

Introduction

I have read with interest some of the contributions to the discussions about Chinese medicine on the Chinese Herbal Academy (CHA) listserv and am keen to comment on some of the issues currently being discussed. CHA listserv is a medium for informal discussion. While it provides individuals with a way of sharing their opinions within a wide circle of people, it has its obvious limitations. I prefer to use the medium of academic writing, which encourages authors to think out their ideas before they publish them, to provide a balanced and objective view based on adequate and publicly available data, and to ensure a maximum degree of consistency of argument. Debate on fundamental issues ideally progresses toward agreed views and solutions to problems. For debates to do this effectively, participants must state their views comprehensively, coherently, and clearly. I believe that this kind of stringency is lacking in the field of Chinese medicine and that discussions have already been going around in circles for decades with little result. I am convinced that we could quickly clear up many of the questions about Chinese medicine if the various positions were explained clearly so that everyone could discuss them with a full awareness of the issues. For this reason, instead of commenting on statements by individuals in the regular discussion list fashion, I prefer to present my contribution to CHA more formally. I offer four papers concerning fundamental issues relating to the nature of Chinese medicine and how we can best improve our understanding of it.

In the first paper, which is entitled *Westerners' Alternative Health-Care Values Eclipsing a Wealth of Knowledge*, I question certain widely held views about Chinese medicine, namely that Chinese medicine is natural, holistic, caring, nonmechanistic, and even spiritual in nature. In discussions of Chinese medicine outside of Asia, these qualities are often tacitly assumed as facts. In this paper, I trace many of these assumptions to influences of the desiderata of alternative health-care, which tend to define Chinese medicine as being what Western medicine is perceived not to be. Assumptions concerning the spiritual nature of Chinese medicine, I trace to the influence of spiritual traditions of the Orient that have enjoyed popular attraction together with Chinese medicine. In the second paper, entitled *Why the Fuss About Terminology?*, I argue why we need to have a full set of equivalents for English terms that are related to the Chinese, and how failure to attend to terminological needs has led to a loss of information in the translation process. The third paper, entitled *English Translation of Chinese Medical Terms: A Scheme Based on Integrated Principles*, is the English version of a paper submitted to a PRC journal. It discusses the principles of translation that apply in other fields and how these can be applied to Chinese medicine. This paper is a synopsis of translation arguments that I have presented before, but it places emphasis on the need for integrated principles, a notion that has been neglected by PRC term translators. The fourth paper, *Against Anti-Terminology*, is a critique of certain approaches to translation in the West and of the assumptions underlying them. Western notions that Chinese medicine is principally a clinical skill learned from clinicians rather than clinical skill based on a large body of book knowledge have been fostered to protect certain political interests and to the neglect of the advancement of Chinese medicine. Like the series of papers I presented at the 2002 Pacific Symposium in San Diego entitled *Transmission and Reception of*

Chinese Medicine: Language, the Neglected Key, the present four papers are intended to be provocative.

Westerners' Alternative Health-Care Values Eclipsing a Wealth of Knowledge

Nigel Wiseman
Chang Gung University, Táiwan

Issued on Chinese Herbal Academy Listservice, August 1, 2002

It is generally held that Chinese medical knowledge is different from knowledge in other fields, notably the modern sciences and the West's scientific medicine. Of course, Chinese medicine is different in numerous ways, but it is naturally important for us to understand *precisely in what ways*. As an alternative to Western medicine, Chinese medicine has often been characterized as being what Western medicine is perceived not to be: natural, holistic, caring, non-reductionistic, non-mechanistic, etc. I believe that failure to scrutinize these characterizations (and the reverse characterizations of Western medicine) together with the failure to gain linguistic access to primary sources has hampered the English-speaking community's understanding of Chinese medicine and impeded progress in the development of Chinese medicine in the West.

1. Western motives for adopting Chinese medicine

Western interest in Chinese medicine has undergone considerable growth over the last couple of decades. Why patients are turning to it, why people study to be Chinese medical practitioners, and why there are even modern medical doctors (MDs) combining Chinese therapies with conventional ones are highly complex questions. The phenomenon of alternative health-care is seen all over the Western world, and conditions for its development appear to vary from one country to another.

Despite the complexity of the matter, there are certain general observations to be made. The West has its own medicine, an extremely powerful medicine, and one that has been adopted all over the planet (at least by government planners). Western medical science has had a greater impact on human health and sickness than any other known form of medicine. People in the industrialized countries of the West live much longer than people in most (but not all) agrarian societies. It has reduced the incidence of many diseases by preventing the transmission of the

entities that cause them through demonstrating the need for hygiene and sanitation. It has powerful drugs to treat transmissible diseases when they arise. With the development of anesthesia, Western medical science penned a whole new realm of intervention that traditional medicines never had.

Despite all its achievements, modern medicine has failed to satisfy everyone completely. Consequently, people have been looking elsewhere to find cures for their illnesses. They have been looking not just to Chinese medicine, but also to homeopathy, osteopathy, Bach flowers, aromatherapy, reflexology, naturopathy, and numerous other alternative (or complementary) therapies. Of course, it may be that people now have more money in their pockets to spend on a wider variety of cures and health-enhancing products and services. How much the turn toward alternative therapies has affected business in conventional medicine is hard to tell. The fact that the use of prescription drugs in the United States, for example, has been growing at the astonishing rate of about 15–18% per annum for the past several years indicates that even if Western medicine is losing some business to alternative therapies, it is still a major growth area.

People are not simply buying extra amounts of health outside the modern medical market. Within Western society there is a deep-rooted dissatisfaction with certain key aspects of modern medicine itself. The recent popular movies *Patch Adams* and *Wit* characterize Western medicine unequivocally as being focused on the treatment of the diseases to the neglect of care for the individual human beings suffering from them. This is obviously a characterization that everyone can understand.

The dissatisfaction has arisen quite clearly because Western medicine has become highly specialized, impersonal, and mechanized. Sophisticated though it is, modern medicine is perceived by increasing numbers of people as being rather harsh and brutal in its treatment (e.g., surgery, antibiotics, chemotherapy). People are aware that Western medicine is scientific in nature, and judgments of Western medicine are naturally influenced by other manifestations of science and technology in our world. It is easy for people to see that the unbridled use of technology for short-term gains is pushing ecological balances to dangerous limits and has similarities with equally short-sighted practices in modern medicine. Just as modern man seeks prosperity by stripping the biosphere of plant-life and is choking what is left to death, he bulldozes his way to health with powerful drugs that reap their toll not only on the individual but on the community as a whole. The dissatisfaction with Western medicine is not the only reason why people have turned to alternative therapies, but it is one of the main reasons. I think that everyone generally accepts this, so I have no need to labor the point.

Alternative health-care practices are alternatives (or complements) to Western medicine. People like them because they are different from Western medicine. In particular, people like them because they perceive them as being natural, holistic, and more caring, as well as being void of reductionistic and mechanistic views of health and sickness. Some even regard them as being spiritual in nature. Chinese medicine is arguably the most popular alternative health-care practice. This may be so because it is a comprehensive body of medical knowledge that offers different treatment modalities and addresses numerous conditions. More importantly, though, people appreciate Chinese medicine because it views health in terms of balance in bodily functions. While Western medicine treats many conditions primarily by killing the offending pathogen, Chinese medicine focuses on the whole situation of an individual affected by disease.

Although there are medicinals that attack evils assailing the body, Chinese medical treatments almost invariably include actions to restore normal functions and correct imbalances. The difference is that Chinese medicine addresses not the disease, but the patient affected by the disease. That, again, is a point I think many already accept.

It is the underlying ideas of a medicine that attract people to it. Acupuncture, for example, is attractive to Westerners not only because of the exotic notion of inserting needles in the flesh, but also because it seems to work simply by adjusting qi flow to restore bodily functions. As far as we know, nothing is introduced that is not removed before the treatment is complete, so acupuncture appears to be the holistic treatment par excellence. Until recently, at least, acupuncture has been virtually equated with Chinese medicine in the West, whereas in China it was long ago eclipsed by medicinal therapy. When Westerners decided to adopt acupuncture, they did so because they liked the idea of acupuncture. They did not say, "Let's examine what the Orient has to offer in the way of medicine, and see which of their treatment modalities Orientals consider to be most effective." Rather, they chose the therapy with the most attractive philosophy. The attraction to any medicine is the same. People don't necessarily go for Western medicine because they consider it more effective than any other available treatment. Many people know that Western medical treatments are carefully devised to produce effects—both good and bad—that are as predictable as possible, but probably many people just accept the treatment because it is based on science rather than quackery.

2. Stereotypes associated with alternative medicines

People accept a kind of medicine because they accept its fundamental approach. Many Westerners have come to like Chinese medicine because they see it as possessing the qualities of naturalness, holism, and caring that they feel are missing in Western medicine. These qualities are considered desirable not only because they are seen to be lacking in Western medicine, but also because they are seen to be lacking in industrialized societies as a whole. Furthermore, these qualities are considered to be so desirable and so generally acceptable that many Western doctors have become interested in alternative health-care therapies such as Chinese medicine.

Like everyone else, I hold the qualities of naturalness, holism, and caring to be desirable and find it quite easy to see how these ideals have become associated with Chinese medicine. Nevertheless, I believe that it is important to realize that they are essentially desirable qualities felt to be missing in Western medicine. It would be wrong to assume Chinese medicine to possess these or any other qualities simply on the grounds that they are sadly lacking in some other form of medicine. What we today call Chinese medicine came into existence over two thousand years ago, in response to conditions of that time. It did not develop to suit the taste of people dissatisfied with Western medicine in the 20th and 21st centuries. If we are to understand Chinese medicine, we don't want our expectations to cloud our understanding. In view of this, I believe that it is extremely important to understand precisely to what extent and in what way these qualities actually apply to Chinese medicine, and how much they are lacking in Western medicine.

2.1 Natural and holistic?

Naturalness is one of the chief qualities of Chinese medicine that appeals to Westerners. Chinese medicines are natural products subjected to minimum processing. From the pharmacological point of view, they are much more complex than synthetic drugs, and hence have a gentler effect on the human body. Nonetheless, the quality of naturalness has to be qualified. “Natural” is often taken to mean harmless, and we know that Chinese medicines are not entirely harmless (at least when they are abused, as certain governmental bans attest). Quite a few substances, such as cinnabar, tabanus, and datura, are toxic unless used in very limited quantities; and others, such as members of the *Aristolochia* family, are dangerous if used to excess. Most Chinese medicinals are natural products, but there is nothing natural about eating bat’s droppings, flying squirrel’s droppings, or products containing human feces or urine. It is not any more normal for the Chinese to eat insects such as screwworms and wall spiders, or animals such as worms and geckos, or industrial products like iron filings and tannery tar than it is for us. Acupuncture is considered harmless in the sense that it introduces no foreign matter into the body. Nevertheless, it has to be admitted that the act of sticking needles in people’s flesh is highly unnatural, and in fact the bizarreness of this treatment probably lies at the root of its popularity in the West.

The claim that Chinese medicine is holistic also invites critical scrutiny. Holism has many definitions: it can mean treatment of the person as opposed to treating a disease; treatment of causes rather than symptoms; addressing spiritual, mental, and emotional needs as well as physical problems; preventing disease rather than curing it. By none of these criteria are alternative health-care therapies exclusively holistic, nor do they have an exclusive claim to holism.

The notion of treating the person as opposed to just treating the disease is a major feature of Chinese medicine. Nonetheless, complementary medical treatments are very often symptomatic.¹ Both acupuncture and medicinal therapy include symptomatic treatments. This is not just some inferior practice that exists beyond theory. Chinese medicine has specific rules for “treating the tip” (治标 *zhì biāo*) of a disease, which include secondary aspects such as symptoms.

It has been pointed out that the analysis of spiritual, mental, and emotional problems in some alternative therapies is simplistic.² In fact, no medicine has anything to compare with the sophistication of Western psychology. Chinese medicine ascribes emotions and mental states to individual organs and holds that disease of the organs due to emotional excesses can be relieved by controlling the emotions and changing lifestyle and that emotional tension can be relieved by treating the organs that they affect. There is no effort to trace psychological problems to root causes. For Westerners, the Chinese approach to emotional and mental problems is holistic because it is seen to be based on the notion of the unity of body and mind. Those who are critical of it see it as one of the numerous dubious applications of five-phase theory to the human body. They also see it as being impractical: on paper, emotions and mental states have clear correspondences to the viscera (one reason, perhaps, why they are attractive), but in clinical practice they are not so easily recognized. The significance of dreams discussed briefly in the *Nèijīng* naturally forms an attraction for Westerners. Nevertheless, it did not constitute a major

point of interest for subsequent generations of physicians in China, and it is one of the many ideas in Chinese medicine that has been left by the wayside.

One reason why the body-mind aspect of Chinese medicine theory (the association of affects with the organs) was never developed may be because patients are reticent about their internal lives. Arthur Kleinman, in his *Patients and Healers in the Context of Culture*,³ describes in some detail the tendency among Chinese people to somatize their psychological problems because bodily illness is the only socially acceptable outlet for them.

One meaning of holism is treating the whole person as opposed to killing the particular offending entity causing the disease. Although treatment tends to restore harmony in the body, the Western medical notion of “killing offenders” is not at all alien to Chinese medicine. In Chinese medicine a vast number of conditions are understood in terms of a struggle between evil qì and right qì, i.e., between an offender and the forces of resistance. The treatment of such conditions usually includes the principle of “dispelling evil” as well as that of “restoring right [qì].” Five of the eight methods of treatment proposed by Chéng Zhōng-Líng of the Qīng Dynasty—sweating, ejection, precipitation, clearing, and dispersion—are all designed to eliminate evils from the body. The actions of dispelling evil are described in the metaphors of war in the same way as they are in Western medicine. It has been pointed out that the emergence of these war metaphors in Chinese medicine predates their appearance in Western medicine by two millennia and that such metaphors have not appeared elsewhere in world medical history.⁴

The qualities of naturalness, holism, and caring are not the exclusive property of Chinese medicine or other alternative health-care practices and can be found in Western medicine. While natural, i.e., non-synthetic, products are now no longer frequently used in the Western armamentarium (note again this traditional metaphor—armamentarium means “store of weapons”), one cannot deny that the science of medicine is holistic in the extreme. All of the knowledge concerning the human body is totally integrated. Bits of knowledge that do not fit the integrated whole are continually questioned. Modern science always aims to explain reality in toto, and modern medicine tries to explain health and disease in a comprehensive and integrated way—in a way that fits the integrated picture of the universe that science constantly strives to achieve. Why Western medicine is considered to be unholistic is because a proctologist looks only at your fundament and an oncologist only at your tumors. The problem there is with the application of science, not the science itself. If we are trying to be objective about things, we should not stereotype medicines any more than we should stereotype people. To do so is to be unholistic.

2.2 Caring?

The caring issue is an important issue and illustrates how important it is to not make generalizations. Holistic therapies are regarded as being effective because they are performed by practitioners who take the time to talk to patients and understand their health problems as a whole. The holistic, alternative health-care practitioner has to gain the confidence of the patient, understand all of the problems affecting the patient's health, explain the relationship of lifestyle habits to the present state of ill-health, and enlist the patient's will-power in the restoration of good health. All this is pretty sensible. These are principles that practitioners of Western medicine would also agree to wholeheartedly—at least in theory. The problem with Western

medicine is that its practice has become largely dominated by the notions of efficiency that guide the management of industrial enterprises. The Western medical practitioner tends to ignore the patient because, given the nature of Western medicine, the patient generally has little to contribute to the process of diagnosis and treatment other than presenting his/her "chief complaint." Physicians tend to develop an attitude that keeps the patient's interference in the process of "medical management" to a minimum. Alternative health-care modalities differ because instead of trying to shut the patient up, they respect the patient and try to encourage mutual respect and openness to effectively solve the patient's problems.

Doctors in the West traditionally learned about "bed-side manner." This has by no means been abandoned. Efforts to provide better human care for patients are seen in numerous aspects of modern medicine, such as hospital management, nursing, and the creation of special facilities for certain kinds of patients (e.g., hospices for AIDS patients); efforts like these show that in some ways Western medicine has made some effort to restore traditional caring. Nevertheless, patients disgruntled with modern health care include among their complaints about Western medical "management" the aloofness and coldness of the physicians who are supposedly caring for them. The art of bed-side manner has undergone development, but the general economic environment that Western medicine has placed itself in leaves little attention for the suffering patient. With third-party payers assigning between five and seven minutes to a patient interview, physicians themselves have become strong critics of assembly-line "patient management." Caring in Western medicine is a "specialized task" ascribed to nurses, who are traditionally females (while doctors are traditionally males), even though there is no evidence to show that nurses are more caring than other professionals.⁵ The doctor is a technician, often highly paid and usually overworked, who does not have any time for caring.

In China healers were always mostly male (Western scholars have analyzed historical documents of back-door female physicians, which are very interesting). When a person is hospitalized in the People's Republic of China or Tái wān, it is accepted that family members will at all times be allowed to attend the patient. Family members will attend to bodily functions and sleep next to the patient. Illness is a family matter. Chinese nurses don't normally deal with bed pans and the like. The Chinese philosophy is that human care for patients is a matter for those closest to them. The Confucian doctrine, which dominates Chinese society even in "communist" mainland China, is that the greatest goodness that human beings naturally possess is exemplified by their natural love of their children, and the first rational development of that goodness is to show the same love to elders in their natural and eventual physical decline. For a Chinese person inspired by Confucian ideals (and Chinese people in general do not want to extricate themselves from this ideal any more than Westerners want to extricate themselves from the Christian doctrine of love even if they do not go to Church), all love and kindness shown to all fellow human beings is nothing more than the extension of the love people learn to express for their parents. Family care for the patient rests on deep-seated Confucian beliefs.

In Chinese culture, family corresponds to the position held by the nurse in an industrial-age Western medical hospital. But what of the traditional Chinese medical practitioner himself? Was he (much less commonly she) more caring than Western physicians are perceived to be? There is no straightforward answer. In China, a physician's services were always paid for privately, so a friendly, warm-hearted physician was likely to be more financially successful than one who was not. Chinese medicine as traditionally practiced in China differs by the absence of

the sterile environment, the absence of paraphernalia used in modern Western medical care, the absence of any testing procedures, the general absence of any attempt to invade one or another of the patient's orifices. The biggest difference by comparison with modern biomedical care is that the patient resorting to medical care was helped by a single physician at any one time, not by a team or a "system."

A Chinese doctor typically encountered his patient in his shop, which would be furnished with medicine chests and pervaded by the unique smell of Chinese medicinals. He encountered the patient as one individual to another. He would often have family members or hired help dispensing medicines, but for the patient the medical consultation was mostly an encounter with a single individual, unarmed with scopes and probes. Diagnosis in Chinese medicine is based on naked-sense observations and on inquiry (the four examinations). One of the four examinations is inquiry, which involves extensive dialogue with patients about their condition. Of course, a Western doctor might argue that patient accounts of their own conditions are less reliable than laboratory tests. It is very hard to argue against this. And of course Chinese medicine traditionally had to rely on information provided by patients in the absence of such tests. Nevertheless, this apparent "backwardness" of Chinese medicine comes to be a strong point when dealing with Western patients who like to be asked more than "How do you feel today?" (a theme that runs through the motion picture *Wit*). As to the treatment the patient received, it usually came in the form of packets of dried medicinals, all of which were recognizable as coming from animals, vegetables, and minerals and some of which the patient would have known by name. The packets of medicine would often have been accompanied by exhortations to eat or avoid eating certain foods and drinks. The patient would take the medicine home and brew it him or herself, thus participating in the act of healing. In so many aspects, the encounter would have been far less alienating than an encounter with modern medicine.

While the average traditional physician in China may have been friendly, he was probably not effusively solicitous and caring, except perhaps for his wealthier patients. Traditional Chinese doctors were expected to be knowledgeable, not caring. Furthermore, in China doctors never had the same elevated social status as physicians in the West, so it would have been unusual for them to be aloof. Their job was to provide specialist knowledge, not to spread love and kindness. Indeed, patients were often happier when the doctor did not ask too many questions. Chinese medical literature is replete with warnings not to rely wholly on pulse diagnosis. The frequency of these warnings over the centuries obviously means that were lots of physicians who did just that! And indeed this is what their patients expected. For me this is quite easy to understand, because, living in Tái wān, I regularly hear about it from my physician friends. Still today, some patients will judge a doctor on how well he or she (many of them nowadays being female) can evaluate the condition just by feeling the pulse. A commonly held belief is that if the doctors have to ask too many questions, they probably don't know their stuff.

Today in the PRC and Tái wān, larger hospitals tend to place little emphasis on time and care for the patient. While I was working at the outpatient clinic and inpatient wards of Xiàmén Chinese Medical Hospital, I observed that the emphasis was on being able to handle patients in almost an assembly line fashion. In Tái wān, with the introduction of national health insurance coverage for Chinese medical care, many large hospitals have opened Chinese medical departments. Here it is not unheard of for patients to be accorded a two-minute interview. However, the many private clinics in Tái wān provide better service and allow more time for each

patient. Amongst the Chinese in general, however, there is little of the hand-holding care that many Western practitioners like to offer. This is a cultural thing.

Of course, I am not trying to say that Western practitioners of Chinese medicine should not bother about being so caring because Chinese physicians traditionally may have had different standards in this respect. Patients should be given what they need with a good dose of what they want because health care is, after all, all about making people feel good. Nonetheless, when we are trying to define Chinese medicine as being characterized by certain specific qualities, we should look to its homeland to view it in its own native social context. My understanding is that in China in the past, the average physician might not have been much more caring than a modern Western doctor is, but the patient would have experienced the encounter with the health-care world as being less awesome and unnerving than our contemporary encounters with Western medicine, largely because patients were attended to by a single person, whom they would have usually found eager to engage in the investigation and resolution of the problem. The patient was never pushed aside while the doctor looked at the disease. Caring is thus to a certain extent built into Chinese medicine, even though it by no means eclipses the technical work. It is probably fair to say that conscientious physicians put most of their care into accurate diagnosis and effective treatment.

2.3 Non-reductionistic?

Many people seem to see a holism in Chinese medicine that is completely antithetical to the reductionistic and mechanistic nature of Western science. Let us take a look at this idea.

Reductionism is a way of understanding an object or a phenomenon in terms of its component elements. It is an approach to problem solving that seeks knowledge by reducing a problem to its essential and testable elements. (Note that the term reductionism is also used in the sense of “the practice of oversimplifying a complex idea or issue to the point of minimizing or distorting it.” This is not what is meant here.) Reductionistic thinking is often called analytical thinking. It is the opposite of analogical thinking, understanding things by likeness with other things.

It is important to understand that although reductionism is a fancy word that was originally devised to describe epistemological approaches in scientific knowledge, it is not a way of thinking that is confined to science. Reductionism is a natural approach to problem-solving that all human beings use. When a doctor tells us we have an allergy probably caused by food and that we have to determine which is the offending item so we can eliminate it from our diet, we engage in efforts to limit the variety of foods we take at one time to narrow the field down until we find it. This is reductionism.

Reductionistic thinking has become a chief object of attack from adherents of alternative medicine, largely because it is responsible for increasing specialization on the one hand and for use of drugs that have highly specific targets. The arguments against reductionism are thus part of the holistic case for alternative therapies.

Reductionism is the type of thinking most commonly used in the modern sciences, but it is not the only method they use. The notion contained in scientific procedure that demands a

hypothesis to be proven allows that any hypothesis, not just a hypothesis produced by analytical thinking, is a valid starting point. Although reductionism characterizes the day-to-day thinking of the modern scientist, many important discoveries are not born out of reductionistic problem-solving at all. A classic example is the principal scientific discovery of the 20th century, namely relativity. Although it incorporates a healthy helping of reductionistic thought, the discovery itself stemmed from a global reconsideration of various fundamental patterns of physical universe organization. Buckminster Fuller⁶ speculated that this global shift in Einstein's point of view and thinking arose, at least in part, out of his experience as a clerk in the patent office in Switzerland where he naturally would have been reading a large amount of information about time, the Swiss being famous inventors of timekeeping techniques. Einstein himself confirmed this observation in the 1930s when the two of them first met.

It would be wrong to think that Chinese medicine is void of reductionistic thinking. If we examine the basic theories of Chinese medicine, we find both analytical and analogical thinking. What we now recognize as "Chinese medicine," which is only one strand in the history of medicine in China, came into being when people began to understand that illness was not caused by evil spirits and the like, but that health and sickness—like all other phenomena—could be understood as conforming to certain patterns, not equal to, but not entirely dissimilar to, the notion of natural laws in Western science. Awakened to this idea, they realized that the human body was composed of different parts and that each part performed certain functions. Health was a state in which each part performed its function correctly and sickness was a state arising when these functions were disturbed by one factor or another, such as exposure to the elements, unseasonal weather, dietary intemperance, etc. Inherent in this new view of health and sickness was the idea of breaking things down into component parts, i.e., reductionism. The body was composed of numerous organs which were believed to perform specific functions.

How did the ancient Chinese know what functions the internal organs performed? Everyone knows that people need to eat to survive, and that ingested food is processed in the body and discharged at the anus. Simple dissection of the body would show the existence of a tube running from the mouth to the anus. So it was easy to conclude that each part of the digestive tract had a hand in processing ingested food. The functions of the lungs, the urinary bladder, and to a certain extent the kidneys could also be understood by simple dissections. It is absolutely no surprise that the Chinese came up with basic ideas about the workings of these organs that are generally similar to the functions understood by Western medicine. The understanding of the organ function thus far described is as much reductionistic in Chinese medicine as in Western medicine. The difference is that Western medicine pursued the approach further, and with the invention of the microscope was able to discover that organs were composed of smaller parts, themselves composed of cells, and that cellular and later molecular biology helped to explain how the organs worked in much greater detail.

Reductionism does not account for the whole of the Chinese model of the body. It would have been possible for the ancient Chinese to work out that the kidney produced urine. Human experience tells us in what location urine accumulates, and simple dissection would reveal the presence of the bladder at that location. The existence of a tube (the ureter) running from the kidney to the bladder would easily allow the deduction that urine is produced in the kidney and then transferred to the bladder for storage pending discharge from the body. But in Chinese medicine, the kidney is ascribed not only the function of urine production, but also that of

reproduction. This function cannot be accounted for by reductionism, and it is not a kidney function recognized by Western medicine.

This item of knowledge was obviously supplied by the five phases. While the water phase was most likely ascribed to the kidney on the basis of urinary function, the reproductive function was ascribed to the kidney on the basis of the five-phase associations of water. Water is associated with winter, when after the purging frosts of autumn, nature withdraws into itself. Animals hibernate and plants survive in the form of seeds, which are the essence of plant life, its blueprint, that allows plants to regenerate when the warmth of spring arrives. The kidney is traditionally said to store essence, which is the seed of life contained in semen that triggers reproduction, and which, as a basic substance of the body, explains the development of the body in youth as well as the gradual decline of the body in old age. By a process of five-phase analogy, Chinese medicine was able to insert reproduction in its own framework of understanding. The reproductive function is explained in terms of the water phase, but we should not forget that the ascription of urine production to the kidney that provided the basis for associating the kidney with the water phase was the result of reductionism. To attempt to reduce Chinese medicine to purely one kind of thinking is futile and does not help our understanding of the subject. To deny reductionism means to incur the error of reductionism in the other sense of the word, that is, of oversimplifying a complex problem. Thus, those who put forth the view that Chinese medicine is simply non-reductionistic demonstrate a decidedly reductionistic approach to understanding the subject.

2.4 Non-mechanistic?

Closely associated with the concept of reductionism is that of mechanism, the attempt to explain things in terms of mechanics. Actually, the word mechanism has different meanings. *Random House Webster's College Dictionary* gives seven definitions, of which two are applicable in our present context: (1) "the theory that everything in the universe is produced by matter in motion;" (2) "the view that all biological processes may be described in physicochemical terms." The *New Shorter Oxford English Dictionary* gives as one definition "the doctrine that all natural (esp. biological or mental) phenomena are produced by mechanical forces." Of course, it is possible to define mechanism (mechanistic doctrines) as the view that everything can be described by analogy to machines, but no dictionary I have consulted gives that definition. Western medicine is often characterized as describing the human body and the processes of health and sickness mechanistically, whereas Chinese medicine deals directly with the dynamics of life processes. This is obviously related to the observation that Western medicine has gained much of its knowledge by studying corpses, while Chinese medicine studies live human beings. Nevertheless, Western medicine depends heavily upon medical statistics derived from living populations.

The notion that Chinese medicine is non-mechanistic simply does not hold water. Take for example the channel and network vessel system. It is not known exactly how the concept of the channels was born. There is no objective physical evidence of them, and whether kinesthetic experience played a role in the development of the idea is still unsure. Most of what we know about the channels is by descriptions of them in the traditional literature. The nomenclature of the channels is overwhelmingly characterized by the presence of water metaphors. The concept of the five transport points—the well, brook, stream, river, and uniting points—is based on the

assumption that the channels they are located on are like the course of a river flowing from the source to the ocean, i.e., in terms of water mechanics. Water metaphors abound in the *Nèijīng*, as the list below shows. It is likely that the comparison with water systems in the environment provided not merely a useful metaphor by which to describe and name the concepts, but may well have played a role in the birth of the concept itself.

Water Metaphors in the *Nèijīng*

(from Unschuld, *Medicine in China: A History of Ideas*, 1985⁷)

湖 *hú*, 'lake'
 海 *hǎi*, 'sea'
 泽 *zé*, 'marsh'
 池 *chí*, 'pool'
 泉 *quán*, 'spring'
 源 *yuán*, 'source'
 渊 *yuān*, 'deep source', 'abyss'
 荣 *yíng*, 'brook'
 漳 *zhāng*, 'river'
 川 *chuān*, 'stream'
 流 *liú*, 'to flow'
 溜 *liū*, 'flow'
 灌 *guàn*, 'pour'
 溉 *gài*, 'irrigate'
 注 *zhù*, 'pour', 'flow'
 泻 *xiè*, 'drain'
 滞 *zhì*, 'stagnate'
 渗 *shèn*, 'percolate'
 渠 *qú*, 'ditch', 'channel'
 读 *dú*, 'ditch', 'sluice'
 隧 *suì*, 'underground passage', 'tunnel'
 冲 *chōng*, 'thoroughfare'
 输 *shū*, 'transport'

It is quite natural for blood and qì activity to be described in terms of water flow. These two terms are water metaphors par excellence. When we talk about qì stagnation, we are using a water metaphor. The Chinese for stagnation, 滞 *zhì*, contains the water signfic, a visual reminder of the character's water inspiration. The English word "stasis" is not a close literal translation of the Chinese. The Chinese 瘀 *yū* appears to have been derived from a character of the same sound, 淤, 'silting,' with the water signfic changed to an illness signfic (implying a pathological phenomenon in the body analogous to silting in rivers).

A good example of a mechanistic understanding of a treatment procedure is "open and closed supplementation and drainage" method in acupuncture. According to this method, draining is

performed by waggling the needle before removal to widen the hole and let the qì escape, while supplementation is achieved by pressing the insertion point after needle removal to keep the qì in the body. The description of the method implies that qì in the channels is like steam creating pressure in a closed cooking pot, or to choose a modern image, like air compressed in a car tire.

Given the importance of qì in explaining bodily functions, analogies to water mechanics pervade the realm of physiology and pathology. Qì, for example, normally moves downward, and when it stops, it tends to move counterflow. Counterflow of stomach qì is characterized by vomiting or nausea, while counterflow of lung qì is characterized by cough or panting. In both cases, the analogy is to a blocked river with the water accumulating behind the blockage and backing up. In Chinese the word for counterflow is 逆 *nì*, whose primary meaning is “going upstream” or “going against the flow.” It also has many metaphorical usages, such as “adverse” and “rebellious.” Some translate the notion of 气逆 as “rebellious qì,” which obscures the concept. In Chinese literature, the behavior of qì is described in water metaphors (e.g., qì stagnation, 气滞 *qì zhì*). The translation of 气滞 as rebellious qì is based on a secondary social metaphor that is entirely without substantiation in the context. If qì were “rebellious,” it would be possible to state what it is rebelling against. The term is much better interpreted by its primary meaning.

Of course it could be argued that water metaphors are natural metaphors, not mechanical metaphors. However, there are many natural phenomena understood in completely mechanical terms (such as are reflected in the description of qì dynamics). Actually, though, there is no shortage of mechanical metaphors outside nature either. The triple burner has been tentatively explained as a metaphor deriving from some sort of industrial plant, like the smelters used to refine metals.⁸ Likewise, the pivot (枢 *shū*) that describes the lesser yáng channel’s position between greater yáng and yáng brightness is another commonly used mechanical metaphor. Less well known to most English speakers will be the principle in medicinal therapy of “raising the pot and removing the lid” (提壶揭盖 *tí hú jiē gài*). The latter metaphor is particularly interesting. The image is of a pot with a hole in its bottom and covered with a tightly fitting lid. When the pot is placed in a basin of water and filled with water itself, it can be lifted without its contents flowing out. Only when the lid is lifted will the water pour out of the hole in the bottom. The metaphor is used to describe the process of freeing urine by diffusing the lung in the treatment of hasty panting, fullness in the chest, inhibited urination, and puffy swelling.

I might point out that the yīn-yáng system is described habitually by English speakers in the unquestionably mechanistic metaphor of “balance.” The use of the metaphor of balance probably does not come from the Chinese. One occasionally sees 平横 *píng héng* (balance) in Chinese texts, but as far as I can tell from the textual evidence I have seen, the balance metaphor did not make its appearance in Chinese medicine until the advent of Western influences. Traditionally, however, “balances” and “imbalances” were described in other terms such as harmony and disharmony. I would note here that my own, highly literal, style of term translation aims precisely to prevent such distortions of Chinese concepts in the process of transmission.

I have discussed various qualities of naturalness, holism, and caring, which many Western adherents of Chinese medicine regard as its fundamentally positive qualities. While I agree that Chinese medicine is more natural, more holistic, and less alienating if not more caring than

modern Western medicine, there is sufficient evidence to warn against generalizations when describing either Chinese medicine or modern Western medicine. Some of the evidence I have adduced comes from experience of Chinese medicine in its homeland, where traditionally people's views were not affected by any expectations deriving from the shortcomings of an alien medicine in the 21st century. As to reductionistic and mechanistic approaches being characteristics of Western medicine that are absent in Chinese medicine, I disagree more strongly. I believe that these qualities are believed to be absent in Chinese medicine by assumption rather than by evidence. I further believe that the tendency arising out of dissatisfaction with modern Western medicine to project qualities onto Chinese medicine obscures certain other features of Chinese medicine regarding the nature of its knowledge.

3. Influence of spiritual, physical, and philosophical traditions of the Orient

I have argued that Westerners have tended to allow their expectations of Chinese medicine to be defined by alternative health-care values born of dissatisfaction with modern medicine instead of by a direct appreciation of Chinese medicine and its native social context. Another factor that has shaped people's expectations derives from certain spiritual traditions and from ideas derived from Daoism.

3.1 Oriental spiritual and physical traditions

Not just Chinese medicine, but many alternative health-care practices are perceived to rest on philosophical notions that have affinities with the Oriental religions and mystical traditions that have gained a wide following during the years in which the alternative medicines have also attracted Western attention. For people who no longer find Western religions either rational or appealing and who are disenchanted with the materialism of Western culture, Oriental traditions have exerted a huge attraction by a mixture of practicality (yoga, qigong), spirituality (meditation), and rationality (Buddhist philosophy) and by the sheer exotic splendor of their art. Daoism has become a part of this new pantheon of Oriental religions, offering at once sound practicality and a deep spirituality.

The spiritual traditions of the East gained a huge following in the 1960s and 70s, when a rebellious youth culture rejected virtually all traditional values. To understand this, we have to consider why the West's traditional values, largely those of Christianity, lost their appeal, and why, for some people at least, Oriental traditions were perceived as offering replacements. Here I will present a secular representation of these various traditions; I acknowledge that participants in these traditions usually have deep-seeded beliefs that often bestow on them a different perspective from what is presented here, nevertheless this secular perspective is sufficiently accurate for explaining certain broad social values associated with the reception of Chinese medicine.

Christianity (Catholicism and Protestantism alike) has three major characteristics: mythological and miraculous elements (e.g., the seven-day creation, the immaculate conception, resurrection); authoritarian paternalism of one omnipotent God requiring devotion and imposing responsibility for sin (a quality shared with Judaism and Islam); universal love as epitomized in the teachings of Christ. Western belief in the mythological and miraculous elements has long been severely shaken by the modern scientific outlook. The authoritarian paternalism has

become increasingly distasteful to many people in a culture in which democracy and individualism increasingly characterize secular life. Universal love for fellow human beings is the only uncontested element, but it is not essentially anything over which Christian teachings have ever had a monopoly.

The religious and spiritual traditions of the Orient are far more numerous than those of the West. They appear to display many more features. Those of India alone offer an astounding variety, largely as a result of polytheism. The elements of this complexity that drew the interest of people in the last half of the twentieth century during the period coextensive with the growth of alternative health-care practices are quite limited. In general, Westerners have been attracted to rational, devotional, and experiential elements. Although authoritarian and mythological elements are present, it is not these things that Westerners find attractive.

Many Westerners have been attracted to Buddhism. Buddhism arose out of a rational review of the human condition. In simple terms, the doctrine states that human suffering is caused by desire, and that salvation is the release from desire. Buddhism largely, though certainly not entirely, set aside the mythology that characterizes older Indian traditions. Emphasis on the rationality of this religion by its 20th century proponents probably helped to increase its attraction in the West.

Others have been attracted to the Hare Krishna movement, which is in fact a new international Hindu sect that was founded in the 1960s. It is based on devotion to Krishna, an incarnation of Vishnu, preaches a doctrine of love not too dissimilar to that of Christianity, and involves practices aimed to achieve ecstatic trance states. The attraction for the West lies in devotion without the authoritarianism of Christianity, and the promise of ecstasy—something that young Westerners were already experiencing quite intensively at the time through the use of psychedelic drugs such as LSD.

Other Indian traditions of a much more practical nature have been adopted in the West. Yoga and meditation, partly dislodged from their Indian philosophical and religious roots, have enabled Westerners to witness the beneficial effects on body and mind brought by toning muscles and relieving physical and mental tension. Here again, there is a rational element; Western physicians can easily see that practices such as yoga have a beneficial effect on the body. In an age where stress is considered by Western medicine to be a major cause of ill health and a major contributor to specific diseases, the practical traditions of the Orient have been welcomed by many as a way of maintaining health.

Other practical, physical disciplines have come from Japan and China. Japanese martial arts such as judo, jujitsu, and karate have long held an appeal among the sportive, and they have since been joined by qìgōng, tàijíquán, and other traditions from China that have appealed to Western interests in Chinese culture.

The list of Oriental traditions that rose to popularity in the West during the latter half of the 20th century would not be complete without vegetarianism. The non-Islamic population of India has traditionally been largely vegetarian and some Chinese Buddhists are also vegetarian. The influence of Indian spiritual traditions has conjugated with concerns about the humaneness of increasingly widespread industrialized meat production to encourage vegetarianism in the West.

The spread of vegetarianism has also been encouraged by the findings of nutritional science. A carefully balanced vegetarian diet that provides the body with all essential nutrients is considered to be as healthy if not healthier than a diet based on animal protein.

The influence of the East has introduced many things to the West that conservative elements of Western society might call fads. But in particular, yogic exercises and vegetarianism, which have a strong rational basis, have spread to large areas of the Western population that are not looking to the Orient for ecstasy or enlightenment. Even older people whose spiritual needs are satisfied by the West's traditional religions will seriously consider vegetarianism and yoga as ways to health that are now fundamentally endorsed by some within the Western medical establishment. In their widest impact on the West, the spiritual traditions of India were intimately connected with notions of physical and mental health.

3.2 Connections between spiritual traditions and Chinese medicine

The traditional medical traditions of India and China have both reached the West. The Ayurvedic medical tradition of Hinduism is studied and practiced in the West, but not on the same vast scale as Chinese medicine. Chinese medicine in the West owes its popularity to acupuncture. Needle therapy has long since attracted the fascination of the West on account of the exotic practice of painlessly piercing the flesh with fine needles, and in the alternative health-care context, on account of the fact it introduces no potentially noxious substances into the body. To those concerned about the side-effects of Western drugs, acupuncture appears as a completely harmless alternative.

There are deeper connections between Oriental spiritual traditions and alternative health. The Oriental spiritual traditions have attracted the West because they promise the discovery of physical and mental potential. They enable the individual to tap new energy resources and experience new states of well-being. They thus *empower* the individual. The notion of empowering is of great importance in alternative health-care practices because they regard the patient not as the passive recipient of treatment but as a human being responsible for his own health, and whose cooperation in the healing process is essential to the restoration of health.

Another important point of similarity is the belief in a life-force. It has been noted⁹ that the notion of a life force is common to many alternative therapies. Chinese medicine possesses the concept of *qi*, while Indian traditions have the concept of *prana*. Homeopathy has the concept of "vitalism," while aromatherapy speaks of the "energetic value" of natural substances. Tapping this energy in alternative health-care can be perceived as another form of empowering.

The broad interest in spiritual and medical traditions from the Orient seems to center very much around discovery of potential and empowering of the individual that is perceived to be lacking in Western religion and Western medicine. This is the basis of the attraction they hold for Westerners. This common basis of attraction tends to obscure important differences. The differences between conceptions of vital force are of particular interest in the borderline between spiritual and physical traditions on the one hand and Chinese medicine on the other hand.

Both Chinese medicine and *qìgōng* have in common the notion of *qi*. In *qìgōng*, *qi* is both breath and an ethereal substance that pervades the body. *Qìgōng* involves breathing and physical

exercises designed to cultivate the qì of the body and improve health. The individual acts on his/her own qì to improve his/her physical health and mental faculties. Qìgōng is thus a self-cultivation practice that offers the way to an improved state of physical and mental well-being. In Chinese medicine, by contrast, qì for the most part is a mundane concept; it is nothing more than a substance that does something in the body, something that may become insufficient and require supplementation. As all students of Chinese medicine know, qì is a problematic concept, where the term qì is used in many different senses, some ostensibly material, such as gas in the digestive tract, some overtly ethereal, such as qì of the channels and the bowels and viscera. What actual overlap there is between the qì of qìgōng and the physiological forms of qì spoken of in Chinese medicine is a moot point. The point to be made here, though, is that there is a concept called qì, which is part of qìgōng and Chinese medical theory, but in these two traditions the method of manipulating qì is quite different.

The Western understanding of qì in the context of qìgōng and Chinese medicine may well have been influenced by the life force of the body-mind spiritual traditions of India, so that qì is conceived as possessing a numinous or magical quality. In qìgōng, qì is experienced and harnessed, but there is no promise of bliss, ecstasy, or at-oneness with the spirit of the universe. In Chinese medicine, qì is a mundane substance. It should be noted that Westerners differ in their understanding of qì in the Chinese medical context. There are, on the one hand, those who, like the Chinese, have a more secular appreciation of qì, and on the other hand those influenced by spiritual notions of the life force that essentially come from outside Chinese medicine, even from outside China. In China, there have been many different medical traditions, among them the combined use of qìgōng and medicine. It is not known with any certainty whether such practices have ever been dominant.

An example of the spiritual understanding of qì is found in *Between Heaven and Earth: A Guide to Chinese Medicine*, Harriet Beinfield and Efram Korngold¹⁰ state: “Subtle yet palpable, my initial encounter with acupuncture left me tantalized by mystery and promise. Mystery that tiny needles could extend my field of awareness and completely alter my state of being.” Here acupuncture is unequivocally described as having an empowering spiritual effect. To my knowledge, no such descriptions are to be found of acupuncture in any Oriental texts. The notion of a spiritual effect of acupuncture does not come from China, Japan, Korea, or Vietnam. I suggest it is a notion of Western origin that has arisen under the influence of experiential spiritual traditions from India.

In China, there are traditional medical practices associated with Buddhism, qìgōng, and religious Daoism, such as the practice of choosing a therapeutic formula by divination. But the orthodox Chinese medicine of the literate tradition considers qì to be a mundane substance. And as I have already pointed out, the whole notion of caring in China falls very much under the sign of Confucianism. This is as much so in the PRC where religion has not been encouraged as it is in Hongkong and Táiwan where freedom of religion is considered to be a fundamental human right.

3.3 Daoism

Among the products of the Orient that have exerted a great attraction in the West is the thought of Lǎo Zǐ and Zhuāng Zǐ that we often refer to as Daoism. For most of Chinese history,

Daoism has been of secondary importance to Confucianism. However, in the West, Daoism has elicited a popular interest while Confucianism has not. In the Oriental Religion sections of bookstores, one usually finds many more books on Daoism than Confucianism.

The thought of Lǎo Zǐ and Zhuāng Zǐ in actual fact is only part of the complex arena of Daoism. Lǎo and Zhuāng's Daoism could be more accurately labeled as philosophical Daoism, as distinct from popular Daoism. It is extremely complex, and the subject of many commentaries, but at its core are notions of a return to a materially simple way of life and escape from the artifices created by the human mind, these two things being perceived as moving with the Dao. Within this thought is a powerful rejection of the formulaic aspects of Confucianism.

Confucius, who lived at a time of social chaos, taught that a harmonious social order could only be achieved if everyone properly performed clearly defined social roles. Children should show filial piety toward their parents, and the people should pledge their allegiance to the sovereign. Lǎo Zǐ and Zhuāng Zǐ rejected this notion because they saw it as a recipe for insincerity and hypocrisy.

It is not difficult to see how Lǎo and Zhuāng's doctrine became attractive in the West at the time it did. The relentless questioning of traditional values that has resulted from the social changes brought by industrialization and that in the latter half of the 20th century was intensified by a rebellious youth culture has naturally paved the way for a favorable reception for the thoughts of Lǎo Zǐ and Zhuāng Zǐ. There is a debate in the question to what degree the analogy between our times and those of Confucius, Lǎo Zǐ, and Zhuāng Zǐ is appropriate, but Lǎo Zǐ and Zhuāng Zǐ have certainly inspired many people in the West who have been aware of the weaknesses of traditional values.

A particular element of philosophical Daoism worthy of consideration in the context of Chinese medicine is the Daoist understanding of knowledge. Lǎo Zǐ tells us on the first page of his book that deepest truth cannot be expressed in language but can only be intuited. Truth that can be formulated in transmittable knowledge is not the deepest truth, for the deepest truth can only be grasped through intuition. Lǎo Zǐ's book in numerous places deprecates learning and intellect: 绝圣弃智，民利百倍 Renounce holiness and abandon wisdom, and the people will benefit a hundred-fold. (Chapter 19) 绝学无忧 Renounce learning and be carefree. (Chapter 20) 为学日益，为道日损 In pursuit of learning, daily something is gained; in pursuit of the Dào, daily something is lost. (Chapter 48)

In the English-language literature of Chinese medicine, the influence of philosophical Daoism on the shaping of Chinese medicine has been emphasized more than the Confucian influence. I mentioned above that notions of caring, which are so important in the context of healing, have in China been very much defined by Confucianism. But this fact has been de-emphasized in the popular literature of Chinese medicine, quite simply, I believe, because Confucianism is an authoritarian doctrine that has little attraction for Westerners. In the catalog of Redwing Books, the major distributor of Chinese medical and related literature in the United States, there are three versions of Lǎo Zǐ's *Dào Dé Jīng*, but no work of Confucius.

Western adherents of Chinese medicine who believe "Daoism," understood as philosophical Daoism, to be the main current in Chinese thought and who have learned that "Daoism" has had

a great influence on Chinese medicine are likely to assume that Chinese medicine, as a Daoist-influenced form of medicine, is a form of medicine that largely rejects any notion of book-learning.

Such a conclusion about the nature of Chinese medicine would naturally fall into place in a conception of Chinese medicine that is strongly influenced by the expectations of alternative health-care. In the alternative health-care mind-set that encouraged the Western adoption of Chinese medicine, a major failing of Western medicine is the complexity of knowledge. The explosion of medical knowledge has given rise to an ever increasing array of specialties, each of which concentrates on an ever more narrow aspect of human health and sickness and which leaves the whole patient increasingly out of the picture. Modern medical knowledge is now far too vast for any one physician to master in its entire scope and detail. The dissatisfaction with overspecialization contains the seeds of the notion that there can be too much knowledge for the patient's good. Given the magnitude of knowledge, students learn medicine by being given an overview of the subject, which in most advanced countries takes about 5 years, and after a couple of years of practical training they become "doctors." This training is considered a bare minimum, and most doctors go on to advanced studies, where they for the first time study exhaustively all the available knowledge in a given specialty. Much of their general knowledge of medicine becomes atrophied and eventually forgotten. Under these circumstances, it is no wonder that those who are attracted to alternatives to Western medicine believe a basic condition for an alternative health-care practitioner is that her/his training should never be such that the whole human being slips out of focus. An inference drawn from this is that any alternative health-care modality needs no more knowledge than anyone can swallow in a normal period of training.

The belief that the holistic approach of Chinese medicine naturally limits the complexity of its knowledge encourages the notion that book-learning is antithetical to the spirit of Chinese medicine and the idea that the effectiveness of any treatment depends on the empowerment of the patient or the magical power of *qi* transmitted from the practitioner to the patient. For those who believe firmly in holism, Chinese medicine must be essentially a clinical skill learned in the clinic and gained by developing intuition; book-learning is only an adjunct. For those who believe in spiritual healing powers, book-learning is an even more distant necessity.

Whatever impression Westerners have received, it is quite clear that when the Chinese speak of the influence of Daoism on Chinese medicine, they mean only that some strands of Daoist thought in antiquity were known to have been concerned with the search for immortality that was associated with alchemical investigations using cinnabar and the notion of health cultivation. The Chinese do not normally think that a Daoist approach to Chinese medicine means developing intuition instead of acquiring medical learning.

I would not wish to decry anyone's interest in Daoism or their faith in any spiritual tradition. I, like many other people in the field, gained an interest in Chinese medicine after having first been attracted to Chinese culture by Daoism. When I first began to study the Chinese language thirty years ago, the first text I read in Chinese was the *Dào Dé Jīng*. Even to this day, I find it a highly inspiring ancient scripture. But my grounding in the Chinese language enabled me to study Chinese medicine completely through the medium of Chinese sources, none of which speak of Daoist influences on Chinese medicine (that is something spoken of only by historians

in China). It tends to be only Westerners with no access to authentic sources who tend to thread all the pearls of the Orient onto the same string.

4. Inaccurate characterizations eclipsing a body of knowledge

Although many adherents of Chinese medicine believe distrust of book-learning and anti-intellectualism to be features of Chinese medicine, nothing could actually be further from the truth. What we today call Chinese medicine (中医 *zhōng yī*) is one of the major strands in the history of healing in China, and it is often described by Western scholars as the “literate tradition,” i.e., the tradition based on book-learning. Almost synonymous with this is the term “classical medicine,” which means the medicine described in the classical literature of antiquity (“classical medicine” is often used in contrast to modern Chinese medicine). This medicine is learned by study of literature and through clinical practice, but the study of literature plays a far greater role than most Western adherents of Chinese medicine seem to think. Among the less literate and illiterate strata of society, there have been many other traditions of healing, which are inherently largely devoid of any theoretical basis. Acupuncture is believed to have developed among the affluent, literate classes as a healing practice based on a theoretical framework dominated by systematic correspondences (*yīn-yáng* and the five phases). Medicinal therapy was originally a symptomatic therapy with little theoretical basis. In time it was incorporated into the theoretical framework of acupuncture. There are acupuncture and medicinal traditions that are largely devoid of theory. These are a part of China’s medical heritage, but they are not generally considered to be part of what we now call “Chinese medicine.” Moreover, to the best of my knowledge, no one in the West has claimed that their clinical training is directly connected to these traditions.

Unfortunately, the training offered by acupuncture and Chinese medicine schools in the West has contributed very much to the notion that book-learning is not important. Westerners whose classroom training largely centered around texts more or less at the complexity level of *Essentials of Chinese Acupuncture* or *Chinese Acupuncture and Moxibustion*¹¹ can to some extent be forgiven for believing that Chinese medicine is a simple body of knowledge. Books such as these lay out the theory of Chinese medicine step by step, and appear to be comprehensive accounts of the knowledge required to perform Chinese acupuncture. The authors have obviously aimed to make the books self-sufficient: there are no references to other literature and no recommended readings (the largest body of reliable literature is in Chinese, hence beyond the access of English-speakers). Some readers might not observe that *Chinese Acupuncture and Moxibustion*¹² contains considerably more detail than the earlier *Essentials* text and fail to deduce that even this work might not be a complete account of acupuncture. Some might fail to doubt whether 2,000 years of accumulated medical experience in China could possibly be compressed into a single volume of a few hundred pages.

English accounts of Chinese medicine intended for acupuncture school students have, as I have said, given the impression of being essentially complete. And of course the implication is that Chinese medical knowledge is integrated in the same way and perhaps always has been. But nothing could be further from the truth.

Chinese medicine has always been a field in which physicians and scholars have made their contribution (and expressed their disagreements with one another), but it has also been a field

which has for the most part centered around the canonized classics. In the whole of Chinese history, the notion never arose that ancient knowledge should be questioned and either verified or rejected to the satisfaction of most if not all members of the Chinese medical community. When the theory of warm diseases (温病 *wēn bìng*) developed in the Qīng dynasty as a way of explaining disease previously explained by the cold damage (伤寒 *shāng hán*) theory, no one ever suggested that the existence of two distinct bodies of knowledge about externally contracted illness implied that either one or the other was right, or both were wrong. The idea that it would be impossible for both of them to be right never arose. People expressed disagreements, but the community as a whole did not revise ideas on externally contracted disease, throwing out the old ones and writing a new book of externally contracted disease. This kind of knowledge differs completely from modern scientific knowledge. All of the modern sciences proceed along similar lines: Only one explanation of a given phenomenon can be right (multiple explanations are only tolerated as a temporary expedient); every explanation must be tested by repeatable experiment; any explanation may be questioned in the light of new data. Implicit in these ideas about knowledge is the concept of progress, namely that obsolete theories will be replaced by more accurate theories. Scientific knowledge is a single book containing fully integrated and thoroughly tested information and that is constantly being rewritten.

Chinese medical knowledge bears much greater similarity to philosophy than to the modern sciences. While it may be possible to see progress in the development of philosophical ideas over the centuries, it is not possible to discard all but the latest ideas. People familiar with philosophical literature will know that even 20th century philosophers often take Kant or Hegel as their starting point, and make numerous references to the thinkers of ancient Greece who lived over two thousand years ago. To be considered knowledgeable in philosophy, one is expected to have read a vast amount of philosophical literature from over the centuries. It is not enough to have read *Essentials of Philosophy*. Furthermore, no philosophy scholar would ever say that any philosophical treatise should be discarded. This is very like the way things have been in Chinese medicine. The traditional approach to Chinese medicine was close study of the classics and wide reading among the huge amount of later literature, comprising the explanations of the classics, the development of classical theories, and case histories. Strangely, the way Chinese medicine has been presented to the West, the neat little textbooks, is much more in the style of a modern science than how a humanities subject is still studied today as is the idea that knowledge of Chinese language and culture is clinically irrelevant.

The literature of Chinese medicine is immense. It is also largely composed of rational discourse. Although there are many supernatural healing traditions in China and some of these supernatural beliefs have infiltrated the literature of the orthodox literary tradition, the vast body of orthodox literature is characterized by increasing rationality over the centuries. Although the earliest classics, the *Nèijīng* and *Nánjīng*, do not offer a complete rational basis for their statements, later literature, including commentaries on the early classics, is firmly based on rational discourse. One has only to examine Unschuld's *Nan-Ching: The Classic of Difficult Issues*¹³ and Mitchell, Féng, and Wiseman's *Shāng Hán Lùn: Translation and Commentaries*¹⁴ to understand this.

While in the West books are of secondary value in the learning process, in China they certainly are not. Evidence of this is seen in the existence of numerous rhymed verses designed to help students memorize large amounts of information quickly. One has to bear in mind that

before the modern era, education in China meant education in the humanities—philosophy, history, and poetry. Rhymed verses would have been experienced by students as a delightful way to memorize large amounts of information. Education in China is now based on Western models, which place the sciences at the center. Rhymed verses have lost their appeal for students, but it is interesting to see that tradition has not died out. *Zhōngyī Zhěnduàn xué* (中医诊断学 “Chinese Medical Diagnosis”), for example, contains an appendix of rhymes intended to help students to memorize information concerning the tongue and pulses, etc.

Chinese medicine has a large body of literature largely comprising rational discourse, and it is through study of this literature that Chinese physicians for centuries have gained the knowledge on which their clinical proficiency has rested. The tendency in the West to deny the importance of book-learning is not founded on any solid appreciation of the nature of Chinese medical knowledge. Furthermore, it seems to be bolstered by the assumption that division exists between book-learning and clinical experience: book-learning is all theoretical and the clinic is the only place one finds practice. People who hold this assumption perhaps think of the Western medical students who in their anatomy studies memorize the names of the minutest body parts, most of which are promptly forgotten after the examination. In reality, book-learning is not all theory because books include many manuals of practice. Chinese medical literature is certainly not all theory; because of the nature of Chinese medical knowledge, all theory is directly related to clinical manifestations of disease and treatments applied to them. Chinese medicine does not deal with the unseen microscopic levels of the body and of the processes of disease. All of its theory is closely related to what is seen and done in the clinic. It is for this reason that case histories form such an important part of Chinese medical literature.

5. Intuition

Regardless of the Chinese sense of things, many Western people feel that Chinese medicine requires a more intuitive approach to knowledge. To get a clearer picture of the issue, we should ask these questions: What is intuition? How is it used? And how is it applied in Chinese medicine?

There are no complete explanations for what we call intuition. Nevertheless, an important part of it is the automation of information. The human brain is such that complex processes of a certain kind become partially automated. Skilled typists do not have to think which key to hit next; they think of a word, and their fingers type it without conscious effort. Artistic creation also seems to work in this way. By constant practice, an artist learns what effect can be produced by a certain brush stroke or a certain combination of colors. An oil painting is partly planned, partly envisioned, and partly evolves as if by itself as the artist manipulates materials on the canvas. In talented individuals, such skills can develop very quickly, but behind them there is always a learning process. Skilled painters and musicians all practice very furiously, often burning all their energy in building skill. The intuitive component makes the difference between a mediocre picture or musical performance and a brilliant one. But intuition allows no one to escape the need for learning and practicing. It only seems as though intuition plays a greater role when there are no textbooks leading a student step by step to the acquisition of basic skills. Beethoven was already a brilliant composer before gradual deafness forced him to remove the legs from his piano so that the floor would act as a sounding board to enable him to hear what he played. He had to hear what he was playing, because this was the only way of learning what

effect a composition would produce on the ears. Even his fantastic artistic intuition did not allow him to dispense with the essentials of his art. Intuition is a higher level of intelligence, but it is not antithetical to the more plodding activities of the human mind; it is simply a higher-level complement, and one that is in no small way dependent on knowledge and skill.

Chinese medicine is a realm in which intuition plays a major role. There are two very clear areas where we can see this. One is in diagnosis, where the practitioner is confronted with a confusing welter of symptoms and has to work out what the main problem is, and what is secondary or incidental. What students find difficult in learning Chinese medical diagnosis is sorting the wheat from the chaff. The practitioner gains diagnostic skill by learning what to look for and what to ask about, and how to judge how these observations reflect processes within the body. It is a difficult task because the classic signs of any disease or pattern are not necessarily seen in any one clinical presentation. Things get much tougher when there are multiple symptoms reflecting multiple processes in a complex disease pattern. These problems are all discussed in the Chinese literature, but since the clinical variations are apparently infinite, practitioners must develop their own skills, and they can only do this by seeing the effect of treatments. A successful treatment confirms their interpretation of signs; an unsuccessful treatment suggests their diagnosis was wrong. Talented practitioners are ones who, with more and more clinical experience, increasingly get the diagnosis right. In the development of their skill, intuition or automated judgment plays an increasingly important role.

The second area where intuition is called for is in devising treatment. In Chinese medicine, treatment options are not, as often they are in Western medicine, “kill it with the drug” or “cut it out” (but, of course, that is a very crass description of Western medical therapeutic options). The problem for the practitioner is selecting medicinals to restore harmony and to address all the aspects of the condition. Again there is a lot of theory to be learned in the literature, but in the end it is by personal experimentation that practitioners learn their art.

Of course the two problem areas interact to multiply the complexity to almost infinite proportions. When the final judgment about the accuracy of diagnosis is the selection of a treatment from multiple possibilities, the student is faced with such an immense number of variables that it almost defies the less than exceptional rational capabilities. Under such circumstances, intuition becomes a necessity. If people cannot develop this skill, they are unlikely to become skilled practitioners. Intuition is the way in which human intelligence can deal with such a high level of variability. But while intuition must be developed, it is not achieved by contemplating the sublime Dao. The Chinese, today as in the past, believe that healing skills have to be developed. They know that Chinese medicine is highly complex, and that intuition is important. But they also know that intuition can never be developed until all the practical nuts and bolts of knowledge are acquired. Chinese medical education requires students to learn the whole host of symptoms and how to relate these symptoms to processes within the body. It requires that practitioners learn by rote what each medicinal and each formula does and how formulas containing multiple agents can be devised to suit the individual needs of patients. To learn the basic nuts and bolts, students to this day have to memorize huge amounts of data. In the past, memorization was often considered to be the easiest way of absorbing this data, and numerous rhymes were devised to aid the commitment to memory. In short, Chinese medical tradition is aware of the complexity of Chinese medical knowledge and prepares students to handle it by a very tough, down-to-earth emphasis on acquiring basic data.

The Chinese do not possess any faculties that Westerners do not possess. Learning Chinese medicine does not require any ability that Westerners don't have. Chinese medicine never took the route of reductionism taken by Western medicine that reduces a pediatrician's or proctologist's work where some 90% of outpatient cases are reduced to five possibilities, each with one or two set treatments. Crass though this appears, one must appreciate Western medicine for systematizing and simplifying things to the extent that health care can be broadly available, but Chinese practitioners are faced with the type of complexity that requires greater intuitive skills. Nevertheless, the need for intuition does not dispense with the acquisition of basic knowledge. Before intuition can be developed, we have to gain this nuts-and-bolts knowledge. Westerners can never gain this knowledge until the myriad details are presented and properly labeled as they are labeled in Chinese. Intuition is a way of dealing with complexity, but it can only be developed by studying and absorbing that complexity. That complexity can only be faithfully and effectively transmitted to the West when it is recognized and when we have the language to describe it.

6. The root problem and the solution

6.1 Two Poles in Literature

I have argued that notions of alternative health and spiritual cultivation have influenced the understanding of Chinese medicine in the West, and that this has tended to obscure the fact that Chinese medicine is a complex body of knowledge that requires extensive and intensive study. There are thus two poles in the understanding of Chinese medicine. On the one hand there is the tendency to assume that Chinese medicine is as alternative health-care ideals expect it to be, a holistic, natural, and caring clinical art based on a body of simple book-knowledge. On the other hand, there is a more objective tendency to take Chinese medicine to be what it is in China, without projecting onto it any Western ideas.

In the West, Chinese medicine is presented in different ways—so different in fact that, were it not for the universal label “Chinese medicine,” one might imagine that different disciplines were being described. When one reads the works of Porkert, Bensky et al., Wiseman et al., Larre, Beinfield and Korngold, etc., one gains distinctly different impressions as to what Chinese medicine is. Students reading broadly in the literature available must be confused by huge differences in content and presentation. It would be wrong to imagine these different presentations as distinct parts of an integrated whole. If they were, students would have no difficulty relating them into a whole. Rather, some of the presentations accurately reflect the Chinese tradition, while others emphasize specific aspects that appeal to Western notions of alternative health-care and de-emphasize and even exclude other aspects.

When we examine the literature in terms of the two poles described above, a clear pattern begins to emerge amidst the confusion. Certain features cluster around the poles.

The literature influenced by alternative health-care ideals naturally tends to extol the virtues of naturalness, holism, anti-reductionism, etc. Because of the central importance of these features, they are woven into the medical discourse. The literature that presents the Chinese view tends to present theoretical and clinical information in a more matter-of-fact way, without any lauding of principles and philosophizing. This is because people who are drawing their

information from primary Chinese sources rarely encounter any philosophizing of this kind in Chinese texts and because they generally wish to keep any personal insights outside the source material.

Another major difference is the difference in emotional tone. The authors who emphasize alternative health-care qualities generally speak in emotional tones, emphasizing mystery, wonderment, adulation, excitement, etc. Those engaged in explaining the Chinese understanding of the subject are matter-of-fact, much like authors of any modern technical literature. There is no imitation of modern scientific literature here; the Chinese scholarship has always tended to be matter-of-fact in its tone.

Yet another difference is observed in the medical content. Those extolling alternative health-care values emphasize the holistic doctrines of yīn-yáng and the five phases out of proportion.

Conceptual detail is another point of difference. Writers who are most serious about conveying all the detail of the Chinese conception of their medicine to Westerners explain concepts in detail, label them with highly literal translations in English, and generously pepper their texts with Pīnyīn and Chinese. Those who emphasize ideas of non-Chinese origin tend to burden their readers with as little conceptual and terminological detail as possible.

The greatest of all differences in the two styles of literature is to be found in the bibliography. Works presenting the Chinese view are translated or compiled from primary sources and therefore contain bibliographies comprising for the most part Chinese sources. Works presenting the view influenced by alternative medicine contain only English sources. Looking at a bibliography is often the quickest way to judge a book.

We can characterize the two poles as source-oriented and target-oriented. The authors presenting the Chinese view of Chinese medicine are oriented toward the original source of Chinese medical knowledge. Those at the target-oriented pole are presenting the medicine of a foreign culture, but they are oriented toward the target culture; they are committed to adapting the ideas to the taste of the recipients; in many cases they can do nothing else because they have little or no knowledge of the source language (Chinese).

The source-oriented approach aims to ensure that Chinese medicine as described and practiced in China is conveyed to Western readers in all of its detail. The target-oriented approach in its extreme is nothing more than adaptation that in some cases has very little to do with the original form of Chinese medicine.

The classic example of the source-oriented approach is the work of my colleagues and me. The classic example of the target-oriented approach is that of Beinfield and Korngold. Bensky et al. and Maciocia occupy central territory.

Over the period in which Chinese medicine has flourished in the West, this bipolar situation has been ever present. The community of Chinese medicine has simply not seen it, and hence has not been able to deal with it. If there are two distinct versions of Chinese medicine, it stands to reason that there must be a difference in their origins and influences.

6.2 Absence of critical thinking

The failure to scrutinize the various forms of Chinese medicine can be attributed to the absence of conditions encouraging healthy skepticism and critical thought. Chinese medicine has operated almost exclusively in the private sector, has lacked government funding, and has not been integrated in mainstream education. Andrew Vickers¹⁵, who sees this unhealthy situation in alternative health-care practices as a whole, explains:

Complementary medicine is largely private medicine. Generally speaking, the organisations that teach complementary therapy do not receive public funds; the regulations governing practitioners are not determined by public representatives and therapy is not reimbursed by state insurance or national health systems. There have been several important implications for criticism in complementary medicine. At its most basic level, the lack of state funding for complementary therapy education puts a premium on rapid completion of clinical training. Where funding is sparse, students will want to qualify and start practice as soon as possible, so they can pay back debts incurred for fees and living expenses. Though there are notable exceptions, and though the situation seems to be changing (Research Council for Complementary Medicine, 1995), colleges of complementary medicine tend to offer the teaching of a trade rather than higher education. What is taught is diagnosis and treatment; only rarely is there an opportunity for the development of critical, reflective and analytical skills.

The development of training institutions in the private sector has also had the effect of distancing complementary therapy education from the university setting. The effect of this has been profound because the university is the cradle of critical thinking, of analysis, of healthy skepticism towards accepted wisdom. It is where new ideas are tested and developed, where, arguably, the most significant scientific, social, philosophical and humanities research is undertaken. Though there may have been benefits from developing outside the university system, complementary medicine has been cut off from a fertile source of creative and critical thinking and lost access to the human, technical and financial resources that are vital for good quality research.

Not only are the conditions encouraging critical thinking absent, but critical thinking is positively discouraged by proponents of alternative health-care. Critical thinking tends to be branded as reductionistic and hence antithetical to the spirit of Chinese medicine. The alternative health-care camp has appropriated the authority to define Chinese medicine according to its own criteria. Those who argue that Chinese medicine possesses any qualities similar to, or that could be construed as being similar to those of Western medicine or the modern sciences, are harshly criticized as forcing Chinese medicine into a modern medical mold. The quasi-religious attitude to Chinese medicine, which, as I have explained, does not derive from Chinese medical sources, treats alternative health-care values as articles of faith.

6.3 The language barrier

One aspect of Chinese medicine unlike any of the other alternative health-care practices popular in the West, is that it is the product of a distant culture in a distant era, and that our understanding of Chinese medicine depends on our linguistic access to sources in a non-English

language. If indigenous alternative practices such as homeopathy and osteopathy are characterizing themselves to some extent falsely as natural and holistic, etc., it stands to reason that characterizations of an imported health-care practice may be even wider of the mark. Chinese medicine grew and evolved for two thousand years without any concerns about holism, naturalness, and other qualities that Westerners in the 20th and 21st centuries believe it should have (if only by dint of its being deemed antithetical to a medicine that did not take on the features now regarded as being essential to it until the 19th century).

The major problem hampering the understanding of a medicine imported from a distant culture is the language barrier. Westerners are not capable of fully understanding Chinese medicine until they are capable of appreciating it in its entirety. Since the only full account of Chinese medicine exists only in the Chinese language, it stands to reason that we can only understand it in its entirety when we have linguistic access to all the sources.

So far, English speakers only have a partial account of Chinese medicine. I suggest that the current account in the English language is so partial that English speakers without linguistic access are incapable of drawing accurate conclusions about its nature. Given that there is so much evidence of false characterizations of indigenous alternative medicines, it is highly likely that the understanding of Chinese medicine would change substantially if more Westerners gained linguistic access to primary sources of information.

In the academic world, anyone who wishes to contribute to knowledge in any given field is expected to have a full grasp of the literature on the subject. Having a broad knowledge of the literature ensures that people don't present ideas or theories that are not new or that have previously been discounted. Any master's or PhD student wishing to test a hypothesis has to know what has been written on the particular topic in the past. This procedure aims to ensure that all advanced degree theses produce new knowledge. Rules of this kind cultivate a kind of rigor that ensures textbook writers do not include obsolete ideas or theories.

In Chinese medicine, the bulk of the literature is in Chinese. If Chinese medicine were transplanted into mainstream academia, the issue of linguistic access would obviously become a major focus of reform. Master's and PhD theses on almost any subject in Chinese medicine could only be considered to have any international value if students are required to search Chinese sources, which constitute the bulk of sources. If they don't know Chinese, they can only search the very much more limited Western sources. Today, everything is internationalized to such a degree that a Master's or PhD by a student incapable of searching Chinese sources would have no value whatsoever.

Making Chinese a requirement for advanced degrees would not only ensure the degrees awarded conform to general academic standards, it would have numerous benefits throughout the field. It would mean that the best qualified in the field would naturally tend to develop their knowledge from Chinese sources. They would be able to discriminate between authentic Chinese medicine and Western adaptations of it, and be skeptical of the latter (I have never met anyone possessing complete linguistic access to Chinese sources who bases his knowledge on secondary English sources). When such highly qualified people became teachers, they would naturally be able to provide their students with larger quantities of reliable information. Such

people would naturally want to try their hand at translation, thereby providing authentic information to wider audiences.

With a more source-oriented approach to Chinese medicine, other developments would naturally tend to follow, such as language-learning and cultural orientation as part of general Chinese medical curricula.

7. Concluding remarks

I have argued that our understanding of Chinese medicine is limited by our expectations of it. Too often, Chinese medicine is prized for certain qualities judged to be lacking in Western medicine. There is a tendency to assume that any desirable qualities that Western medicine lacks must be present in Chinese medicine, and to project those qualities onto Chinese medicine. In the process of projecting ideas onto Chinese medicine, other features have been obscured. I have argued against the false assumption that clinical experience and intuition are exclusively features of Chinese medicine, while theory and book-learning are characteristics of Western medicine that are of little import to the traditional Chinese physician. The notions that Chinese medicine is a set of healing practices based on a vast body of knowledge that has accumulated over two millennia and that clinical proficiency can be attained only through careful study of that body of literature has been largely obscured by a lack of linguistic access. As a result, information about Chinese medicine—and Chinese uses of Chinese medicine—have been held captive to the understanding of its Western interpreters.

Expectations that have largely derived from the tenets of alternative health care have to some degree distorted Western conceptions of Chinese medicine. Nevertheless, things are changing. Opinions regarding the size of the body of Chinese medical knowledge and the importance of language as the means of gaining access to it are far from static. Translators are providing English-speaking readers with more and more information about Chinese, so that the amount of literature now available is far more complex than the literature available 20 years ago ever reported or even suggested could exist. There are increasing numbers of people who have realized that they have lots to gain by learning Chinese, or by working with closely translated and unexpurgated sources, so that the amount of translation from primary sources is definitely on the rise. The more Chinese medical knowledge that reaches the West, the greater the influence that knowledge will have and the less Western expectations of Chinese medicine will be projected onto it. People will appreciate Chinese medicine for what it is, rather than for qualities they expect it to have by contrast to Western medicine or Western culture. As that happens, the English-speaking community of Chinese medicine will be able to embrace Chinese medicine rather than interpretations of it. Earlier, I used the metaphor of eclipsing to describe the way in which Western expectations of Chinese medicine were obscuring the facts about Chinese medicine. The metaphor is appropriate because eclipses are short-lived. Facts don't simply wither away when they are obscured. Given the prevailing trends in Chinese medicine in the West, the truth will gradually come to light.

¹ Stevenson C. "Complementary Therapies: Complementing Nursing?" In *Examining Complementary Health Care*. Vickers A (ed). Cheltenham: Stanley Thornes (Publishers) 1998.

-
- ² Peters D. "Is Complementary Medicine Holistic?" In *Examining Complementary Health Care*. Vickers A (ed). Cheltenham: Stanley Thornes (Publishers) 1998.
- ³ Kleinman A. *Patients and Healers in the Context of Culture*. Berkeley: University of California Press. 1980.
- ⁴ Unschuld P.U. *The Reception of Chinese Medicine in the West: Changing World View and Epistemological Adaptation*. Speech given at the 45th Annual Congress Oriental Medicine, Kobe, Japan, May 14, 1994.
- ⁵ Stevensen C, 1998.
- ⁶ Fuller R. Buckminster. *Critical Path*. New York, St. Martin's Press 1981.
- ⁷ Unschuld P.U. *Medicine in China: A History of Ideas*. Berkeley: University of California Press, 1985.
- ⁸ Unschuld P.U. 1985. Page 81.
- ⁹ Wood C "Subtle Energy and the Vital Force in Complementary Medicine." In *Examining Complementary Health Care*. Vickers A (ed). Cheltenham: Stanley Thornes (Publishers) 1998.
- ¹⁰ Beinfield H., Korngold E. *Between Heaven and Earth: A Guide to Chinese Medicine*. New York: Ballantine Books, 1991.
- ¹¹ *Essentials of Chinese Acupuncture*, Běijīng: Foreign Languages Press, 1980.
- ¹² Cheng X-N, *Chinese Acupuncture and Moxibustion*. Běijīng: Foreign Languages Press, 1987.
- ¹³ Unschuld P.U. *Nan-Ching: The Classic of Difficult Issues*. Berkeley: University of California Press, 1986.
- ¹⁴ Mitchell C., Feng Y., Wiseman N.. *Shāng Hán Lùn—On Cold Damage: Translation and Commentaries*. Brookline: Paradigm Publications, 1999.
- ¹⁵ Vickers A. "Criticism, Skepticism and Complementary Medicine?" In *Examining Complementary Health Care*. Vickers A (ed). Cheltenham: Stanley Thornes (Publishers) 1998.