are widely used (Durkin-Longley 1982).

Attempts at unifying the cultural diversity of Nepal are comparatively recent. Up until the eighteenth century, the area that is now Nepal was fifty small tribal states ruled by kings claiming Rajput — that is, high caste Hindus — status. During the second half of the eighteenth century the Gorkhas (a predominantly Chetri and Thakuri group from central Nepal) united under Prithvi Narayan Shah (a Thakuri) (von Furer-Haimendorf 1966). They gradually succeeded in imposing rule over these tribal states and in 1769 pronounced it a unified kingdom called Nepal (S. Kumar 1967:8-10), the name previously applied to the area now known as the Kathmandu Valley. The Shahs moved their capital from Gorkha to Kathmandu.

The Shahs held actual authority in Nepal until the rise of the Rana family in 1846. During the pre-Rana period a very hierarchical system based on ethnicity and caste evolved. At the central level elite families and their allies formed factions and dominated politics. Alliances within factions were maintained through a system of obligations and loyalties. This was the beginning of the Chakari system, a characteristic of organization in Nepal in which those who show loyalty through service and gifts are granted favours and protection in return. A large loyal following developed for one noble Chetri family, the Ranas. The Ranas intermarried with the Shahs, and came to share the status of royalty and claim continuous occupation of the prime ministership. The gradual transfer of virtually all power from the Shahs to the Ranas culminated in Prime Minister Bahadur Rana bestowing the title "Maharaja" on himself and declaring his position hereditary. The Shahs became "puppet kings" and were kept in virtual confinement (Rose and Schultz 1980:23; Wake 1980:25; D. Kumar 1980:2).

Thus began a century of Rana rule. The isolation previously determined to a large extent by mountains to the north, east, and west, and malarial belt to the south, intensified under Rana rule and became almost absolute. Except for a few British officials,

foreigners were denied entry; resident missionaries were deported; all newspapers were banned. During this century there developed a minimal administrative system to collect taxes and quell disturbances. District headquarters were run by governors who were members of either the Rana or other high caste Hindu family (Schultz 1981:13). These were directly responsible to the prime minister in Kathmandu. Taxes were collected primarily by landlords (Wake 1980:24), many of whom were from favoured families who had received Birta land grants from the Ranas (Stiller and Yadev 1979:145-146) and were beholden to the central powers for their fortunate position (Wake 1980:24; S. Kumar 1987:133).

The central Rana government did not interfere with matters in the periphery as long as revenue was forthcoming. This gave local officials power to extract high taxes (keeping some for themselves) and negotiate personal monetary gains for any services rendered (Wake 1980:26), against which the peasant had little recourse but to move.

The chakari system continued, extending to most relationships of habitual obligation whether political or economic:

> It was considered discourteous to visit one's superior without bringing some offering ... This practice escalated to payment at the obligatory annual visit during the dasain festival ... which also happened to coincide with the annual termination of tenure (pajani) in all offices below that of prime minister. Reappointment at all levels depended to some extent on the degree of loyalty and respect for authority expressed by this gift (Wake 1980:25).

There was opposition to the Rana regime despite the imprisonment or execution of dissidents. The event that was decisive in ending the Rana regime in 1950 during a period of general unrest was the escape of King Tribhuvan. The king is believed by many to be an incarnation of Vishnu (a Hindu deity) and the ultimate repository of authority in Nepal: the well-being of the king and of the country are believed to be causally related. By breaking free of his virtual confinement and fleeing to India, King Tribhuvan demonstrated his support for the dissident movement and denied the Ranas the appearance of legitimacy.

The fall of the Ranas in 1950 marked the end of isolationist policy and the beginning of a period of political and administrative experimentation. Those actively involved in opposing the Ranas had competing ideas about how Nepal should be organized, politically and administratively. Outsiders came with ideas about how Nepal should be developed. An increasingly open country led to more widespread awareness of the level of development in the outside world, an eagerness on the part of some for these conditions, and promises from others that these conditions could be attained in Nepal. Nepal's political history since 1950 has been a history of disputes over how best to develop the country given the political, economic, administrative, and human base on which it had to build. Much dispute centers around to what degree the present organizational and political forms are a legacy from Rana days, and whether these are necessary or antithetical to the development of Nepal in such a way that all benefit.

The political and administrative context of development efforts is an important influence on their outcome (Bossert and Parker 1984). The remainder of this section will outline the growth of politics, government bureaucracy, and foreign aid in Nepal since 1951.

King Tribhuvan eventually returned from his refuge in India and set up an interim government composed of representatives of the active participants in the 1951 rebellion: the social democrats (modelled after the Indian Congress Party and presently known as the Nepali Congress Party), the communists, and the traditionalists. The king and the majority of his illiterate subjects remained unpartisan. King Tribhuvan promised that a form of parliamentary democracy would be established. He appointed commoners as prime minister. He also agreed to the construction of a road from Kathmandu to Raxaul at the Indian border, thereby opening Nepal to the outside world. Tribhuvan did not live long enough to fulfill his promises to any substantial degree.

King Tribhuvan was succeeded by his son Mahendra in 1955. After four years experimenting, appointing cabinets with himself as

head, in 1959 he introduced a new constitution providing for popular elections to parliament based on adult franchise. In the resulting parliament, however, he would still hold ultimate authority: out of 100 articles in the constitution, more than 80 begin "if the king so pleases ...". The first elected parliament met in 1960. The experiment was short lived. On December 15, 1960, Mahendra suspended the constitution, dismissed the cabinet headed by Prime Minister B.P. Koirala, dissolved parliament, banned political parties, and imprisoned all the ministers and political leaders who had not managed to escape to India (Blaikie et al., 1979:22; D. Kumar 1980:23).

The next political experiment has continued in various forms until today and has an integral influence on both the planning and implementation of development policy. The "guided democracy" promised to the people of Nepal in the 1962 "Panchayat Constitution" was to be a more "suitable" form of democracy based on the "traditional practices of the Nepalese people" and "suited to the particular genius of the Nepalese people". It was claimed that the system would "promote the welfare of the people by establishing a social order which is just, dynamic, democratic, and free from exploitation, by integrating and coordinating the interests of all classes and professions from a broad national viewpoint" (Nepal Gazette 1962, cited in Shrestha 1980:30). The second principle of the system is the principle of "class harmony" which held that the welfare and rights of the poor would be protected (Wake 1980:12).

Such high ideals were to be facilitated by a five-tier system of representation in panchayats from the village, through district and zonal levels to the national panchayat headed by the monarch, in whom, as before, all ultimate authority would reside. In theory, the collected levels of panchayat were to form a pyramidal structure on a popular electoral base, with the monarch at the apex (Blaikie et al., 1979:23).

Popular elections were only to take place at the village level. In these elections an eleven member executive committee with a president, vice-president, and nine members representing the nine

wards or division of the panchayat area were to be chosen. These locally elected leaders were charged with coordinating development efforts in the area and had powers to tax and settle quasi-judicial cases (Justice 1981:23-24; Blaikie et al., 1979:24). At higher levels of the pyramid most members are drawn from the already elected village leaders. At the national level, the king appoints the prime minister, deputy prime minister, and ministers from members of the national assembly. Holding these positions requires maintaining the confidence and approval of the king (Blaikie et al., 1979:24).

King Mahendra died ten years after the inception of the Partyless Panchayat System. His son Birendra Bir Bakram Shah Dev ascended the throne on January 31, 1972 and continues to rule Nepal today. The Partyless Panchayat System has undergone some changes but the structure remains much as described above.

The Partyless Panchayat System was designed to be the grass-roots political basis of development planning and implementation. The administrative organization necessary for development orchestrated from above was created by expanding the minimal civil service of the Rana period. A specialized civil service was formed to implement the burgeoning number of development projects (Justice 1981:185). Guided by administrative advisors from Canada, the United States, and the United Nations, the bureaucracy was planned to function according to Western concepts of efficiency, economy, and rational decision making (Rose and Landau 1977:42-43).

The resulting bureaucracy has four major levels of authority. The top two levels are based in Kathmandu. At the top is the king who is the ultimate policymaker. The king guides the second level, the Palace Secretariat, which formulates major policies such as the five-year development plans. Each of the Palace Secretaries bears responsibility for a specific department; their powers to intervene in policy formation and implementation are not specified in either the law or the constitution (Seddon 1987:224). Parallel to the Palace Secretariat is the Central Secretariat, the administrative unit directly responsible for carrying out the orders of the king and

Palace Secretaries. In rural areas zonal commissioners who are appointed by the king and report directly to the palace, supervise Chief District officers (Justice 1981:21-23) who form the lowest level of the major bureaucracies. At and between all levels of organization there are countless organizational units charged with specific tasks. Being an expansion of the former administrative system of the Rana days, the present-day system is characterized by extra-systemic features such as the chakari system.

Planned development, utilizing the emerging political and administrative structures, began in 1956 with the government's first five-year plan. Since 1954 Nepal has received aid specifically donated for health development. Until 1978 this was primarily used to set up hospitals and health posts, train some doctors and nurses outside the country, and implement "vertical" programs orientated towards the elimination of specific diseases. Since 1978, in accord with trends elsewhere, the emphasis has shifted to primary health care and the "integrated community health" approach rather than the "one disease, one program" approach (Justice 1986:8-10).

Despite 30 years of development effort in Nepal, morbidity statistics are amongst the worst in the world. In 1977 the crude death rate was 23/1000, with infant mortality 172/1000 (Tribhuvan University, Institute of Medicine 1977:1). As of 1976, life expectancy for males was 46 years; for females 43 years (Nepal Ministry of Health 1979). Morbidity rates have been found to be between 39-52 percent during a two week period, a rate that is high even compared to countries such as India and Pakistan (Tribhuvan University, Institute of Medicine 1977:8-9, 35-38).

Of all children born, one out of four will die before reaching the age of five years. The most common cause of morbidity in children is malnutrition interacting with bacterial, viral, and parasitic infections. The most common symptomatic manifestation of this is diarrhea and dehydration (Nepal Family Planning and Maternal Child Health Project 1977).

In addition pneumonia, respiratory infections, malaria, measles, diptheria, tetnus, typhoid, and tuberculosis all take their toll (Bezruchka 1984).

Adults suffer from all the above sicknesses plus others. Goitre due to iodine deficiency is endemic in some northern regions. Leprosy occurs in all regions, with frequencies up to 2 percent. Malaria, despite its apparent eradication in the 1970s has again become a significant health problem (Nepal, Ministry of Health 1979:151-158). One survey (Pokharel 1979:149-151) shows that due primarily to cataract and infection 1-2 percent of the population is blind compared to .2 percent in developed countries.

Health development in Nepal has had some successes: some diseases have been eradicated through vaccination (smallpox, for example), but as indicated, the health situation of the population remains poor. More facilities have been constructed, but these are unequally distributed with a heavy concentration in urban areas (Seddon 1987:252) and areas most easily accessible from Kathmandu. In 1978 only 21 percent of panchayats had any kind of permanent health facility; many of these function inadequately due to the shortage or absence of drugs, equipment and vaccines, lack of staff training, and even the absence of staff who are officially available (Justice 1986:101).

PART IV

OBSTACLES TO HEALTH DEVELOPMENT IN NEPAL: WHY THE POOR STAY SICK

It is in countries of the Third World like Nepal that it becomes most clear that health status and the effectiveness of technical biomedicine depend on a favourable physical and political environment. In this section I will describe relationships between physical conditions, malnutrition, landownership, and political power in order to show that patterns of infant and child morbidity and mortality are greatly influenced by political factors. The physical conditions of life for many Nepalis will be described and it will be shown that most Nepali children are frequently exposed to the pathogenic agents that are the proximate causes of the diarrhea-dehydration syndrome. It will then be argued that all are not equally affected by such exposure if it occurs: nutrition level is an important factor in determining how frequently a child becomes sick and whether a sick child will die. There will be shown to be positive correlations between landownership and nutritional level and between malnutrition and mortality, and a negative correlation between landownership and mortality rates.

My argument is similar to that made by Djurfeldt and Lindberg in Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Town (1975). This study was presented in the Introduction as an example of work done in the tradition of the political economy of health. In the study village the authors collected extensive qualitative and quantitative data on diverse phenomena such as morbidity, mortality, nutrition, and income distribution. On the basis of this they argue that the poor suffered from the "diseases of poverty" and that their health situation would not improve significantly without change in the prevailing political and economic order. I have not in any sense tried to replicate Djurfeldt and Lindberg's study: this was precluded by my short period of residence in Nepal. Based on primary and secondary sources and a case study of political process in one village, however, I suggest

that the situation described in Djurfeldt and Lindberg's study probably exists in Nepal.

Of the many diverse factors contributing to the high rates of infant and child mortality in Nepal, I will focus on malnutrition and polluted water sources. Lowering the high mortality rate would require improvement in nutrition levels, most likely through changes in patterns of access to land, and the provision of a reasonably safe drinking water source. The accomplishment of these changes depends on a positive political will. This must include favourable official government policy, but here I will stress that official political will must be translatable into action if significant change is to take place. I will discuss political forces in terms of how they have influenced the implementation of policies designed to improve the position of the poor. It will be shown that those who hold political power act in accordance with traditionally prescribed behavioral expectations. As such they constitute a conservative force which has the effect of perpetuating a system which inhibits change that could improve the living conditions and health of the poor in Nepal. It will be shown that the leap from official policy statements to clean water and full stomachs is a long one.

Some (see, for example, Bauer:1981) would argue that the kind of political will needed in countries like Nepal is the kind that promotes free enterprise as the basis of economic development, which in turn would form a base for long-term self-sustained growth and a consequent reduction in levels of malnutrition. But I am arguing from what exists in Nepal now. The Nepalese government annually receives millions of dollars in foreign aid. Some of this has been given for the construction of water supply systems and the relief of malnutrition. Some of it has been accompanied by demands for land reform. The Nepalese government has accepted this aid for the purposes stated. Given what is actually happening, I will discuss the influence of political power and political will in the implementation of programs that could create conditions that are conducive to the effective use of biomedicine.

Durkin-Longley graphically describes the environmental conditions in Kathmandu:

> The health conditions in Kathmandu City ... are reputed to be among the worst on earth. Despite many modern developments, such as paved roads and motorized transportation, large luxury hotels and electricity, the city still lacks modern waste disposal and drainage systems ... Kathmandu's sanitation problems are exacerbated by unprecedented population density .... The festering piles of human waste and other garbage that accumulate in the streets, courtyards and rivers of Kathmandu today breed disease-causing microbes that contaminate food and water supplies and pose a ubiquitous threat to the health of the city's residents (Durkin-Longley 1982:57-58).

Outside the capital, too, the living conditions of most Nepalis are perfect for promoting the spread of food and water borne diseases. With 90 percent making their livelihood from agriculture, and only 21 percent of the land cultivable (Seddon 1987:91), the majority of the ever-growing population of approximately fifteen million lives in densely crowded conditions. Only six percent have piped (but not necessarily clean) water; most of these people are living in the Kathmandu Valley. Others retrieve water from streams and rivers sometimes a few hours' walk from their home. There being few toilets of any style, fields are used for defecation; with rain fecal matter is carried to streams; accordingly, field-grown food and drinking water sources often become bearers of fecal-borne diseases.

For most Nepali children, contact with disease-causing pathological agents is common, especially in the "dangerous season", the warm months, when flies proliferate and streams fill with organic matter carried by monsoon rain. The Nepal Health Survey conducted through the mid-1960s shows that 72 percent of children tested had either intestinal parasites or intestinal infections (cited in Seddon 1987:69).

Aside from exposure to the pathological agent itself, malnutrition is another crucial factor in the physical cycle that leads to infant death. Quite simply, malnourished infants and children are more susceptible to gastroenteric diseases and parasitic

infection. The resultant diarrhea further worsens the malnourished condition, leaving the child even more susceptible to future bouts of sickness.

A study of East Palpa district conducted by Blaikie et al. (1976) shows that rather than being a static variable, "nutrition level" for any individual or group can fluctuate according to variables such as season, availability of food, and income. In the study area environmental deterioration was far advanced and general levels of food production low. The "hunger season" (at the beginning of the "dangerous season") lasts from late February until late July when the first maize or upland rice is harvested. In late June and early July food scarcity affected from one-half to three quarters of the population in four of the five panchayats studied. During this time cereal consumption is gradually reduced, by up to five-sixths by the poorest and one half by the less poor. People gather jungle plants to supplement their diet and were found at times to resort to eating the seeds of the following year's crops.

Many children in Nepal suffer from chronic or acute malnutrition as a result of factors including those just described. Seddon (1987) cites two surveys that report the nutritional levels of children. The Nepal Health Survey of 1975 reports that 52 percent of surveyed children suffered from long-term malnutrition, 7 percent were experiencing acute under-nutrition, and 4 percent were in critical condition experiencing both acute and chronic malnutrition. A 1974 WHO survey concluded that only 29-30 percent of Nepali children could be considered adequately nourished (Seddon 1987:69-70). Many Nepali children suffer chronically or seasonally from malnutrition.

Adequate nutrition depends on access to income with which to buy food, or access to land on which to grow food. Ninety-six percent of Nepal's population earn their livelihood directly through land whether it be their own or someone else's they work on. Given the large population and the lack of industry, income from other sources is hard to procure (Seddon et al., 1979). As a consequence of this, in Nepal adequate nutrition generally depends on income, which depends

on landholdings, or access to land to work. Ghai and Rahman conclude in their study of rural poverty and the small farmers' development programme in Nepal that "since land is a major source of income in the rural areas ... differences in landownership translate directly into differences in income distribution" (Ghai and Rahman. Rural poverty and the small farmers' development programme in Nepal, Rural Employment Policies Branch, ILO, 1979, p. 3, cited in Seddon 1987:118). In an APROSC (1979) study of the Tinau Khola Catchment Area Conservation Project, it was found that "land, the single most important production resource in the project area (a fact which is equally common in the whole of rural Nepal), determines the level of income and socio-economic status of the population of the region concerned. Distribution of landholdings largely determines the disparities in income, while the productivity of the land determines the level of income" (APROSC 1979:18).

Distribution of land is highly concentrated, leaving the majority of Nepalis with insufficient land for subsistence needs. Twenty-seven percent of the land is owned by two percent of rural households. This is more extreme than in 1961 when the top eight percent of households owned almost 40 percent of the land, and the bottom 46 percent of households owned only ten percent of the land (Central Bureau of Statistics, Agricultural Census, Kathmandu 1962). Nearly 75 percent of the households owned only one quarter of all cultivated land, owning less than one hectare each.

Such small landholdings are not sufficient to support a household. Butterfield estimates that "85 percent of hill farm households do not produce enough food to meet their own consumption requirements, and that 50 percent of terai farm households are similarly deficit" (Butterfield. Nepal: Country Development Strategy Statement 1979. USAID mimeo cited in Seddon 1987, p. 127). There is, then, a direct positive relationship between landownership (and how this translates into income) and nutrition. As landownership is highly concentrated, many Nepalis do not have access to sufficient land to produce their subsistence needs.

It should be noted here that there is some correlation between landownership and caste. Reviewing the literature pertinent to this and drawing from his own research, Seddon concludes that there is "a broad tendency (not borne out in every single village however), for 'high caste' groups to be large landowners, particularly in the Terai." This he explains in terms of the states having made land grants to members of the ruling class and to local notables as was related earlier in this essay. The one feature common to all villages in Seddon's study "with regard to the relationship between caste and landownership was the relatively deprived situation of the historically labouring and artisan classes whose caste rendered them 'untouchable'" (Seddon 1987:188).

Relationships between malnutrition, income, landownership, and morbidity, suggest that children from households with little or no access to land are more likely to die from the diarrhea-dehydration syndrome than children born to households with large landholdings. There is little data available to concretely support this conclusion. It is borne out, however, by data from the Rapti Baseline Survey. This study reveals that between 25 and 32 percent of children in the surveyed area die before reaching adulthood. Infant mortality was highest, however, among those of the marginal, sub-marginal, and small land-holding households and lowest among the largest land-holding categories of household. For the three years preceding the survey, infant mortality rates among the sub-marginal landholding households averaged 249/1000, those for households of better land-holding categories ranged between 131 and 169 (APROSC 1980:57-58). These findings confirm that there is a higher risk of death to infants born to households with no or little land.

The infant mortality rates for rich households are still very high, though slightly lower than the national average of 172. With poor household rates at 249, some groups must enjoy a much lower infant mortality rate (if the national average figure is accurate). I suspect these groups are the wealthier landowners, particularly in the

Terai and Kathmandu Valley but have seen no data to support this suggestion.

To summarize so far this discussion of the physical and economic factors that influence health status and the potential effectiveness of biomedicine, it has been shown that the environmental conditions of Nepal are such that a large majority of infants and children are in common contact with the pathogenic agents that are the proximate cause of diarrhea and dehydration. It has been suggested that a child's nutritional status is a major determinant of both how well they can resist becoming host to these pathogens and how well they survive the debilitating effects of infection should it occur. Although little specific data is available to support my conclusion, a child's family's income, dependent to a large degree on the size and quality of landholdings seems to a large extent to determine the child's nutrition level and likelihood of early death. At present, because landownership is highly concentrated, for the majority of Nepalis the conditions such as adequate nutrition that in the long term promote high health status and make biomedical technology effective in the treatment of the common childhood illnesses do not exist.

The creation of the conditions that maintain low mortality rates would require sewage containment measures, construction of water pipes, and raising of nutritional levels. The achievement of these conditions requires a positive political will. I will now discuss who has political power in Nepal and how well this power has or has not been used to facilitate positive environmental and nutritional change. Various kinds of policies and their implementation will be referred to but my emphasis as noted earlier will be on: 1) attempts to redistribute wealth (and thereby improve nutrition) through land reform, and 2) attempts to lower the incidence of water-borne disease through the construction of drinking water systems.

As presented earlier, all official power resides with the king. Others are given power subject to the king's continuing approval. At the level of the village or town panchayat, leaders have

power to extract and spend taxes, settle semi-judicial matters including disputes over land, and to coordinate and to some extent direct development efforts in their community. Other political and bureaucratic personnel have power in their district, zone, or town, but only to carry out the programs and commands originating either from the Palace itself or from the Palace Secretariat ministries.

The positions in the bureaucracy and government, created since the inception of the Partyless Panchayat System, have primarily been filled by members of the same social and economic group that had administrative and political power during and prior to the Rana period. As described earlier, these were people who were either of high caste status or had large landholdings. Usually they were both, a consequence of the birta land grant system.

Several studies have traced the composition pattern of the local government and power structure since 1951. Gaige, in his study of regional politics in Nepal states that "since 1951, politics in the Terai districts has continued to be dominated by the largest landowners ... the traditional elite" (Gaige 1975:145). Rana and Mohsin's (1967) study of leadership in Nepal revealed that in three eastern zones, at both village and district levels, there was a concentration of political power amongst the large landowners. Of village panchayat chairmen at that time, 57 percent were landowners, 40 percent were owner-cultivators, and 3 percent were employed by the state. At a time when the average landholding in Nepal was .25 hectares, 60 percent of these leaders owned more than 2.5 hectares, and 12 percent owned between 1.5 and 2.5 hectares.

Gaige (1975:144), Rana and Mohsin (1967) and Shrestha (1980:83) all found that political power at the village level was concentrated in high caste groups: although "each caste or group has the right to put up its own candidate so as to capture the reins of power ... there is still a high concentration of community leadership in upper castes" (Shrestha, 1980:83). Untouchables are represented in some cases. Gaige cites the case of a village in Kapilvasta district where 17 percent of the population is of untouchable caste. Five percent of

village panchayat members were untouchables. Most of these, however, were elected in wards where only untouchables lived (Gaige 1975:144).

Power at the village and town level, then, is held primarily by landowning high caste people. The pinnacle of power, the King, of course is high caste (a god, in fact), and his family is clearly not lacking in wealth.

The corollary of this, of course, is that the poor and those of low-caste status do not have political power. It will be remembered that one of the stated objectives of the Partyless Panchayat System was representation of and concern for the welfare of the poor. Village level elections are the only activity in which the poor may be legitimately involved in political activity; however, real access to political power with which to influence activity within the panchayat seems to be limited by established patterns of traditional authority based partly on landownership. Efforts to institute "positive discrimination" have failed. The 1962 Constitution, for example, provides that in the National Assembly, in addition to the members either appointed directly by the king or elected from district panchayats, there would be representatives of "class organizations". On behalf of women, youths, farmers, and other groups these representatives were to give expression to "class" interests. These, however, remained in effect largely vehicles for the personal ambition of a small number of individuals, usually drawn from the urban bourgeoisie or landed classes, and had little real political significance for the broad mass of their official constituents. "Although programs were planned to be implemented through local branches of these organizations", the ability of those formally eligible to participate to do so was strictly limited by the prevailing local power structure" (Seddon 1987:221). By 1975, these organizations received no official support; most of them now no longer exist.

The "Back to the Village Campaign" of the mid-1970s was another unsuccessful attempt to promote representation of the most disadvantaged groups. Village level elections were suspended, and

officials appointed directly from the palace appointed members to the village panchayat council. Traditional power structures prevailed, and the experiment ended in 1978 with the resumption of elections (Seddon 1987:246-7).

Despite the expressed goals of the monarchy to uphold the principles of the Partyless Panchayat System, especially those relating to concern for the welfare of the poor, most development that occurs in Nepal favours the elite landholding classes: those entrusted with political power to plan and implement development projects use it in such a way that the poor are not the primary recipients of benefits. The use of power is often directed by traditional expectations and the local rationality of the marketplace, rather than by political ideals. This situation creates major problems for development projects which attempt to produce conditions that would improve health standards and make technical biomedicine more effective for the poor of Nepal. For the remainder of this section I will discuss how the positive political rhetoric of the monarch does not translate into the successful implementation of development programs.

First it should be emphasized that officially in Nepal the "political will" for rapid development exists. As emphasized earlier, all ultimate power in Nepal resides with the king. The political rhetoric of the king representing official government sentiment could hardly be more positive with respect to willing general development and welfare for the people. This is evident from the goals of the Partyless Panchayat System as related earlier in this essay. This will is also proclaimed daily in the government controlled media, especially Radio Nepal and the newspapers The Rising Nepal (English) and Gorhkapatra (Nepali). For example, a news item in the Rising Nepal, on February 21, 1987, commenting on the King's visit to the Far Western Development Region (the first visit in five years), emphasized that such "activities demonstrate the keen interest of Their Majesties the King and Queen in stepping up the tempo of development of the villages .... The Nepalese people are indeed fortunate to have been

blessed by the able and dynamic leadership of a development-orientated Monarch" (p. 2). The professed goal of the Monarch and government is "to attain average Asian living standard by the end of this century" (Rising Nepal December 13, 1986). According to the Quarterly Development Review (published in Nepal), "the King has been providing regular directives for the effective implementation of various projects based upon basic needs like food, clothing and shelter" and for this "all Nepalese people are grateful to His Majesty the King" (January 1987:2).

This official royal enthusiasm to promote development (particularly of the poor in accordance with the ideals of the Partyless Panchayat System) can face three major obstacles in being translated into real change: 1) structural problems of the administration, 2) what I shall call the "local rationality of the marketplace", and 3) the direction of development by traditional patterns of obligation and expectation rather than by political ideals. The first two obstacles will be dealt with briefly; the third will then be treated at length.

The present structure of the Nepali civil service is such that even the best of intentions can result in minimal or even no results from policies. Justice (1986), Wake (1980), and others have described how the complexities of the various hierarchies and the frequent re-organization of structure and shifting of personnel can result in programs being stalled indefinitely. The system makes communication so difficult that to facilitate action, people often bypass the official structure altogether relying instead on traditional family and political networks.

The local rationality of the marketplace in Nepal is manifested in the all-pervasive practices of bribery, informal diversion of funds, and other activities where power is used to negotiate financial gain. "Everyone knows" that this goes on; everyone has seen the "ring-road mansions" on the outskirts of Kathmandu, the large houses of Nepali bureaucrats that could not be supported on an official salary only.

The failure of centrally designed development projects to help the poor is partly due to implementation problems. Many of these derive from the influence of traditional patterns of obligations and expectation on political and administrative processes. I will present two cases which illustrate this argument. The first case demonstrates how in one town political processes on the national and local level are influencing the distribution of water pipes. The second is the more general case of attempts at land reform as a measure to aid the poor. It will be shown that despite pressure from foreign donors and the passing of legislation, changes in access to land -- important to the improved nutrition and health status of the poor -- have not happened: in general those with political power to effect change to benefit the poor did not have the will to do so.

CASE 1: POLITICS AND THE DISTRIBUTION OF THE BENEFITS OF DEVELOPMENT

At the local level in Nepal there is an enthusiasm for development, and it does take place. But it takes place to the benefit of the historically and presently powerful groups. The present-day political elites are the inheritors of the system of obligations between elites and client families. In making decisions politicians are often obliged to favour their client families. On other occasions they are obliged to favour their own locality or ethnic group. There are

> few men in positions of responsibility and power who are not placed in situations of resisting or yielding to expectations to favour either members of their own family or people of the same ethnic group or locality. There is no bazaar town with a native son in high office where condemnation cannot be heard for his failure to change project priorities on its behalf (Wake 1980:28).

The local panchayat leaders, as related earlier, are responsible both for coordinating development and providing the central government with information about local needs. Says Justice in her report on the organization of health care in Nepal:

> There was little evidence that information on health needs and conditions was transmitted through the panchayat. Rather, the panchayat was used by local elites to obtain resources, such as health posts, to meet their needs. Numerous examples show that health posts were built in areas where local families have influence, and not where there was the greatest need or where the services would be most easily accessible to the local population.
>
> Elites and villagers may have similar health needs, but who receives government services differs. Delivery of services is better structured to meet the needs of the elite, who have priority in obtaining the limited resources (Justice 1981:187).

Whatever the central government plans, the rural local elite are a crucial link in the implementation of policies because they have the power to promote or resist these along lines that serve the interests of their own group.

The effects of political activity in Nayagaon (a fictitious name for the town I lived in) over the past several years is an example of how politics based on traditional patterns of obligation influences the allocation of development resources and benefits in Nepal. Both the national and local levels of political influence were involved. I will now outline how the political activity of Nayagaon over the past several years has influenced, and will continue to influence, the construction of a water supply system in the area.

Several years ago a preliminary study of Nayagaon, which was at that time a village, was carried out by a foreign government aid organization. This was to be the basis of a development plan for the village. A priority of the project was the construction of a water supply system running from the nearby hills to the village. The absence of a good water supply was widely acknowledged to be a major problem. When I left the town in May 1987, water levels at nearby sources were low and the water was filthy.

The implementation of the project was and will continue to be effected by a change in the settlement's administrative status from that of village to town. The transition to town status gave the local leader more power in a greater sphere of influence. Compared to

leaders in villages, town leaders have more power to extract and distribute taxes, settle semi-judicial matters, and control and coordinate development in their electoral districts.

The events leading up to this transition were recounted to me by numerous people in Nayagaon and an American Peace Corps Volunteer working in Thulogaon (a fictitious name), a neighbouring settlement. A number of previous campaigns to achieve town status had failed; the primary reason was that the village's population was too small to warrant a change in status. The successful attempt came after two changes in the village's situation. First, the village's boundaries were redrawn to incorporate seven small surrounding villages, thereby increasing the official population (though still not to the officially required level). Second, a local person who had been elected to the National Assembly provided a strong link with the central decision making body in Kathmandu.

The acceptance of the successful application was not straightforward. There was opposition from some of the inhabitants of Thulogaon who stood to lose from the change; if Nayagaon became a town it would be able to compete for profits from various enterprises. The people of Thulogaon also had a strong link with a member of the National Assembly to whom they applied for support. The status of town was finally awarded after three months of bribes and counter-bribes, some violence in the area, and many trips by the leaders to Kathmandu. A leader for Nayagaon was then selected, rather than elected. He was from the richest family in the town. Nayagaon became a town despite low population and opposition, through the support of a powerful "source" in Kathmandu.

Before the election of 1987 implementation of the development project began. The original planning had taken place before the village boundaries had been redrawn to include outlying areas. The selected government had continued to focus attention on the central settlement. By the time of the election development plans had not been adjusted to account for the new population distribution.

There were two major candidates in the leadership election of 1987. The concerns of their supporters illustrate how politics on two levels influences who benefits from development resources and projects in Nepal. The successful candidate was the former selected leader. His supporters wanted him to continue as leader because in addition to wanting to "bring development to the town" he had the strong business, administrative, and political connections in Kathmandu that would enable him to do this. During the upcoming development programs he could use his "source" and "force" to get as much as was possible for the town from central sources. The concerns of the alternate candidate and his supporters, many of whom lived in the outlying settlements, were of a different order: while also wanting development for the town, they feared that the benefits and costs of that development would be unevenly distributed. Since 1985 no change had been made in the routing plan for the new water pipe system; pipes would not be redirected to provide water pipes for the newly absorbed villages. Yet the people in these settlements were paying higher taxes and feared that they would be called upon to perform an unfair share of the "community participation" volunteer labour required to lay the water pipes.

In summary, Nayagaon's elites had used political connections to have the village's administrative status changed to that of a town. The post-incorporation selected leadership had not altered a development plan that aimed to bring water pipes to the center of the town. At the time of the 1987 election the plans as they stood would benefit those living in the central area only, possibly to the detriment of those in the outlying areas. As one man told me, "If you have money what difference does a small tax make? If you have no money a small tax and extra work can ruin you."

This case illustrates how politics guided by traditional patterns of obligation influences the distribution of benefits from development resources and projects. Both national and local levels of politics were involved. On the national level alliances between people with political and administrative power in Kathmandu and the

leaders of their home localities were used to change Nayagaon's administrative status from village to town. This change gave village leaders more control over development in the area and more funds to control both through taxation and increased government funds. On the local level, elected leaders were expected to give priority to the needs of their kin and immediate neighbourhood; as a result the less powerful were not to benefit from a development project whose cost they could ill afford to help bear.

CASE 2: LAND REFORM

From the preceding case, it can be seen that with respect to the distribution of services, power can be used by local politicians to benefit local elites. With land reform efforts the situation is rather different. In this case the politicians and administrators, being in general the large landowners, are asked to enforce measures that definitely are not in their own interest: those who stand to lose most by land reforms were asked to implement them. The results are predictable: a succession of attempts at land reform have had very little effect on caste/class patterns of landownership. Consistently either the laws have not been widely enforced or, when land was redistributed, those who administered the laws used their position to secure land for themselves and their families and friends (Stiller and Yadav 1979:146). In June 1978, for example, the Special Police Department announced that six officials had misappropriated almost 1300 hectares of land that had been freed for distribution (Rising Nepal, June 16, 1978).

During Rana rule birta land grants were given to those favoured by the ruling family. By the revolution of 1951, 60 percent of agricultural land was held in birta grants and was not taxed. One of the priorities of the post-revolution government in the early 1950s was land redistribution. The Congress Bloc proposed that the grants were made under legal norms that were no longer in force and that accordingly, birta owners had no claim of ownership. The land was to be taxed and gradually redistributed to tenants who were working the

land. Passing the laws was easy; enforcing them harder. The 1951 law only prohibited the sale of birta holdings and required that they be registered. Registration was not accomplished: besides there being virtually no records of individual land grants, almost everyone who qualified for government service in 1951 themselves held birta land and were, apparently, reluctant to promote the process. A major consequence of the law was that landowners started to evict tenants in order to better establish their ownership of land (Stiller and Yadav 1979:146-47).

Through various cabinets the matter did not progress until the Birta Abolition Bill was passed in October 1959. With King Mahendra's suspension of the constitution and dissolution of parliament in late 1960, the land reform program temporarily ended (Stiller and Yadav 1979:148).

In the early sixties, foreign aid donors pressured the government to implement land reform measures as unequal distribution was thought to be a major obstacle to further development (Seddon 1987:41). The Land Organization Act was passed in 1963 followed by the Land Act of 1964. The proposed measures were modest, establishing an official ceiling on land holdings which in effect only applied to seven or eight percent of the cultivatable land in the Terai (Gaige 1975:173). The acts had limited effect even eight years after they were passed, although 146,000 acres of land had been made free, only 56,000 acres had actually been distributed (Seddon 1987:41). Many landowners were often able to transfer surplus land to relatives (Seddon 1987:119; Rose and Fisher 1970:122-129).

In summary, the historically embedded patterns of political power that shape present conditions also constitute the mechanism through which change must occur. Because this is a conservative force, change is slow to occur.

In Part II, three assumptions of the hypothetical model of biomedicine were presented as barriers to effective health planning in the Third World: 1) the notion of the medical system both as a body

of knowledge and an institutional framework, 2) the implicit model of the ideal-rational patient, and 3) the belief in the effectiveness of biomedical techniques. In the light of the material presented in Parts III and IV, I will now assess the relative importance of these three to the planning of development to deal with the problem of high rates of child and infant morbidity and mortality in Nepal.

"Health development", the phrase I have used through most of this essay, can be distinguished from "medical development". "Medical development" is here used to refer to development projects that aim to lower morbidity and mortality rates through the expansion of biomedical facilities, and the promotion of the use of biomedical techniques and facilities. "Health development" is planning that recognizes non "medical" (in the biomedical sense) influences on health and aims to alter these in an effort to promote a reduction in rates of morbidity and mortality. Health development does not deny the importance of some aspects of biomedical technology in the promotion of health. These are to be seen, however, as one aspect of a larger project. In the light of this distinction, the relative importance of problems that arise from the assumptions of the hypothetical model of biomedicine can be better evaluated.

In order to lower rates of infant and child mortality from diarrhea and dehydration in Nepal medical development planners aim to 1) provide facilities such as health posts to which the afflicted can be brought for treatment, 2) promote the use of Oral Rehydration Therapy (ORT), currently widely advertised on Radio Nepal, and 3) to some degree promote the use of basic preventative measures such as boiling water.

Medical development efforts encounter three major types of problems. First, as can be imagined from the foregoing discussion, there are political factors that influence the location of health posts (Justice 1981:187), the distribution of oral rehydration salts, and the availability of medication. If biomedicine does not exist in an area, clearly it cannot be used. The second group of problems cluster around assumptions 1 and 2 described in Part II: questions of

differing conceptions of what illness involves, different rationalities of sickness behaviour etc.. A large and growing literature (Allen 1978; Devoka 1984; Durkin-Longley 1982; Macfarlane 1981; Stone 1976) all report diverse beliefs concerning indigenous Nepali beliefs concerning sickness aetiology and treatment that extend into realms such as the social and spiritual that are well beyond the parameters of biomedicine. The importance of these as obstacles to the promotion of biomedical practices varies with factors such as education, exposure to Western culture in general, the particular form in which biomedicine is presented, and the circumstances of a particular sickness episode. In Kathmandu, for example, facilities are widely used and prospering drug stores abound: there are few cultural barriers. In remote areas, however, cultural considerations are likely to be more important.

The third set of problems relates to the diminished effectiveness of biomedical techniques in the physical conditions of Nepal. Antibiotics may be administered to a child, for example, who recovers only to be reinfected and debilitated a few days later. If a malnourished patient takes medication for tuberculosis, she may not show any signs of recovery. Just as in the West, in Nepal biomedicine can do little for many chronic and immediately life-threatening conditions. Such phenomena are not well documented. During my own visits to a hospital in Nepal, however, skeptical attitudes were not unknown. If patients perceive that biomedical treatment does not yield results, this will probably diminish the likelihood of further investment in these services and techniques.

If we speak of medical development and ask how the assumptions of the hypothetical model of biomedicine limit effective medical development planning to reduce high child and infant mortality rates it seems that in Nepal, as elsewhere, all three assumptions discussed in Part II, impede the success of this endeavour. The relative importance of each is dependent on circumstances. I would suggest however that the obstacles become smaller as the target population becomes wealthier. Wealthier people in Nepal are more likely to be

educated, more familiar with and receptive to Western culture, and have easier financial and geographical access to biomedical facilities. They are also likely to be better nourished: therefore, for them the results of treatment are more likely to be, and to be seen to be, effective. For the opposite reasons, providing medical development for the poor will be more problematic.

For the planning of health development in contrast to medical development, it is clear from the preceding extended discussion that the third assumption of the hypothetical model has proven to be the largest obstacle to effective planning to reduce child and infant mortality. Because of the assumption that biomedical techniques are effective independent of physical, economic, and political context, health planning as such scarcely exists. Instead we have medical development. The most profound obstacle stemming from Western conceptions of sickness is the confusion of medical development with health development. By cloaking the problems of widespread sickness in the idiom of biomedicine and planning <u>medical</u> development, the underlying causes of the sicknesses of the poor are not directly dealt with: they are not, after all, <u>medical</u> problems.

PART V

THE ANTHROPOLOGIST IN THIRD WORLD HEALTH DEVELOPMENT

In this section I will support two claims made earlier: 1) that the research of many anthropologists working in health development in Nepal is directed by priorities determined by the biomedical model of disease, and 2) that by addressing the problems of health development in the idiom of biomedicine, the medicalized anthropologist helps maintain, legitimate, and defer criticism of the existing system of social relations that has the effect of inhibiting change that would improve the health status of the poor. It will also be shown that these same social relations mitigate against the anthropologist adopting alternative approaches.

Promoting the treatment of diarrhea and dehydration through the administration of oral rehydration salts (ORS) -- commonly called oral rehydration therapy (ORT) -- has been a major goal of medical development in Nepal during the last year. The United Nations International Childrens' Emergency Fund (UNICEF), whose mandate is to help the poorest people in the Third World, is a major sponsor of ORT promotion campaigns in Nepal. I shall discuss how UNICEF describes and justifies its efforts to meet that mandate through ORT. My sources are The State of the World's Children by James P. Grant, Executive Director of UNICEF, and ORT campaign materials distributed in Nepal in 1986. It will be seen that Grant presents the problems of health development from the biomedical point of view with an explicit denial of the influence of political and economic conditions on health and development.

Grant calls for the promotion of ORT on the grounds of "capacity" and "morality". "Capacity" here refers to scientific knowledge of disease processes including knowledge of simple measures that effectively intervene in these; "morality" refers to "the right" of everyone to have command of the more simple aspects of this knowledge so that they can save the lives of their children. He holds that the "time has come for the international community to say that it

is ... intolerable for 40,000 of its young children to die every day ... in the silent emergency of infection and malnutrition which the world has already demonstrated its capacity to prevent on a significant scale and at a manageable cost" (Grant 1987:9). In this "Revolution in Child Survival and Development" Grant exhorts all to "exert the moral muscle to transform what can now be done into what will now be done" (Grant 1987:9). What can be done, he claims, is that "through the use of simple biomedical techniques the majority of the world's children can be freed from high death rates and from frequent growth-sapping disease" (Grant 1987:11).

Grant bases his hopes that this goal will be reached on the possibility that knowledge about the scientific basis and treatment of disease can be spread widely in the Third World. He claims that science can adequately describe the diarrheal syndrome's cause and provide its cure and that science can end malnutrition. Grant and the UNICEF ORT pamphlets distributed in Nepal stress the proximate rather than social causes of death: they claim, for example, that "frequent bouts of diarrhea is the main reason for malnourishment and child deaths in Nepal" (pamphlet UNICEF IN NEPAL), rather than land distribution and income as I have argued. Because of "scientific understanding" Grant claims, most childhood illness and malnutrition is "readily preventable" (Grant 1987:9). "The scientific core of what is now possible ..." he says, "... could enable most families to prevent the everyday emergency of child malnutrition and child death" (Grant 1987:25).

In emphasizing the need for widespread education in the basic principles of scientifically based health-care techniques, Grant supports the biomedical emphasis of individual rather than social responsibility for sickness. He claims that the key to ending malnutrition is education: teaching the poor how to breastfeed, wean and feed their children, and how to administer ORT. Mothers are his target group. Although acknowledging that mothers need community support, Grant places the responsibility for a child's proper treatment and survival, or the blame for the child's improper

treatment and death, on the child's mother's shoulders. In Grant's biomedical model most deaths can be prevented if mothers are "well-informed": it is the "actions of mothers which can now turn the key to release so many children from the prison of frequent bouts of illness, poor health, and early death" (Grant 1987:34). The ORT radio campaign in Nepal plays heavily on this theme. The scenario of one common advertisement for ORS portrays a mother treating her child incorrectly; she is then reprimanded by a knowledgeable male who tells her and the listening audience about the "real" cause and appropriate treatment for her child's sickness. The problem is located in the sufferer and caregiver, not the overall situation that made that particular child sick.

What little attention Grant explicitly pays to the relationship between economics and health reveals that he holds this to be of little significance. Arguing for the necessity of vegetables twice a day in a child's diet, for example, he states that "they are almost always available to, and affordable by, the majority of the poor" (Grant 1987:25). This is clearly not the case in most of Nepal where, as I have shown, a large portion of the population does not have sufficient resources for subsistence needs. Even if available, vegetables are a luxury item which the majority of the poor cannot afford.

Grant does discuss poverty to some extent and in doing so claims that the powers of science reach beyond the mere curing of disease: he argues that the widespread use of scientific techniques such as ORT will actually help to end poverty. Rather than social and economic development being a prerequisite for improved child health (as I have argued), Grant reverses the direction of causality, claiming that it is improved child health, the result of ORT and other biomedical techniques, that will be a spur for social and economic change (Grant 1987:11). The use of biomedical techniques, he says, "would not be an isolated victory in the war on poverty. ... it would demonstrate in practice how other 'worst aspects' of poverty could be overcome" (Grant 1987:34).

This UNICEF statement on the cause and treatment of childhood diarrhea is cast within the idiom of biomedicine. It locates sickness within the individual sufferer, gives sickness an asocial aetiology, proposes cures and preventative measures for which it assumes no economic barriers exist, and places the responsibility for treatment and recovery on the sufferer or caregiver.

Grant's presentation is perhaps an extreme version of the biomedical viewpoint. Yet in Kathmandu today, this orientation pervades and dominates discourse about the problems of child health in Nepal. All development workers do not, of course, subscribe to this view; and UNICEF and other agencies do have other programs attempting to deal with the problems of nutrition through un-medical measures such as agricultural development. My point, however, is simply that this viewpoint is pervasive and to a large extent accepted even though it propagates an inaccurate and incomplete understanding of the problems of child health.

It was claimed at the outset of this essay that most anthropological research relating to sickness in Nepal is medicalized anthropology: it fits well into the paradigm propagated by those such as Grant who view the problems of health development in Nepal in biomedical terms. Research that is commissioned by development agencies, and much independent work, is designed to locate in target populations obstacles to the introduction of biomedical techniques. Such an emphasis is consonant with practice over the past thirty years. I shall now present a brief outline of this tradition of practice in medical, or medicalized, anthropology. This will be followed by illustrations of how current research in Nepal fits into this tradition.

A compilation of essays edited by Benjamin Paul in 1955, Health, Culture and Community, reveals that at that time anthropology in health development was directed by the biomedical framework. As a popular text, it shaped how such research continued to be done. In his introduction Paul presents a view of health and the problems of Third World health development within the biomedical paradigm:

> In the long run the most efficient method of combating illness is to stop it at its source, to prevent its occurrence in the first place. The health sciences are discovering new means to promote sound health and prevent specific disabilities. The great challenge is to find ways of weaving the discoveries of science into the fabric of daily living. This is a task in community education, or reeducation ... because every human community has developed an elaborate set of ideas, attitudes and modes of behavior in response to the persisting problems of social living ... (Paul 1955:4).

These ideas, attitudes, and modes of behaviour include those relating to sickness. The way to handle health problems Paul suggests is to replace these ideas and modes of behaviour with those based on scientific knowledge. The task of the anthropologist is to find where the resistances to scientific knowledge and practice, the "cause" of illness, reside. The aim is reeducation.

Polgar's delineation of four fallacies limiting the effectiveness of medical-health development has been influential since his writing in 1963. These four fallacies demonstrated that the biomedical model of the "medical" domain did not fit easily into other cultures. Polgar described Third World people as: 1) having health beliefs of their own, they were not empty vessels waiting for new medical knowledge; 2) not necessarily separating "medicine" and "health" from other aspects of their existence; 3) not necessarily deriving all their knowledge from official sources "above" in society; 4) not being all the same. Although this account admits a wider domain of health than Paul's account does, as a plan of research it still locates the ultimate problems of sickness, treatment, and survival in incorrect knowledge.

Recent writings on the anthropologist's role in improving the health status of the poor in the Third World still emphasize this "seeking obstacles to intervention" approach. In a 1984 article on "Appropriate Research for Primary Health Care: An Anthropologist's View", for example, Buzzard argues that the work of anthropologists using the method of participant observation can be useful in "identifying local values and belief systems and making the data

useful to program decision makers ..." The anthropological method is ideal she argues for identifying "potential problems" in "folk beliefs, curing practices, and community social organization" that will "affect the reception of a program by the target group" (Buzzard 1984:276). Buzzard deems survey techniques to be of limited use because they merely confirm that a positive relationship exists between poor health and poverty (Buzzard 1984:276).

In Nepal most commissioned and independent research follows the mandate proposed by Paul, Polgar, and Buzzard. A June 1976 special edition of Contributions to Nepalese Studies, the primary journal of social science research in Nepal (in English and Nepali) was devoted to "Health, Development and Anthropology". All the articles were descriptions of indigenous beliefs about sickness and various modes of treatment including biomedicine. Some (for example, Wake 1976) specifically dealt with the influence of cultural factors on the use of biomedical health services. Other research explores the possibility of using traditional healers in the promotion of biomedical techniques (see, for example, Peters 1979). As described in the introduction, anthropologists reporting the results of research on "medical" subjects in Nepal omit political topics in presenting Nepali views of sickness etiology, describing instead beliefs in causation on the natural, supernatural, or immediate social level.

The research described above is designed to elicit the "native's point of view" concerning sickness. Because it is guided by the biomedical world-view and/or biomedically defined priorities, however, such research does not elucidate political knowledge in connection with sickness. As argued in the introduction, the non "medical" ethnographic literature and my own findings in Nepal indicate that some subjects of this research have awareness of, and concern with, the effects of landlessness, low income, and political process on health. The "native's point of view" is too narrowly defined by the anthropologist's paradigm.

Presenting the problems of health development in the idiom of biomedicine is not without consequence. I will now discuss how this

practice obscures the relationship between politics, economics, and health, thereby helping to perpetuate social relations that inhibit improvement in the health status of the poor in Nepal.

In Part I the arguments of Young (1976(b)) and Taussig (1980) were presented. By combining these viewpoints, biomedicine can be described as an internalizing discourse which locates disease within the body of the sufferer and emphasizes the proximate physical cause of sickness. Social relations that influence the distribution of morbidity and mortality are thereby objectified: the biomedical discourse reifies the signs, experiences, and outcomes of a sickness episode as desocialized facts of nature. Through the process of conceptually internalizing and objectifying sickness, the practice of using the biomedical idiom obscures the political and economic components of sickness.

This objectifying practice helps perpetuate existing social relations in three ways. First, by denying that social change is necessary if health development is to occur, such practice deflects attention from social problems and focuses on problems of individual pathology and action: the message conveyed is that it is the individual body, not the social body, that requires treatment. Second, at a time when there is a demand and expectation for development in Nepal the provision of health services — even though rudimentary and inadequately functioning -- creates the impression of an official willingness to implement reform. Guided by biomedical concepts of health care, however, this image can be created without major political or economic change. It is common in status quo orientated regimes facing potential instability to initiate minor reforms such as Primary Health Care Programs to promote stability (Bossert et al. 1984; Heiby 1981; Cleaves 1980). Third, by having the authority of an "objective" science not only does the biomedical discourse deflect attention from social relations, it also deligitimizes any suggestion that those relations influence sickness patterns. A person's awareness of social influences on their suffering is interpreted by biomedical standards as a misguided

perception of "the facts of life ... irretrievably locked in the realm of physical matter" whose manipulation should be left to science and the doctor (Taussig 1980:5). Medical discourse, taking its authority from science, reifies sickness thus defining alternate interpretations to be "unscientific" or illogical.

In sum then, presenting the problems of health development in the biomedical idiom denies the influence of problematic social relations on patterns of morbidity and mortality. In doing so the biomedical discourse serves to perpetuate social relations that have the effect of inhibiting the improvement of the health status of the poor by: 1) drawing attention away from fundamental problems, 2) providing a discourse and activity that gives the appearance of a committed political will without threatening the status quo or requiring that fundamental change take place, and 3) claiming its objectivity from science, thereby rendering critique, whether explicit or implicit, "subjective" and therefore wrong.

As presented earlier, the work of medical development anthropologists in Nepal is directed by and supports the biomedical model of disease. The anthropological research draws attention to "unscientific" indigenous beliefs and practices about disease and neglects beliefs about the wider context of sickness: attention is drawn to sickness on the individual rather than social level. Medical development research by anthropologists promotes the objectification and mystification of social relations, with all the consequences of such practice as described above.

There are real barriers to carrying out research that attempts to deal with the social context of sickness: most of these derive from the very status quo that benefits from medicalized anthropological research. The Nepali government does not welcome criticism. Academics (Nepali and foreign), people working for aid agencies, and those holding positions in the Nepali political and administrative structures are slow to either criticize the government or object to its policies.

Foreign aid organizations do not sponsor research on the political context of health or ill-health. On the basis of a career as an anthropologist working in development, Foster (1987) concludes that aid organizations consider extra-medical research not only lacking in practicality, but potentially threatening. Foster describes the situation in international bodies such as the World Health Organization. These, he says,

> must be ... sensitive to the organizational and political consequences of all their activities, including research. ...Medical research is "safe" research, because ... its probable findings, if not always predictable, can be controlled and cast in a favourable light ... behavioral research is far more likely to reveal unflattering aspects of the health programs of member nations, and the policies of the parent body itself than is medical research. It is inherently a threatening activity which, if allowed to get out of hand, might do great damage to the organization and its relations to member nations (Foster 1987:711).

Aid organizations in Nepal are not entirely free to set research priorities without support from their Nepali government associates. Given the structure and operating practices of the Nepali government as outlined in Parts III and IV, it is not in the interests of any government employee to support or suggest research that could potentially criticize their superiors or the government itself. Says Justice (1986) in her study of health care bureaucracies in Nepal, the Nepali bureaucrat is

> judged not only on training and on job performance but also on personal affiliation. Familial and interpersonal relationships are critically important in determining the course of his career. Relationships within the bureaucracy are multistranded, personal, and long-term .... Knowing that individual consultants and project schemes come and go in a relatively short time, a Nepali may agree to a program that he knows is inappropriate for Nepal in order to ensure his own job security. (The) typical Nepali administrator cannot afford to take a stand in opposition to government policy, to his supervisor, or to family members that could single him out for reproach. To displease those in power might result in transfer to a less desirable post (Justice 1986:42-45).

Thus research that would threaten the interests of the powerful is unlikely to be supported by those whose livelihood depends on maintaining the good will of their superiors in the bureaucracy. As everyone is less powerful than the King and the King does not condone political opposition, virtually nobody in the Nepali government administration would support a foreign aid agency that wished to promote research on the political context of health in Nepal.

The government's position on the role of intellectuals is clear. The Prime Minister stated in a recent speech that "sincerity, impartial thinking and reason form the very foundation of academic freedom". This impartiality should be used, however, to support the government, promote political stability, and "help materialize the Royal wish of providing the basic needs of the people." This is to be done he says by promulgating the ideals of the Partyless Panchayat System in the schools and university. "The University and its campus are places for academic exercise not political platform" (Rising Nepal, December 13, 1986). The government clearly wishes academic opinion and research to support government policy and rhetoric.

In a review of trends in research supported by Tribhuvan University, Kathmandu, Mishra, a Nepali academic, shows that research is directed by the interests of the government and elites of Nepal. Research at the university is predominantly "'feasibility and impact studies and ... the ubiquitous 'social-economic survey' despite their limited overall significance", "fancy" topics such as spirit possession, and the study of "economics of and for the privileged" (Mishra 1984:2-3). This research he says "has, in general failed to deal squarely with most of the fundamental issues perplexing the everyday lives of the masses of Nepalese people ... landlessness ... labour, poverty ... corruption and the gross political-administrative-professional inefficiency we know is about us" (Mishra 1984:2). Mishra notes that in Nepal there is no tradition of, or place for, critical research.

Even if inclined to do critical research, Nepali academics usually refrain from this to protect themselves and their position. A

self-named "silent participant" said of a development seminar that he attended that often in the seminar the "real" problems of development almost became subject for discussion. But everyone always stopped short of confronting these, being afraid "to take the bull by the horns" (Silent participant 1983:3). This reluctance to speak against dominant interests in order to protect personal interests was also reported by Blaikie et al. commenting on "radical" educated and self-employed people: even these muted their criticism out of self-interest (Blaikie et al. 1980:88).

Foreign researchers must procure visas through Tribhuvan University. Given the types of research supported by the university and the reluctance of its membership to even express support of critical research, there is a real barrier to conducting other than "safe" research in Nepal.

Those who do manage to procure a visa for political or economic research are then confronted with ethical responsibilities to the subjects of their research. Expressing anti-government opinion is illegal in Nepal: people who do so are sometimes imprisoned or otherwise caused to suffer. Yet I found that political opinions were often freely expressed. Should the anthropologist keep field notes of such data, even if coded in an attempt to conceal identities? If a researcher is investigating political subjects how can she present a "report of findings" as the Nepali Government requires and be sure no ill consequences will arise from it? And what of publishing? Working -- as anthropologists tend to do -- in small communities, identities are hard to conceal. Interested governments are able to link fictitious and real location names through visa records. Though wishing to represent the interests of her subjects, both as she and they perceive them, the anthropologist must be ever vigilant about protecting her subjects' immediate interests.

In this section I have argued that the research of many anthropologists working in health development in Nepal is directed by the assumptions of the biomedical model of disease. Accordingly, this

research does not take into consideration the political and economic situation in Nepal when addressing the problems of health development. I have shown, I think, that the political and economic situation in Nepal influences the distribution of morbidity and mortality. I have argued that many people in Nepal are aware of this. By perpetuating the biomedical discourse in Kathmandu, medicalized anthropologists: 1) detract attention from major obstacles to the improvement of the health of the poor, and 2) deligitimate "grass-roots" critique of the existing system. Medicalized anthropologists support a status quo that inhibits improvement in the health status of the poor. I have also shown, however, that the interests of this status quo mitigate against the anthropologist adopting a more critical approach to health development.

CONCLUSION

> I do not wish to talk to you about these things, for my situation is so miserable and I am so desparate that I cannot go on talking of them. It is not words that can change my life, but a change in my country ....
>
> Interview in Nepal, reported in Blaikie, Cameron, and Seddon, 1979, p. 48.

In this essay I have discussed the limited gain and potential harm of health development programs that are planned on the basis of Western ideologies surrounding the sickness domain. Through a discussion of the social origins of biomedicine it was shown that, being ground in science and "reason", biomedicine is popularly believed to be objective and not influenced by social processes. By contrasting medical practice in the West and the Third World, however, it was shown that a large discrepancy exists between this hypothetical model and the reality of socially embedded theory and practice. It was argued that planning health development on the basis of the assumptions of the hypothetical model has lessened the benefits for the poor from expensive, well-intentioned plans.

The case of Nepal was discussed at length. It was demonstrated that in addition to the proximate, physical causes of disease, economic and political conditions in Nepal influence the distribution of mortality and morbidity. Through the description of two cases, land reform and the local level implementation of a water pipe project, it was shown that political processes on the national and local level are important influences on whether the health status of the poor improves, stays the same, or worsens.

The biomedical model does not, in general, include the consideration of social influences on health. As discussed in Part I, some disciplines such as family medicine and psychiatry have always explicitly taken into account social and psychological, as well as

physical, variables in disease etiology. In general, however, the biomedical model locates the cause, site, and treatment of sickness within the individual sick person's body. Accordingly, discourses in the biomedical idiom are not, as popularly thought, ideologically or politically neutral: they embody a very specific view of the nature of disease, one that obscures the relationship between political and economic conditions and patterns of morbidity.

In Kathmandu today, the biomedical discourse is used to discuss the problems of health development in Nepal. It was suggested that this perpetuation of the biomedical world-view has three negative consequences: 1) the political feasibility of plans is usually not considered, 2) elites are provided with an activity and discourse that creates the impression that they favour reform but does not require a fundamental change in the status quo, and 3) the grassroots critique of the existing status quo is invalidated.

Most research by medical anthropologists working in health development was shown to be guided by the perceptions and priorities of biomedicine. It was argued that by conducting this research medicalized anthropologists are supporting a system that has the effect of inhibiting change conducive to improving the health of the poor in Nepal. This very system, however, militates against the anthropologist adopting other approaches.

In concluding I wish to suggest what anthropologists can do to improve the health status of the poor in Nepal. The anthropologist's proposed role with respect to health development in particular will be returned to after a brief, broader discussion of development and what, in general, ought to be done for the poor in Nepal. I hold that, despite the obstacles described in Part V, it is unacceptable for foreigners working in development in Nepal not to promote change in the existing status quo.

Many development workers with whom I spoke in Nepal would argue that change in the existing system is not necessary and should not be attempted. They claim that a powerful elite is necessary to implement development projects and run the bureaucracy; that the wealth that

accrues to the elite "trickles down" to the poor; that the beneficiaries are not wealthy (compared to foreigners) and that in demanding bribes and diverting funds "they're not really doing anything wrong, that's the way things are done here".

This acceptance of the status quo is justified only if any of the following premises are accepted. 1) All people in the Third World have, by virtue of their nationality, a "right" to a share of the wealth of the West. 2) The elite of the Third World have a "right" to use this donation without interference from the donors. 3) The present system will actually get the work of development done. 4) It is morally justifiable to not help and even harm the poor in order to aid the wealthy or not-so-poor.

All these premises warrant an extensive consideration not feasible in this essay. I hold, however, that none provides an adequate justification for a refusal to challenge the existing system. Premises 1 and 2 derive from a Western liberal political philosophy questioned by many (see, for example, Bauer 1981) who would argue that, while it may be permissible to help those who cannot help themselves, it is by no means clear that those already faring quite well have any right to charity. Premise 3 is invalid. As described earlier, the typical Nepali bureaucrat is orientated towards personal goals quite distinct from the completion of particular projects. The fourth premise is to me unacceptable. If foreign aid is given to help the poor, it is the poorest, so trapped in their poverty that they cannot help themselves, that must be aided first.

Change in the existing administrative and political structure of Nepal is necessary if the poor are to be helped to a significant degree. How is this to be attempted? At the start of this essay I argued for the usefulness of looking for obstacles to development in light of the ideologies and practices of Western culture. Following this approach I will now, as a basis for proposing productive action towards change, briefly examine 1) who plans development and 2) how the characteristics of this group — their ideologies and practices —

influence how they plan development. In this discussion I draw from Chambers (1983) Rural Development: putting the last first.

Chambers argues that we people who plan development are members of a class. We are in general, he says, the opposite of those whom we seek to help: we are relatively well-off, literate, urban-based, have sufficient food to eat, and expect to live long lives. Our class exists in every country of the world, including Nepal. We share interests, preconceptions, and preferences and it is these, he claims, that guide how development is done (Chambers 1983: pp. 2-3).

Six orientations of our class translate into biases in how development is planned and implemented. These are 1) spatial: towards the urban tarmaced or roadside; 2) personal: to those better-off, educated, users of services rather than non-users of services; 3) seasonal: towards when the climate is pleasant; 4) diplomatic: not seeking out the poor for fear of giving offense; 5) professional: confined to the concerns of our own specialities; and, 6) project: towards places where there are already projects. These biases keep us in contact and consultation with our own class and effectively distance us from those not of our class, the rural poor (Chambers 1983: 13-23). I have so far emphasized that many obstacles to development in Nepal derive from indigenous political processes. Here I suggest that the selective perception of the members of our class aids those processes: that the routing of resources towards elites is partly a result of our biases guiding us to what we find familiar and comfortable.

As a positive step in planning for the poor, our class should acknowledge that the poor know much about their situation and needs that we are unaware of. The biases noted above should be reversed and planning strongly moderated by knowledge gained through talking to and learning from the poor. Their priorities should be recognized; these will be heterogeneous, as are the poor. How the needs they give priority to are to be met should too, perhaps, be decided by the poor as it is they who must take the risks and do the work. The poor will also be more likely than us to accurately determine the local level

political feasibility of any project. Planning should be based on an exchange of information: on a combination of the poors' knowledge of the local situation and the planner/anthropologist's knowledge of the wider political and development situation in Nepal.

Projects that favour the poor, or are determined by their stated interests are not likely to be well received. The kind of approach that I am suggesting does not have to be directly confrontational. A switch in emphasis, however, could in itself be seen as threatening. International agencies according to Foster (1987) do not want to sponsor program or research that "rocks the boat" and Nepali government agencies are likely to oppose or be indifferent to programs that only help the poor. Centralized planning agencies do not generally encourage input from the poor. Pant (1982), for example, in a report for the Center for Economic Development and Administration, Kathmandu, explicitly denies the necessity of input from the poor and favours what he calls "the technocratic approach" to identifying their needs: the government agency should decide development priorities because "the uneducated masses of the developing countries simply cannot identify their basic needs properly" (1982:1).

This apathy or opposition to pro-poor programs should not be accepted with resignation. Resistance to can be diminished, and enthusiasm for them stirred, by the simultaneous planning of some benefits for elites. But the elite should not be accommodated too generously. Although international aid agencies and their employees act and speak as if the Nepali government is granting privilege to foreign nations by accepting their help, in reality, the foreign agencies are in a very powerful position. The present government requires their presence; they bring revenue into Nepal and by their presence legitimate the current regime. I suggest that the powerful aid agencies and the people who work for them have a responsibility to use their power to rock the boat a little. Foster (1987) points out that they are reluctant to do so for fear of spoiling their relationship with the host nation. But to what end should that

relationship be continued? I claim, as before, that the arguments for the continuation of the present system are of questionable validity.

The Nepali bureaucracy is not the homogeneous monolith that I have presented. There exist what Blaikie (1982) calls the "modern bureaucrats": younger administrators, often educated outside the country, who are committed to change from within. There are local elites who are concerned about the welfare of the poor. These people can be supported and used to great advantage in the promotion of pro-poor programs.

My proposals may appear unrealistic. Such ideas have, however, occasionally successfully guided practice. I attended, for example, a meeting where the budget for the next year's operation of a multi-ministry nutrition program funded by an international aid agency was being planned. An anthropologist was representing the aid agency in the capacity of project coordinator. The budget proposed by the agricultural ministry representative allocated 20 percent of the available resources to promoting a program through which rich farmers would start to grow cash crops for a ready market in Kathmandu. On the basis of the agency's offical mandate, the anthropologist argued successfully for the funds to be allocated to an alternate program that benefitted the poor. The gains may seem small but for the poor they are critical.

Even if there is a shift in planning emphasis towards the needs of the poor, and the interests of elites are accommodated, and only politically feasible projects are pursued, significant change may not be accomplished. Project plans may still be stalled indefinitely in the bureaucracy or adjusted at the local level to benefit elites. Aid agencies may not want to rock the boat beyond explicitly proposing politically feasible programs to help the poor. A positive attempt at change from the top may bring only limited results.

Even with such limited initial success, in the long run an approach that directly addresses and is directly addressed by the poor might bring about a fundamental change at the grassroots level. Development is now usually planned from the top and is shaped by the

biases of both the Nepali and foreign elite. The poor are generally not listened or spoken to, do not receive benefits in proportion to their numbers or need, often do too much work to benefit others and are powerless. Partly because of this they sometimes feel that they do not have a claim to the benefits of foreign aid. They also often feel ignorant: as one man told me, "when I see what you all have, and how you can come and go here, and how I can never go where you go or have what you have, I think maybe that you know everything and I know nothing". Contrary to the common orientation that denies the importance of the poors' knowledge of their own situation, the orientation and method I suggest validates and heightens the poors' critical awareness of their own situation. Talking to the poor with the intention of learning from them -- not learning about these so that obstacles in their beliefs and lifeways can be overcome -- is a process that legitimates their knowledge. This is a positive step to changing their situation, as it validates rather than denies the legitimacy of their desire for change.

What then can anthropologists of both applied and academic orientations do to help the situation of poor Nepalis? Most directly applied anthropologists can promote projects that address the needs of the poor, as in the case described above. On a more general level the applied anthropologist can promote awareness within development agencies of the kind of argument I am making here. Many people working in the development industry who are in a position to influence policy cannot clearly articulate what they perceive to be the priorities of development. Some do not know the priorities of the organization they work for. Many are not aware of the realities of Nepal beyond the Kathmandu Valley: their beliefs are guided by the media and what they read in official reports. Justice reports that some people in policy-making positions are not aware that the newspaper the Rising Nepal is a government sponsored publication presenting an unjustifiably positive view of the progress of development in Nepal (1986:121-122).

In general anthropologists have by inclination or training an ability to communicate with those culturally different from themselves. As I am proposing that the poor should be spoken to, and listened to, there is much scope for productive research by academic anthropologists. The view from the bottom needs to be documented. Cases of the poor suffering rather than benefitting from development projects should be documented from the point of view of the poor. Much of the poor's knowledge -- of their physical and social environment as it effects the attainment of basic needs -- can be best learnt by a method anthropologists are very familiar with: spending time with people and listening.

Alternatively, the academic anthropologist can conduct research on the familiar: the foreign aid organizations themselves as Justice and Foster have done, seeking in the assumptions by which these operate, barriers to effective development planning for the poor.

All these orientations can be dangerous for the anthropologist, and can definitely be against their own career interests; the unorthodox anthropologist may not be re-hired by agencies or may not be granted a visa to conduct research. The alternatives are either to support the system that has the effect of inhibiting aid to the poor, or simply to not work in development at all and by default let the present situation continue. Once committed to working in development, I hold that the anthropologist has a responsibility to do what virtually no-one else is willing to do: attempt to challenge a system that does not, as it claims, help the poor.

The approach I propose could potentially be dangerous for the Nepalis who voice their opinions through an anthropologist. Nothing needs to be reported that is directly critical of the king or the Partyless Panchayat System. Information gathered can be innocuous, dealing with, for example, local agricultural knowledge -- topics such as which varieties of potatoes grow best on particular slopes (there are significant differences) -- rather than finding out how to persuade people to grow cash crops. On the more controversial level, protecting those who report specific instances of exploitation or

diversion of funds is more problematic. The point, however, is to gather information to plan more effectively for the poor, not to publicly announce specific cases of corruption.

Raising the critical consciousness of poor Nepalis may be seen as an unwarranted imposition of Western ideology. I have argued in the introduction, however, that Nepali and Western spheres of awareness are not completely separate. I do not propose inciting people to revolution; I propose that indigenous knowledge not be delegitimated. We Westerners are already influencing the thoughts of Nepalis: not to promote Nepalis' awareness of their own situation is to act to let it be delegitimated.

My discussion shows the question "what can anthropologists do to improve the health status of the poor in the Third World?" to be misconstrued. The question reflects the Western biomedical ideology that distinguishes health as a realm apart from politics and economics. Substantially improving the health status of poor Nepalis requires programs that address their basic needs as they see them. This may eventually require a change in their political status or even a fundamental change in the political and economic system of Nepal. Research on western society (McKeown 1977), Japan (Jannetta 1987), and China (Sidel and Sidel 1973), shows that factors such as improved nutrition and political change -- not the introduction of biomedicine -- have been responsible for raising the health status of a population. Likewise, improving the health status of poor Nepalis depends on change in extra-medical factors.

Even for the poor in the Third World some biomedical techniques are effective and should be available and used if possible. Oral rehydration salts, immunizations, cataract operations to restore sight are all of potential benefit to the poor. What is important for the anthropologist to influence is where these are available and how they are presented. Anthropologists can work against biases that make resources available primarily for the elite. Anthropologists can also work to ensure that these be presented for what they are: primarily treatments for symptoms not causes. I suggest that biomedicine be

presented simply as physical techniques without the cosmological baggage that separates disease from the social conditions of its occurrence, thereby delegitimating indigenous knowledge in connection with the influence of politics on sickness. This indigenous knowledge should not be invalidated as it could potentially inspire action towards the fundamental societal changes necessary for a sustained substantial improvement in the health status of the poor in Nepal.

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