

The Transmission of Chinese Medicine:

Chop Suey or the Real Thing?

Abstract

The transmission of Chinese medicine has been far less successful than it could be. The reasons are to be found in the nature of Chinese medicine itself, but more importantly in the motivation of those involved in the process of transmission and reception. It has suffered by the unintegratedness of its knowledge and the fuzziness of its concepts. It has suffered from the influence of Western medicine, but more importantly from Western expectations of Chinese medicine as a complementary health practice.

Introduction

In this paper, I wish to talk in general about the westward transmission of Chinese medicine, that is, the whole delivery system by which the clinical knowledge of Chinese medicine gets into the hands of Westerners. The questions I ask concern how we transmit knowledge and how much “interference” there may be in the process. How well a body of knowledge is transmitted can depend on the nature of the knowledge and the motivation of the transmitters and recipients.

Some things can be transmitted from one culture to another very easily. One might well imagine that ideas such as fire-making, the stirrup, the plough, or the wheel could be easily transmitted from culture to culture by mere observation. Some types of knowledge, on the other hand, are more complicated, and cannot be transmitted by observation alone.

Some cultural products change in nature as they move from one culture to another. Food is a prime example. When I was a child, my mother most weeks used to serve up macaroni cheese, an adapted form of an Italian dish that came into fashion in England as early as the 18th century, I believe. Of course, what my mother cooked up did not bear much resemblance to any pasta dish with a cheese sauce that is served in Italy. Different ingredients are substituted (Cheddar instead of Italian cheeses), and the method of preparation is different.

Let me focus on this example a little. The connoisseur and professional cook wishing to learn about Italian cooking would strive to gain a detailed knowledge of the materials and methods used by Italians in the preparation of food. For an English speaker to do this, he or she would probably have to spend a good deal of time in Italy and learn Italian. It does not take too much imagination to realize that the person would have to gain a feel for what Italians appreciate in the way of food, and that would involve gaining acquaintance not only with Italian cooking but also with Italian culture in general.

For knowledge of authentic Italian cuisine to be broadly disseminated among English speakers, we need English-language Italian cookbooks written either by Italian cooks who have gained a good command of English, or else by English speakers who have spent time in Italy learning from experts. The point here is that a good Italian cookbook is written by someone who has full access to the language and culture of Italy and who admires Italian cooking in all its detail and Italian culture in general. This level of transmission is quite different from merely picking up a couple of ideas from Italy. The authentic Italian cookbook is different from the cookbook for busy housewives. The recipe for *quattro formàggii* is quite different from the recipe for macaroni cheese that is intended to make use of those odd moldy old bits of left-over cheese.

Not everything changes when it moves, though. Over the last century or more, a whole conglomerate of interrelated branches of Western learning have been transmitted to other language communities, notably to those of the Far East. Despite the immensity of this operation, the Western sciences look to Chinese and Japanese people very much as they look to us in the West.

The comparison with the eastward transmission of Western knowledge is useful to us in our effort to understand some of the basic issues involved in the westward transmission of Eastern knowledge. I will show that in the westward transmission of Chinese medicine we have ended up with macaroni cheese, or rather—in this case—chop suey, a Western variant of Chinese food, instead of the real thing.

Eastward Transmission of Western Learning

China has had knowledge of Western healing arts for several hundred years, but it was not until the 19th century that Western medicine attracted greater interest. By this time, Western powers were making incursions into China's economic life, and Western civilization was beginning to exert great influence. Western medicine came to be adopted in China, as in many other countries throughout the world, perhaps not so much on evidence of its superior efficacy to any indigenous form of medicine as out of the prestige accorded to it by virtue of its being the medicine of the economically most advanced nations.¹ The Chinese realized that the economic and political superiority of the West lay in its superior technology and that they had to acquire Western scientific and technological knowledge if they were to restore their country to strength. They also realized that in order to acquire this knowledge they had to gain full linguistic access to the source culture. Thus, in the mid-19th century, they began establishing schools designed to teach foreign languages so that students could gain access to Western knowledge and translate technical information into Chinese.^{2,3}

At the same time, plans were put in action to encourage Chinese students adequately trained in foreign languages to go abroad to study.² These early moves, which have continued into the present, reveal the clear recognition that language is the vehicle of knowledge and that source languages must be learned, not necessarily by all students of the field in question, but at least by a limited number of people capable of translating information for wide dissemination.

Nowadays, students in the People's Republic of China (PRC) learn modern medicine by the medium of Chinese, in a Chinese terminology closely pegged to the terminologies of Western

languages. In Hongkong and Tái wān, greater emphasis is placed on students being able to read English texts. In both cases, however, the linguistic link is important. Although in China (as in Japan) the number of people who are both fully competent in medical English and make continual use of this skill must be quite small, these people are obviously a crucially important link in the transmission of information. Furthermore, a good command of English is indispensable for any Chinese (or person of any other nationality) wishing to gain access to the findings of international research and or to gain international credit for his or her own work—in medicine, as in virtually every modern field or discipline.

The success with which Western scientific knowledge has been adopted in the Far East is partly the result of having overcome the language barrier. It is also related in some measure to the inherent transmissibility of the knowledge in question.

Scientific knowledge is very different from cookery. While Italian food may appear on the tables of English speakers in different degrees of authenticity, scientific knowledge is not so susceptible to such variability. This is quite a surprising fact because modern scientific knowledge is immensely complicated and continually growing, and because it cannot be transmitted cross-culturally by observation alone, and cannot be transmitted without the use of man's fuzziest tool, language.

The reason why scientific knowledge lends itself to accurate transmission lies in its own precision. Every scientific concept is clearly defined, and its relationships to all the other concepts in its conceptual system are similarly clearly defined. While in cooking one can substitute Cheddar for mozzarella and still have something edible if not tasty, in science, one could not substitute a native concept in the target culture for a concept in the knowledge system to be transmitted without grave consequences. You cannot remove anything from the structure without there leaving an obvious hole, and you cannot add anything without justification.

Scientific knowledge is produced in accordance with strict principles that place demonstration over human authority and allow any existing theory to be open to question. Any given phenomenon must be explained in terms of a single, comprehensive theory. When two conflicting theories are put forward, either one is wrong or both are wrong. While scientific principles provide no guarantees that the knowledge produced by them is one-hundred percent true, there is theoretically only one true explanation of any phenomenon.

As I said, scientific knowledge cannot be transmitted from individual to individual without the use of language. Language is sometimes an ambiguous and unreliable method of communication. But the sciences are at pains to reduce the problems of communication by using language in an unequivocal way. The ideal that scientists try to achieve—and indeed do achieve to a large extent—is that each concept should be represented by a single term, and each term should represent only one concept. Very importantly, each concept must be clearly defined.

Any body of knowledge that, no matter how complex it is, admits of only one truth and makes use of clearly defined and labeled concepts would appear to be more easily transmitted than other types of knowledge. Scientific discourse is not open to interpretation in the way that other forms of discourse are. It resists any deliberate or accidental distortion.

Westward Transmission of Chinese Medicine

Turning now to the westward transmission of Chinese medicine, we find a very different situation with regard to cultural prestige, willingness to gain linguistic access to primary sources, and the nature of the knowledge in transmission. I will discuss the language issue first, because ultimately it is linguistic access that counts in the transmission of any complex body of knowledge that is conveyed from individual to individual by language.

If I were to ask people in this room who have some knowledge of Chinese to raise their hands, we are unlikely to have a spectacular show. If I were to ask those who can read Chinese-language literature of Chinese medicine fluently, there might be even fewer hands. Few people in the West learn Chinese. Chinese medical schools do not teach it, certainly never to a level intended to enable students to rely on Chinese literature for their intake of information.

While language was recognized as the key to the eastward transmission of Western medicine, it has not been identified as significant in the westward transmission of Chinese medicine. One might suppose, as I think many people tend to, that Chinese medicine rests on a relatively compact body of theoretical knowledge that has already been fully transmitted.

The facts speak against this, however. A huge legacy of literature is accessible in Chinese: according to different estimates, between 10,000 (Sivin 1989) and 12,000 books (Unschuld 1990). There are considerably fewer books available in the English language. According to a survey of Chinese medical literature by Birch & Tsutani (1996), fewer than 500 books were published on Chinese medicine in English between 1950 and 1993, and many of these are not translations.

A feature of traditional study of Chinese medicine is the study of classical literature. Translation of the classics has been slow to develop. Translations of a number of classics have appeared over the last 15 years or so, but good translations with adequate commentaries are few in number. Accurate book sales figures are hard to get hold of, but it is quite safe to say that translations of classics do not sell well. As Birch & Tsutani concluded from their study, Chinese medical transmission is still very much in its infancy.

For those who have linguistic access to this heritage, it is only natural to believe that Westerners would benefit greatly if the vast amount of literature created over centuries were available in Western languages. I suggest that this thought actually occurs quite rarely to the monolingual English speaker, for reasons that will gradually become apparent.

Why have Western adherents of Chinese medicine not bitten the linguistic hook? One might suppose that the linguistic issue is, to some extent, a vicious circle. If people cannot read Chinese, they are unlikely to realize how much more literature is available in Chinese. When they are in China, they cannot even read the sign that says “library” over the door to the place where the books are kept.

Why the Chinese identified language as the key when adopting modern Western learning, I suggest, is that they could see a whole range of products of Western intelligence before their eyes—superior means of production and superior weaponry that were undermining the economy

and the political power of the whole Chinese nation. The sheer force of the impact caused the Chinese to rattle their brains to see how they could best get hold of the knowledge that made the Western powers so strong. They quite sensibly realized that knowledge is transmitted by language, and so to acquire the knowledge they had to gain linguistic access to it.

By contrast, the Chinese cultural products that Westerners have identified as being worthy of adoption are limited to acupuncture and other modalities of Chinese medicine, as well as qigōng. Nothing from China is of any vital significance to the economic and political survival of Western nations. And even Chinese medicine is identified as desirable only by a segment of the population. The importance currently accorded to Chinese medicine is insufficient to mobilize the human and material resources necessary for the transmission of Chinese medicine on a significantly large scale.

While the transmission of Western knowledge to China has been a straightforward question of gaining linguistic access to Western knowledge, the problem for Westerners to obtain knowledge about Chinese medicine is fraught by questions of what is useful in Chinese medicine. Those with linguistic access to China's medical heritage have not agreed on what is useful in it, and have not agreed on a transmission program.

One of the main causes for this disagreement is the lack of a conspicuous cognitive structure in Chinese medicine. Chinese medical knowledge is based on different cognitive approaches, and applies diametrically opposed principles of treatment. Theory and practice are not closely interrelated.

For example, knowledge of organ functions is partly based on an analytical understanding similar to that of modern Western medicine. The lung's function of drawing in air and the stomach's function of preliminary digestion are examples of this. But the liver's function of orderly reaching and the kidney's functions of essence storage and reproduction were the product of an inductive type of thinking that works on the principle that what is generally seen to be true in the universe must also be true of the body. The qi function of the liver and, in part, the reproductive function of the kidney were almost certainly determined on the basis of five-phase correspondences (Wiseman 2000, Chapter 4).

Similarly, Chinese medicine includes different treatment modalities that have to a large extent developed separately and that are still usually practiced by different physicians. At no time did all healers join forces to decide what treatment modalities should be applied under what circumstances. Even within one modality, entirely different approaches to treatment can be taken, such as an allopathic approach of expelling evils on the one hand or a holistic approach of promoting balance on the other (Unschuld 1987, 1992; Birch 1998).

Over the centuries, Chinese medicine continually evolved. Successive generations of physicians made their contribution to medicine. However, nothing of the past was ever definitively discarded. For example, various systems of correspondence between the pulses and diseases of the internal organs were devised. Different schemes for the interpretation of the anomalies of the tongue and its coating were developed. The theories of the *Nèijīng* (內經) concerning febrile disease were developed into the theory of cold damage, which was centuries later to be rivaled by that of warm disease. Yet in all these developments, although earlier ideas

in some cases may have been eclipsed, no ideas were ever definitively discarded.

In the second millennium, the classics of the formative period (up to end of the Hàn Dynasty in the third century) were increasingly held to have authority as major works of a golden age, which scholars could only attempt to explain in depth, but would never be able to improve on.

Medicine in China is like a huge barrel from which physicians have drawn what they want. This heterogeneity of knowledge is largely alien to Westerners, and it is not surprising that we have had difficulty in identifying it and accepting it. Westerners may be apt to think that one approach is more representative of Chinese medicine than another. This is not, I suggest, because there is ample evidence for a single approach, but rather because of modern science, which finds a single explanation of any phenomenon to be more conclusive than multiple explanations. Back in the 1970s, Manfred Porkert (1978), for example, preached the word that Chinese medicine was based on the principle of inductivity rather than causality. This, however, does not represent the whole truth. There is clear evidence that both principles are operant.

It is precisely for these reasons that it is much more difficult for Westerners to enter the world of Chinese medicine than it is for Chinese people to enter the world of science. It may be an exaggeration to put it like this, but it helps to make a point that is poorly understood: if one were to transfer the whole body of Western medicine to a language community that never heard anything about it, one would only have to translate, say, all the books published in English in the last year in the field of medicine and related fields for that community to gain a comprehensive grasp of the subject. By contrast, if one were to attempt to transmit Chinese medicine to our hypothetical isolated language community, we would have to translate a whole pile of books from different centuries before the recipients could have an equally clear understanding of Chinese medicine as they would have of Western medicine. In this respect, Chinese medicine is something like the fine arts; anything from the past can still be appreciated, and it is difficult to say if there is any such thing as progress in it.

The transmission of Chinese medicine is hampered by its knowledge structure. It is also hampered by the language it is expressed in. Chinese medicine has many “technical terms,” but not quite in the sense as is meant by the expression in the modern sciences. A “technical term” is any term used in communication among specialists that the layman does not understand, or any lay term that is used in a specialized sense that the layman does not fully understand. In other words, a technical term is an unfamiliar expression or a familiar expression used in an unfamiliar sense. In this sense, Chinese medicine has many technical terms, thousands upon thousands in fact. Yet it never felt the need to sharpen the language tool to eliminate multiple meanings and ambiguities.

The transmission of Chinese medicine has been further complicated by the presence of a very vibrant medical and scientific culture in the West, and this is reflected in the fact that this knowledge has largely replaced traditional Chinese learning in the very country from which Chinese medicine comes. There are twice as many Western medical doctors as there are Chinese doctors in the PRC, and ten times as many in Táiwān (Birch & Felt 1999).

With the impact of modern knowledge in China, Western medicine relegated indigenous healing arts to a secondary role in the modern health-care system. Chinese medicine is still

considered by a large section of the population to be valuable and effective. Yet, for most people in China, modern scientific methods are now the arbiter in all matters of nature, and Western medicine is considered the final judge of all medical matters.

For this reason, there is a strong belief in China that Chinese medicine must be explained in terms of scientific principles, and only that part of it that is scientifically based should be retained for posterity. It is this notion that lies behind the continuing efforts to integrate Chinese medicine with Western medicine in China.

This has been important, because the Chinese have played a major role in the transmission of Chinese medicine. A number of basic acupuncture textbooks from the PRC provided the basic texts for acupuncture training in the United States for a number of years.

But the notion that therapeutic procedures need to be set on a scientific basis naturally also exists in the West. In fact, one reason why acupuncture gained in popularity in the 1970s lies in new evidence for the pain-relieving effects of acupuncture (Unschuld 1998). Experiments in the PRC about the analgesic effects of electroacupuncture in surgical operations (which were given sensationalist media coverage after Richard Nixon's personal physician witnessed them during the historical Presidential visit of 1972 that reopened communication between China and the West) triggered scientific experimentation by Western scientists. Initial studies suggested connections between acupuncture analgesia and the effects of endogenous opioids, which made engagement in the scientific experimentation of acupuncture respectable (Unschuld 1998: 111).

While many aspects of Chinese medicine are not easy for Westerners to understand unless they have linguistic access to the source, there is one thing about Chinese medicine that is immediately apparent: its unscientific and speculative nature. To learn acupuncture, for example, one has to familiarize oneself with the pathways along which qi flows. Unfortunately, neither the pathways nor the qi are detectable as individual entities by any known scientific method. If people were asked to define qi, each person would be quite likely to give a significantly different answer.

Some people who believe acupuncture and Chinese medicine to be valuable despite their unscientific nature have argued that empirically or scientifically based forms of Chinese medicine that to a greater or lesser degree dispense with traditional theoretical trappings are likely to be more viable in the West. In other words, trying to import Chinese medicine lock, stock, and barrel would probably be unsuccessful; rather we must adopt its treatment modalities and ground their use in modern scientific theory. Such ideas are notably to be found in Felix Mann (1992) and in Jacqueline Filshie & Adrian White (1998).

Our modern scientific view of the world has not only influenced the adoption of acupuncture by demonstrating in scientific terms the ability to suppress pain by inserting needles in the body, it has also affected our interpretation of the physiological and pathological theories on which acupuncture was traditionally practiced. Felix Mann, for example, recast the five humors (五液 *wǔ yè*), tears, sweat, drool, nasal mucus, and spittle as tears, sweat, saliva, nasal mucus, and urine. In so doing, he eliminated the rather puzzling problem of two kinds of saliva proposed in the *Nèijīng* (內經) by replacing the humor of the kidney with "urine," which of course makes a lot more sense to a modern Westerner (Mann 1962/1971). Felix Mann was probably also the person

responsible for reconceptualizing the traditional principle of “draining” as “sedation,” a term whose continuing use supports the equation of qi with energy. I will return to this further ahead.

The scientific respectability of research in acupuncture is undoubtedly one of the reasons for the popularity of acupuncture. Nevertheless, a more fundamental reason is to be found in the identification of acupuncture as a possible alternative or at least as a complement to Western medicine. And this makes the transmission process even more complicated.

In the 1960s, a certain segment of Western society began to lose faith in scientific medicine and turn increasingly to alternative therapies. The reasons for the complementary-health boom are generally agreed both by their proponents and by their opponents.

Biomedical treatments are often experienced as harsh and invasive, having side-effects that can sometimes create health problems as well as solve them. The great advances of Western medicine have increasingly been won through reliance on complex technology and through specialization in which personalized care is difficult to provide. The care of a single physician has given way to procedures of patient “management” involving many specialized workers, many of whom the patient never even comes in contact with. Antibiotics that create resistance, chemotherapy and nuclear medicine, abortion on demand, and maintenance of life after brain death all evoke the fear, now encountered in so many aspects of our lives other than medicine, that through the pursuit of science and technology man is, as it were, bringing to life an uncontrollable monster that will bring about his own destruction.

An increasing segment of society views Western medicine as acting forcefully against nature and failing to care for the whole patient, and has turned increasingly to complementary medicines perceived to possess the qualities of naturalness and holism felt lacking in Western medicine. Complementary medicines such as homeopathy, aromatherapy, herbalism, Bach flowers, the Alexander technique, and not least acupuncture and Chinese medicine, have in common the fact that they are deemed by their proponents to work gently through the power of nature and with minimum human intervention, and to take care of the whole patient instead of looking at an isolated laboratory report.

The insertion of Chinese medicine into the Western array of health-care options in the late 20th century was to a large extent contingent upon its ability to be perceived as a “soft” therapy, applied by practitioners who fulfill the role of holistic healer. This would, arguably, have not been possible had it not been for the Western focus on acupuncture. Ostensibly, the therapy of needles, according to traditional explanations, achieves its effect by adjusting the flow of qi. By this subtle intervention in an intangible aspect of the body’s functioning, pathological imbalances can be corrected in order to bring about major beneficial effects that reach into the deepest functional centers of the body, the internal organs. So far as we know, acupuncture introduces nothing into the body that remains in it after the treatment. It is a direct intervention in bodily function that occurs without any physical medium such as that of an ingested drug. Hence, it can be perceived as a soft therapy par excellence.

The Gospel of Complementary Health

Among the complementary-health therapies available, there are huge differences. There are

very old medicines such as Chinese medicine, and relatively new ones such as Bach flower therapy. There are allopathic and homeopathic approaches to treatment. There are treatments that require ingestion of substances and others that do not. Yet despite these huge differences, proponents of these therapies all espouse similar ideals.

Complementary therapies are assumed to be natural because they use simply processed animal, vegetable, and mineral products, if any at all. They are holistic in that they treat the whole patient rather than the disease, and prevent disease rather than curing it. In particular, they are felt to address spiritual, mental, and emotional needs as well as physical problems, and for this reason complementary therapies are closely related to personal growth philosophies and to practical Eastern spiritual traditions, such as yoga, qìgōng, and meditation.

Related to the notion of naturalness is the idea that complementary therapies are rooted in some ancient, even timeless tradition that arose in cultures that were much simpler, earthier, and wiser than our high-tech civilization (Coward 1989; Vickers 1998; Campbell 1998). At the same time, they are supposed to respond to a postmodernist belief that the world cannot be understood in terms of a single framework and that technological advance does not bring progress (Peters 1998).

Evidence of the tenets of complementary health are very much in evidence in the English-language literature of Chinese medicine. Most of them are to be found in the introduction to a book entitled *Between Heaven and Earth: A Guide to Chinese Medicine* by Beinfield & Korngold (1991). I quote a rather long passage (pp 3–4):

Subtle yet palpable, my initial encounter with acupuncture left me tantalized by mystery and promise. Mystery, in that tiny needles could extend my field of awareness and completely alter the state of my being. Promise, in that by burrowing into the conceptual soil of this system, I could deepen my own self-understanding.

As the daughter of a surgeon and granddaughter of two surgeons, my early life was steeped in the cauldron of medicine, brewed over several generations. Enthusiasm for healing was contagious, and I became infected. As a child I was impressed by father's devotion and satisfaction. He rushed to the hospital day or night to operate on a man lacerated in a motorcycle accident or a child threatened by a ruptured appendix. Lives would have been lost without his heroic intervention.

The role of doctor and the appeal of medicine came naturally—but why Chinese medicine? The ideology of Chinese medicine immediately captivated me by its stark contrast to the perspective of Western medical science. I had never been comfortable thinking of myself in my father's language of electrolytes and blood-gas ratios, a collection of quantities and statistics. The Chinese medical vocabulary contained metaphors from nature like Wood, Fire, Earth, Metal, and Water, Heat, Wind, and Cold. This cosmological description of human process confirmed what I knew intuitively to be so—that what moves the world outside moves within me—that subject and object are two aspects of one phenomenal world. As peculiarly outside my cultural context as it was, Chinese medicine felt familiar. What enticed me even more than my sense of continuity with family tradition was the affinity I felt with its concepts, and I wondered if the ancient wisdom embedded within its construction of reality could untangle some of our

modern predicaments.

When Efrem and I were first introduced to acupuncture at a seminar at Esalen in spring of 1972, there was tremendous upheaval in the world. The Chinese were in the midst of a cultural revolution, and so were we. During the sixties the concerns that I wrestled with were more social than medical. Many of us were seeking to antidote the toxicity of racism in the American social body and heal the wounds inflicted by a decade of violence in Vietnam. I struggled to understand and reconcile how Western civilization, having achieved some outstanding accomplishments, could so often contribute to rather than alleviate human suffering. How could it perpetuate vast environmental insult and the threat of nuclear disaster and yet be building a better future?

To remake the world it seems we needed to rethink it. After all, solutions depend on how problems are framed, the context within which they exist. At issue for me was in part how we defined reality—and the reality assumed by Chinese medicine made sense.

Chinese medicine echoes the logic of quantum physics, which suggests that we exist in a relative, process-oriented universe in which there is no “objective” world separable from living subjects. The essential questions cannot be resolved by measuring static “things”; rather, answers become stories about interactions and relations. Within this paradigm contradictions are not only sanctioned but prevail, and truth is purely contextual. In contrast with our conventional Western tendency to draw sharp lines of distinction, Chinese thought does not strictly determine the boundaries between rest and motion, time and space, mind and matter, sickness and health. Chinese medicine transcends the illusion of separation by inhabiting the reality of a unified field, an interwoven pattern of inseparable links in a circular chain.

Paul Unschuld has said that the history of healing reveals that a group or community chooses therapeutic interventions, not on the basis of their clinical effectiveness, but on the basis of the ideas underlying them (Unschuld 1992). The subjective attraction that Chinese medicine holds for Beinfield and Korngold is quite clear from the quotation above.

It is becoming increasingly apparent to people within complementary health and outside it that the way proponents characterize their own complementary-health practices does not always fit the actual reality of those practices. There is a growing awareness that complementary health therapies are not entirely natural, that they do not have monopoly over holism, and that their claims to ancient traditions are somewhat exaggerated. Chinese medicine is a typical example. It is interesting to look into some of these points.

As to naturalness, acupuncture may be considered natural in that it appears to achieve its effect by stimulating the body to correct its own imbalances, but, as has been pointed out (Campbell 1998), there is nothing natural about sticking industrially manufactured needles into people’s flesh.

The naturalness of China’s *materia medica* is also suspect. Although vegetable products account for the vast majority, there are numerous insect, mineral, and animal products including worms such as earthworm (地龍 *dì lóng*), insects such as screwworm (五谷蟲 *wǔ gǔ chóng*), spiders such as wall spider (壁錢 *bì qián*), and reptiles such as gecko (蛤蚧 *gé jiè*). There are

also animal and human excretions such as bat's droppings (夜明砂 *yè míng shā*), licorice in human feces (人中黃 *rén zhōng huáng*), as well as a variety of industrial waste products such as tannery tar (煙膠 *yān jiāo*) and needle filings (針砂 *zhēn shā*). It is not natural for human beings to eat animal, human, or industrial waste, and the thought of eating insects probably provokes nausea in the vast majority of humanity.

Nevertheless, proponents of Chinese medicinal therapy for the most part refer to their art quite misleadingly as “herbalism,” and I suggest that they do so out of an unconscious effort to ignore in Chinese medicine what fails to conform to the notions of complementary health. Herbal remedies are closely related to vegetarianism and health food culture, as everyone knows. But Chinese drugs are not all herbal, and they are certainly not all harmless. Not only mineral products, such as cinnabar (朱砂 *zhū shā*), but also a number of the animal products, such as tabanus (虻蟲 *méng chóng*), and even vegetable products, such as datura (曼陀羅 *màn tuó luó*) and croton (巴豆 *bā dòu*), are toxic.

The claim that Chinese medicine is holistic can be criticized on several accounts. The structure of its knowledge is not highly integrated. Chinese theories concerning the body have developed through a combination of observation and speculation, and by a combination of inductive and analytical thought. In the whole of its history, Chinese medicine has never developed unified criteria for distinguishing facts from falsehoods and definitively rejecting the latter. To this day there are multiple explanatory models for interpreting tongue signs and pulse conditions, and for understanding febrile disease.

Even in one treatment modality such as acupuncture there are holistic and unholistic explanatory models, since treatment can take an allopathic approach of expelling evils from the body as well as a holistic approach of promoting balance (Unschuld 1987, 1992; Birch 1998). Some treatments are purely symptomatic (Birch 1998). As Birch points out, numerous Western defenders of Chinese medicine, including Kaptchuk, Larre, Beinfield & Korngold, Cassidy, Hammer, and even the World Health Organization, have emphasized the exclusively holistic nature of Chinese medicine in spite of contrary evidence.

As Unschuld has pointed out (1994), the battle field terminology of allopathic Western medicine so closely associated with its perceived ills in fact was predated in China by two millennia. The following expressions all appeared in the *Nèijīng* (內經): 衛 *wèi*, “defense”; 攻邪 *gōng xié*, “attack evil”; 犯 *fàn*, “attack”; 伐 *fā*, “quell” (Zhāng1 D-B & Wǔ C-C 1990). The unholistic approach is much more marked in Chinese medicinal therapy, which has amongst its therapeutic arsenal the principle of “attacking toxin with toxin” and the methods of purgation and emesis.

The diagnostic process in the now most popular style of Chinese medicine relies on correlating multiple symptoms. Although many pathological conditions are attributed to causative agents such as wind or fire that have to be eliminated, just as bacteria and viruses have to be eliminated in Western medicine, these causes defy isolation and their presence is inferred from the various symptoms that the patient presents. Chinese medicine relies on the four examinations (inspection, listening/smelling, inquiry, and palpation). These naturally place the patient fully in the eye of the physician. To this extent, diagnosis is holistic. Nevertheless, the holistic diagnosis of Chinese medicine traditionally may have not been so important as is often

thought. The repeated insistence in traditional literature on the performance of all four examinations rather than mere palpation of the pulse suggests that many physicians based their diagnosis on the pulse alone. This is corroborated by patient expectations in China to this day: Chinese patients often expect a skilled physician to be able to offer a diagnosis based solely on the pulse.

Chinese patients are traditionally different from the complementary health client who expects the practitioner to investigate health problems in the context of his or her life in general. Chinese people often visit doctors for a solution to specific health problems with an attitude such as: “Feel my pulse, and don’t ask me too many questions!” The Chinese medical practitioner in China addresses this specific problem very much in the way that the Western medical practitioner does, with the same minimal amount of personal contact.

The relationship that Chinese medicine establishes between psychological states and organ functions, which is much lauded in the West, is one of the dubious products of systematic applications of the five phases (obvious in the case of the liver, but less so in the case of the other organs). On paper the correspondences are simple (one reason, perhaps, why they are attractive), but they are less easy to see in practice and can hardly be considered a theory of psychology in the sense of explaining thought processes and their manifestations in behavior. For example, the *Nèijīng* (內經) has a brief discussion of dreams and their significance; while this might naturally form an attraction for modern Westerners (Maciocia resurrects them in *The Foundations of Chinese Medicine*, 1989), subsequent generations of physicians in China had little or no interest in them. Chinese medicine over its long history has accumulated many theories, some of which have lasted and some of which have fallen by the wayside. The relationship between theory and practice has always been vague.

The notion of a timeless tradition cannot be applied to Chinese medicine. As Unschuld has pointed out (1992: 54), “Western proponents of Chinese medicine have depicted traditional Chinese medicine, in contrast to historical evidence, as a coherent system of thought, basically unchanged since antiquity.” Stephen Birch (1998) has illustrated the point further with a description contained in the preface of a popular text (Maciocia 1989) of a fictitious peasant woman in 154 BC, whom an acupuncturist gave both a diagnosis and a treatment that were not to appear for centuries. Chinese medicine has never been fully integrated or static, and the unconditional reverence for ancient knowledge is a relatively recent phenomenon (Unschuld 1992).

The belief that practices of East Asian origin are rooted in ancient wisdom, in true understanding of nature, and in spiritual enlightenment makes them especially attractive to Westerners who embrace the philosophy of complementary health-care. Yet the fact that the origins of Chinese medicine lie in a distant and ancient culture by no means make the Western student of Chinese medicine particularly willing to embark on the journey through time and space to understand the roots of the art. As I have already said, classical literature so far seems to have attracted little attention.

The West’s interest in Chinese medicine and other forms of complementary health is closely associated with its being perceived as natural, holistic, timeless, and spiritual. These qualities are neither consistently observed in complementary medicines, nor are they wholly absent from

modern Western medicine. Rather, they are philosophical desiderata that spring from a reaction to the ills created by modern industrialized society. Their projection onto complementary medicines is limiting and even damaging to the development of these medicines. In Chinese medicine, they foster distortion of the subject matter and divert attention away from the realities of knowledge transmission.

Criticism of complementary health therapies has not been limited to their dubious self-characterization. The main thrust of the argument presented by Campbell, Vickers, and Peters is that the lack of healthy criticism and scepticism that is characteristic of academia forecloses any progress in complementary health. The lack of criticism and scepticism, they say, fosters an almost religious attachment to complementary health practices, and discourages any research designed to prove the efficacy of treatments. Scientific demonstration of therapeutic efficacy is seen in opposition to healing skill that aims primarily to make the patient feel better.

Chinese medicine provides evidence of the lack of criticism and scepticism characteristic of complementary health practices. It has been suggested that scientific research is often used by proponents of complementary health to bolster a positive claim about their treatments, while negative evidence tends to be ignored (Vickers 1998: 2–3). It is of note that scientific research in Chinese medicine is conducted by scientists in mainstream academia; it is not considered anything worthy of promotion in Chinese medical schools. In the 1980s, in an attempt at the New England School of Acupuncture to establish a framework for clinical research in the school's teaching clinic, teachers were asked to apply a standardized vocabulary in the writing of clinical histories. Most of the teachers refused to be bound to a strict vocabulary on the grounds that, among other things, all their patients were different and could not be described in a limiting terminology. As a result, the research project failed to take off (Birch, personal communication 1990). Teachers regarded the call to research to be an unwanted act of scrutiny that encroached upon the sacred realm of the clinical competence of individual practitioners. Needless to say, such an attitude is conducive neither to clinical research nor to the much needed standardization of terminology.

Unwillingness to engage in critical self-scrutiny has been shown to be an endemic problem in complementary health. Yet, as has been pointed out (Birch & Felt 1999), Chinese medicine, unlike any other form of complementary health, not only faces the challenge of conducting research to substantiate therapeutic claims. As a form of medicine transmitted from a distant culture, it also faces the challenge of ensuring that authentic East Asian knowledge reaches Western readers.

We can proceed down different avenues at the same time. Viable approaches are a) faithful translation so that more of the corpus of Chinese medicine is made available to English speakers; b) scientific research to validate clinical efficacy. These two avenues are in fact not uninterrelated. As Stephen Birch has shown (Birch 1998), we cannot perform effective and comprehensive research in acupuncture until we have a clear picture of what acupuncture is, and that is not yet the case.

Adaptation

Although Chinese medicine does not entirely fit the tenets of complementary health, attempts

have been made to make it fit them. Let us return to Beinfield & Korngold, who provide us with a startling example of the way in which Chinese medicine is remolded beyond recognition to suit complementary-health taste.

Between Heaven and Earth is divided into three parts: basic theories (including yīn-yáng and the five phases); five psychological types; and therapy. By the book's very table of contents, we see that it presents a version of Chinese medicine in which five-phase theory and the doctrine of human types are the central, if not the only features. The importance of the five phases is exaggerated to the point where the six bowels are completely subsumed to the five viscera and only five emotions are discussed, while the seven-fold classification of seven affects, 七情qī qíng, is not mentioned. The treatment section notably presents herbal remedies in the form of a "modular pharmacy." Formulas containing multiple ingredients are labelled "Tonify Moisture," "Tonify Blood," "Consolidate Qi," "Purge Moisture," "Supplement Wood," "Harmonize Wood-Earth," etc. What is precisely meant by all these things is not clear. The formulas have been devised by the authors and are sold by them.

This adaptation raises a number of questions. Although the authors state in their introduction that they are offering an adapted form of Chinese medicine, they do not explain in detail what parts are traditionally Chinese and what parts adapted. They do not tell us what parts have been added and what parts have been subtracted. They offer no rationale for the adaptations, and no proof of their validity.

Although Chinese medical knowledge, unlike that of Western medicine, has not been developed through repeatable experiment, it is reasonable to give it credit for its long experience in caring for human beings. Nevertheless, Beinfield & Korngold cavalierly whisk this experience away even though, without linguistic access, they cannot know any more about it than has been presented by translators. Obviously, they believe that it is more useful to reinvent Chinese medicine to suit Western tastes than to take the trouble to learn an East Asian language so as to deepen their understanding of East Asia's heritage of medical experience.

What they offer in its stead is of uncertain origin. *Between Heaven and Earth* is generally recognized as belonging to what is known as the traditional acupuncture movement (otherwise known as the Worsely school of thought), which has a strong following in both the United Kingdom and the United States. Interestingly, the founder, Englishman Jack Worsely, has not, to my knowledge, published a full description of his five-phase adaptation of Chinese medicine, any explanation of its origin, or any justification for its validity. We know that his theory of the five human types originates from a passage of not much more than a thousand characters in the *Líng Shū, Yīn Yáng Èr Shí Wǔ Rén* (靈樞·陰陽二十五人 "Magic Pivot, Yīn-Yáng and the Twenty-Five Human Types"), but we are not told where all the detail comes from.

Implicit in this adaptation is a belief on the part of the authors that their interpretation of Chinese medicine is adequate and reliable and that more is to be gained by developing a Western interpretation than by acquiring linguistic access to primary texts in order to investigate in greater detail what the 2,000-year heritage of Chinese medicine has to offer. If they are unaware of the problems of transmitting a complex knowledge corpus such as Chinese medicine and unaware of the low degree of transmission that has so far been achieved, then they must have far less esteem for China's medical heritage than confidence in their own ability to improve on it.

The fact is that they do not have a clear grasp of any of the basic issues. As has been pointed out (Birch 1998), the distinct dichotomy that certain writers establish between the holistic, integrated approach of Chinese medicine on the one hand and the fractured approach of Western medicine on the other not only misrepresents the reality of Chinese medicine, but also that of Western medicine.

Furthermore, quite ironically, Beinfield & Korngold's adaptation is a simple, integrated system based on one traditional facet of Chinese medicine only, responding to what Unschuld has called a "cognitive aesthetic" (Unschuld 1989) that is typically Western, not East Asian.

Adaptations of this kind are possible because many complementary-health advocates find them attractive and are averse to applying any critical scrutiny. Moreover, they do not have the linguistic access to primary sources that would enable them to apply such scrutiny to maximum benefit. Because such adaptations are often labeled as Chinese medicine, many people are unaware that they are adaptations. The fact that Chinese medicine is subject to the modifying force of political, economic, and cultural demands is rarely noted in the training of acupuncturists (Birch & Felt 1999).

The point here by the way is not that adaptation is inherently wrong. We simply need to know what is authentic and what is an adaptation. And presumably we need to know that the adaptation is justified. In my view, a modern adaptation that has been created by people who have no direct access to the East Asian tradition and that is not based on scientific evidence is likely to be far inferior to original East Asian knowledge unless it rests entirely on its placebo effect.

With a view to eliminating the problem of the dubious origin of Chinese medical information presented in current literature, three major U.S. publishers of Chinese medical literature (Blue Poppy, Paradigm, and Eastland) met in May 1995 to discuss a "Code for the Council of East Asian Medical Publishers" (COMP) whereby publications should contain a designation indicating whether they are translated or compiled from primary sources or are original works, and, in the former case, how close the translation is. The instigator of the agreement, Blue Poppy Press, and one other participant, Paradigm Publications, accepted the code and have since applied it, and certain publications of Churchill Livingstone have included designations. The agreement is significant in the present discussion because it recognizes and highlights the existence of problems in the transmission process.

I have so far only spoken of adaptations inspired by complementary health. I have not spoken of the adaptations inspired by Western medicine. The ways in which Chinese medicine can be integrated into a Western medical framework and even Western medical practice should be fairly clear to most people. Because of space limitations, I will not go into them here.

The Consequences of Error

Unless a considerable segment of the receiving community has linguistic access to primary sources, the progress toward advanced knowledge is slow. In the United States, for example, most practitioners even today have a training based on a series of three basic textbooks produced in the PRC: *An Outline of Chinese Acupuncture* (1975), *Essentials of Chinese*

Acupuncture (1980), and *Chinese Acupuncture and Moxibustion* (1987). They have not had to know any more than what is contained in these books to get a license to practice. Licensing hampers efforts to raise standards particularly when education is mainly provided by schools operating outside mainstream academia. However, the acupuncture literature that has been published since the above-mentioned PRC publications appeared is largely not translated, but is written by people with no access to primary sources. Books such as O'Connor & Bensky's *Acupuncture: A Comprehensive Text* (1981) and Yang & Chace's *Zhēnjiǔ Jiǎyījīng: The Systematic Classic of Acupuncture and Moxibustion* (針灸甲乙經) (1994) are comparatively rare highlights in the development of English-language acupuncture literature.

Unless a considerable segment of the receiving community has linguistic access to primary sources, the transmission of information is subject to a process rather like Chinese whispers, the game in which a message is whispered from person to person until it is distorted beyond recognition. I will illustrate the point with an example. Stephen Birch and Bob Felt have pointed out that many English-speaking writers have expressed the belief that the eight extraordinary vessels store original qì (元氣 *yuán qì*) or essence (精 *jīng*), and have counselled against their needling to prevent any loss of these substances (Birch & Felt 1999). The belief is not supported by primary Chinese sources, notably the *Huángdì Nèijīng*, and the belief has been traced to the French-speaking writers Albert Chamfrault and Nguyen Van Nghi, who are suspected of representing Vietnamese tradition.

The belief that the extraordinary vessels should not be needled is highly prevalent in the English-speaking world. It can even be seen in the work of Maciocia, whose bibliographies deceptively suggest he works exclusively from primary Chinese sources (Maciocia 1989: 355).

It has taken decades for anyone to realize that although the contraindication against needling the extraordinary vessels is of East Asian origin, it is not an orthodox Chinese medical belief. Quite patently, people are scratching around in the English-language literature. They are not facing the burning need to learn Chinese and translate instead of picking what they like from the crumbs of past translation and piecing them together according to their own fancy.

There are quite a few people busily writing books and lecturing far and wide, as if they were authorities on traditional Chinese medicine. Nevertheless, it is simply a matter of straightforward logic that in order for someone who has no knowledge of the Chinese language (and hence no access to primary Chinese literature) to be considered an authority on traditional Chinese medicine, they and their readership must either believe (A) the current body of English literature accurately represents all the essential elements of Chinese medicine or (B) that it is not necessary to even have all the essential elements available in English since Chinese medicine can be learned not only from books but through clinical practice.

I suggest that such people are gravely mistaken. I have already pointed out how much less literature there is available in English than in Chinese. It does not take too much imagination to realize that the Chinese barrel most likely contains much useful information that has not seen the light of day in the English-speaking world. It would be naive to argue that the westward transmission of Chinese medicine had advanced past its infancy.

The notion that clinical experience confers authority is a complete myth. The

contraindication against needling the extraordinary vessels is an item of theory that, if we are to judge by Chinese experience, has no substantiation in clinical reality.

Yet this misinformation was not magically corrected by our clinically proficient English-speaking authorities who have all accepted it. Some of these people have been critical of me for the emphasis I have placed on language issues. They say that Chinese medicine is a healing art, and that what counts is clinical experience, not linguistic precision. They fail to see that linguists or terminologists could have anything useful to contribute to their knowledge. Yet it is quite easy to reverse the argument and say that no amount of clinical experience is of any use unless it rests on sound knowledge of theory and a broad command of the experience of other physicians that can be made available only by negotiating between languages.

Clinicians can talk about what they have seen in the clinic in relation to what they have learned in their study of the literature. Practical experience cannot be isolated from other aspects of learning. When the literature contains faulty knowledge, then any clinical experience built on it is likely to be faulty too. If contrary to some Vietnamese tradition, Chinese acupuncturists have been needling the extraordinary vessels for centuries and have found that it has positive rather than negative effects, then it is wrong to say that the extraordinary vessels should not be needed.

Of course, it is the Vietnamese word against the Chinese since there may ultimately be no objective proof either way. The physical existence of the extraordinary vessels, of essence, and of original qi has not been proven scientifically, so that no hypothesis concerning these entities can be pursued. The fact remains, though, that to learn about the clinical experience of East Asian physicians, we need proficiency in language, not clinical skill. A paint-brush maker does not need to be able to paint like Picasso; he just has to understand what the artist needs.

If the Western practice of acupuncture is not to restrict itself to scientifically proven treatments, it must base itself on clinical experience. The greatest amount of experience is contained in Chinese texts. In the transmission of Chinese medicine, linguistic access is actually far more important than clinical experience because it provides access to a wealth of East Asian experience.

In China, broad reading in ancient and modern literature is generally considered indispensable to the development of the individual physician's clinical proficiency. In modern medicine, such a need is minimized by the existence of an efficient mechanism that enables objective experience to be fairly evaluated and swiftly shared. The theoretical and clinical studies published in refereed journals this year provide the raw materials for next year's textbooks. Over recent decades, Chinese medicine has tried to set itself on a similar footing, but the very nature of its knowledge makes this difficult. While in Western medicine, last year's textbooks are now being thrown away and recycled, Chinese medical doctors continue to rely on a large corpus of miscellaneous writings for their inspiration. Until we have access to that corpus or until an adequate proportion of it is available in reliable translation, we cannot say that we have fully acquired Chinese medicine.

Given the fact that the information supply chain in the Western world includes people with little or no access to primary literature, the monolingual English reader cannot always be

guaranteed that the information he or she receives has come from a reliable origin. It is precisely these problems that the COMP agreement I mentioned earlier was meant to sort out.

Issues such as these ought to be thrashed out in formal public debate, so that everyone can arrive at a common understanding. So far, Chinese medicine in the West has not developed an adequate academic forum for dealing with such issues. Most exchanges go on behind the scenes.

Over the years, I have argued in favor of a particular approach to translation and to transmission. I have won a great deal of support, and increasing numbers of translators have adopted my proposed terminology. But the linguistic issues I have presented have elicited little or no response from the Chinese medical “establishment.” Most of those who have expressed opposition to my linguistic contentions have no knowledge of Chinese. But there are those that do. However, none have entered into a public dialogue about term translation, even though private, off-the-record comments are frequently heard. No others have published a glossary of terms to enable other translators to reliably follow their method of translation and create a literature that supports and develops their own. Most have declined to join the COMP agreement that is designed to orient consumers in their choice of literature. When one learns that this group includes not only publishers and writers, but also those who sit on committees that decide the scope of licensing examinations, then it is easy to see how linguistic access insufficient to scrutinize published work, or to compete with it in significant markets, can hardly be considered to be without financial and personal consequence for the people in question.

I have come to realize that the full import of the linguistic problems involved in the transmission of Chinese medicine may possibly be understood only when the problem of transmission is presented in its wider social context. Unfortunately, to do that without beating around the bush entails assessing the behavior and motives of key individuals in the field. In short, it means having to turn a scholarly debate into a political one.

Conclusion

I began by comparing the transmission of Chinese medicine to the West with the transmission of Western learning to China. Let me recap.

China’s acquisition of Western learning was a relatively simple process. The economic and political weakness of China made the acquisition of Western learning a necessity for survival. Language acquisition was immediately identified as the means by which the knowledge was to be acquired. The process of adoption was helped by the conceptual nature of modern scientific knowledge and its expression in language.

The westward transmission of Chinese medicine takes place under very different conditions. Chinese medicine appeals to a much more limited segment of Western society. Its transmission is hampered by the fact that the West has a powerful form of medicine that forms an integral part of a whole scientific and technological package that has spread like fire across the globe because it offers wealth and prosperity. Notably, Western knowledge, including medical knowledge, has virtually ousted all traditional knowledge in China.

The westward transmission of Chinese medicine has also been hampered by the complexity

and unintegratedness of its concepts, which have laid it open to tampering by its Western (and modern Chinese) adopters.

The greatest force influencing the reception of Chinese medicine does not spring from scientific Western medicine, but from a reaction against it and against science and technology in general. The rise of complementary health is not only intimately related to dissatisfaction with scientific medicine, but also to a growing awareness of the wide-ranging side-effects of science and technology in general.

One would hope that no sane and intelligent person would wish to dismiss ecological problems out of hand. Such a hope should not entail, however, that it is right to project the desiderata of complementary health onto Chinese medicine and other alternative therapies without even looking to see if they fit.

In the case of Chinese medicine, this uncritical approach has, in the most radical of adaptations, led to the removal of all contents that do not fit the complementary-health profile, and the ten-fold magnification of those elements that do fit the profile.

Westerners have projected indigenous ideas and expectations onto Chinese medicine with such an intensity that they have been virtually unaware that Chinese medicine is the product of another culture and that it is expressed in a different language.

As I have said, the two avenues that we can usefully follow in the development of Chinese medicine are that of substantiating therapeutic effectiveness in scientific terms, and that of making sure we have an authentic and complete picture of Chinese medicine in all the important details.

One avenue that we should not proceed down is trying to fudge Chinese medicine to make it look scientific. Another avenue that we should not proceed down is that of trying to develop a form of Chinese medicine that is completely holistic but that has neither the stamp of scientific approval nor the stamp of “made in China.” We should not sift and select what conforms to complementary health tenets that are dubious anyway. We should seek to obtain as much as we can from the original source.

The fate of Chinese medicine in the West is changing all the time. In the past, training in Chinese medicine was largely provided by schools outside mainstream academia. In the United States and many other countries it has been possible to gain a license to practice acupuncture after studying at educational establishments that neither impose the academic standards nor provide the intellectual atmosphere conducive to the healthy transmission of Chinese medicine.

Over recent years, acupuncture has started to move into mainstream academia, not as some accessory to Western medicine, but as an independent field. In my eyes, this is a most propitious development. Mainstream universities differ from small-scale privately run acupuncture and Chinese medical schools in that they are responsible not only for education, but also for research. Scholars are expected not only to pass on knowledge to others, but also to critically evaluate existing knowledge and to produce new knowledge. In such an environment, it is difficult for voices pointing out grave deficiencies in the transmission of knowledge to be ignored as they can

be outside the academic system. Only as an independent field of study within academia can the energy and intellectual honesty be mustered to sort out the fiasco that has occurred in the transmission of Chinese medicine.

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