

The Introduction To
Glossary of Chinese Medical Terms and Acupuncture Points

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Editor's Note

This edition differs from the published gloss. Lists of Chinese characters have been removed. The typeset pinyin toning has been replaced by a pre-press mark-up system that indicates the tones. In this system numeral represent the four Mandarin tones: 1 = the high, flat tone usually represented by a solid

horizontal line over the accented vowel
2 = the rising tone usually represented by a
``right- leaning'' accent (/)
3 = the deep, dipping tone usually represented by
the ``V'' (\/) accent.
4 = the high, falling tone usually represented by
the ``left-leaning'' (\) accent

In addition:

" = the umlaut in combination with the above tone,

e.g.: u4" is a ``u'' umulat of tone four.

The following table details the various combinations and the order of interpolation:

ang1	ang2	ang3	ang4	ang5
an1	an2	an3	an4	an5
ao1	ao2	ao3	ao4	ao5
ai1	ai2	ai3	ai4	ai5
a1	a2	a3	a4	a5
eng1	eng2	eng3	eng4	eng5
en1	en2	en3	en4	en5
er1	er2	er3	er4	er5
ei1	ei2	ei3	ei4	ei5
e1	e2	e3	e4	e5
ing1	ing2	ing3	ing4	ing5
in1	in2	in3	in4	in5
ong1	ong2	ong3	ong4	ong5
ou1	ou2	ou3	ou4	ou5
o1	o2	o3	o4	o5
i1	i2	i3	i4	i5
un1	un2	un3	un4	un5
u1	u2	u3	u4	u5
u1"	u2"	u3"	u4"	
ui1	ui2	ui3	ui4	ui5
ue1"	ue2"	ue3"	ue4"	

``[]'' surrounds footnote numbers, footnotes will be found at the end of the text.

In the Notes Chinese characters have been replaced by one ``X'' for each character. These were generally a character reference to the term discussed.

The text relating only to the use of the text in which this introduction appeared has been expunged.

**

Introduction

Extant texts of Chinese medicine in Chinese are estimated to number more than 12,000.[1] Yet no more than 200 are available in English at the present time.[2] Of these, only a small percentage have been translated directly from Chinese sources. Of that small percentage, few reveal the rigorous translation standards that are necessary to guarantee the conceptual integrity and clinical validity of Chinese medicine in English.[3] Any cursory review of English language books shows striking differences in terminology that hamper the understanding of even basic concepts, and forestall the Chinese medical community's advance to a deeper knowledge of the discipline. All signs point to the conclusion that the transmission of Chinese medicine to the West is still in its

infancy.

For Chinese medicine, the most important period of transmission began in the 1960's, when acupuncture started to develop as a profession in the West. This period followed one of the greatest changes Chinese medicine had ever undergone: its adaptation to the twentieth century.[4]

Western influence, which finally brought about the collapse of Imperial China in 1911, ushered in a new era for Chinese medicine. Traditional healing was spared by the nationalists after the founding of the Republic, and was again spared by the communists after 1950, in part because of the lack of Western medical practitioners, and in part by the purported similarity of Chinese medical theory to marxist ideology.[5] Although it survived, its name *yī* or *yī xué* (medicine)[6] was changed to *zhōng yī* (Chinese medicine),[7] reflecting its declining status relative to its Western rival. After World War II when it was incorporated by the Chinese government into a modern mass health-care system, it underwent a thorough revision. Mass health care demanded unified standards of practice, and a unified method of teaching in colleges. The traditional medley of different schools of thought and heterogeneous practices, many of which bordered on shamanism, were unified into a more coherent system, and superstitious elements were expunged.[8] Traditional transmission by individual healers to their apprentices, with its emphasis on memorization of the classics and mnemonic verses, was replaced by efficient modern classroom methods of mass education.[9]

The question naturally arises as to what criteria were applied to determine the composition of this new Chinese medicine. While in the modern era statistically demonstrated clinical efficacy is the only universally acceptable criterion, the science of statistics never developed in traditional China. There were never large hospitals offering the possibility of broad clinical trials; there were never computers to manage the information.[10] The effectiveness of a method of treatment was judged by how it withstood the test of time. In creating the new ``traditional'' Chinese medicine, the Chinese selected theories and methods of treatment that were based on a coherent rationale and that were revered over centuries. Although they began to gather statistical data, there is clear evidence that their choices were, and continue to be, not only technical, but also political.[11]

Although much older medical literature is available to the public in China, school curriculum is increasingly based on the new literature created by China's universities to meet the exigencies of the modern period. The new literature, for example, barely mentions the *hun*, the *po*, and other ``psychic'' aspects of the organs. Presumably these ideas are thought to be clinically invalid or to introduce unnecessary elements of superstition. The new literature also omits mention of many of the sociopolitical analogies of traditional medicine. Analogies of the liver as the general, or the lung as the assistant, have been omitted or minimized because they are

reflections of China's pre-communist society. While the new literature includes the five phases, it judges the shortcomings of this theory by reference to marxist theory.[12] The new Chinese medicine also has provided explanation for the etiology of diseases that are contained nowhere in the traditional literature,[13] and has applied traditional drug functions to acupuncture points in an effort to homogenize the two distinct traditions.

In transmitting Chinese medicine to the West, our options for what we present and how we present it are limited. The older classical literature holds immense difficulties for translators, and even if good translations of all the classics were available, they would not be acceptable to Western students. Imagine, for example, the reaction of the present generation of Western acupuncture students if the Nan Jing were given as a first-year text! What was acceptable to Chinese students in an apprenticeship system, in which books are an adjunct to practice, does not apply to classrooms in the West, where theory precedes clinical experience.

The Chinese medicine easiest to present to the West is the distilled, systematized form devised for the modern classroom. The Chinese met the West halfway by creating this new Chinese medicine, then attempted to go further by providing translations of selected works in English and other European languages. In selecting texts for presentation to the West, they chose books based on overviews with minimal detail. Essentials of Chinese Acupuncture, for example, was translated from one of the briefest overviews of acupuncture available in the Chinese language. It is also one of the texts with the greatest Western medical bias, a fact that suggests that it was written for medical doctors who wished to inform themselves about Chinese medicine. This text has since been superseded by the more detailed and slightly improved Chinese Acupuncture and Moxibustion. However, this text shares with its predecessor a strong Western bias and great simplification. In these texts, scant information is reduced further in translation. Chinese medical conditions are translated into Western medical diseases. Non-standard translation methodology obscures subtle aspects of meaning. Concepts and their renderings are reoriented; terms are translated inconsistently, breaking the conceptual unity present in the Chinese editions.

Despite these failings, the English literature produced by mainland China has become the accepted standard for an attempt to build an English-speaking profession over the past twenty years. While in China, the ``rewritten'' Chinese medicine stands side by side with traditional literature, English-speaking Westerners have only a partial view of the rewritten story. What is now understood as Chinese medicine in the West is considerably simpler than what is practiced in China today, and is even further removed from the traditional Chinese medicine practiced before 1950.

The Western translators of clinical literature have endorsed China's simplification as natural and necessary for a Western

readership, and have accepted it as an adequate basis for a medical profession. The subject of China's revision is rarely discussed openly, and there has been relatively little effort to identify or modify the shortcomings of Chinese presentations.[14]

The direction taken by Chinese textbooks is understandable. The Chinese have wrestled with the challenge to traditional medicine that is presented by the world-wide success of Western biomedicine. Because biomedicine is based on theories that are more easily demonstrable by rigorously measured clinical criteria, Chinese concern has been whether Chinese medicine can be substantiated by scientific method, and whether it can be wedded to Western medicine in a comprehensive health care system. Their decision to translate literature with a strong Western bias was doubtlessly influenced by a desire to simplify the translation process and safeguard Chinese medicine's image in an international community uninitiated to the Chinese view of the body.[15] It may also be indicative of the assumption that Westerners share the same desire for scientific justification. While simplification of data and reference to the more familiar biomedical context is welcome for beginning students, failure to present and explain "raw" Chinese medical concepts has negative long-term consequences for the development of Chinese medicine in the West. A broader, richer Chinese medicine has a greater chance of acculturation in the West than a Chinese medicine simplified and Westernized - especially since the popularity of Chinese medicine in the West is associated with dissatisfaction with Western medicine.

We believe that in the presentation of Chinese medicine there is a viable alternative to that embodied in the English literature thus far generated by official Chinese agencies and those who have followed their methods. Although it was probably impossible to escape dependence on modern Chinese literature to provide an overview of the field during the initial stages of transmission, the selection of texts and translation methods that replace Chinese medical concepts with Western medical concepts or otherwise damage the integrity of Chinese medicine is neither necessary nor suitable for Western needs. In our opinion, translation can, and should, be based on Chinese texts and translation methods that preserve the original concepts as much as is possible.

We feel that solutions to the problems posed by the transmission of Chinese medicine are found in Chinese medicine itself. To preserve the foundations of a holistic medicine we cannot ignore the culture that produced it. To achieve a deeper understanding of what we call Chinese medicine, we need the knowledge of historians, and must accept the help of anthropologists and epistemologists who can help us achieve a clear understanding of how those who developed Chinese medicine conceived of it and used its concepts in the practice of healing. For those issues that concern the translation of Chinese medicine for the healing professions in the West, there is a broad consensus among those who have investigated the deeply buried roots of China's medical knowledge. By applying

the fruits of that consensus, and the standards of professional translation, we will gain a better understanding of the origins of the discipline, and a clearer grasp of its ideas. In so doing, we will be able to transmit Chinese medicine with minimum loss.[16]

Many Westerners feel that the English literature from mainland China represents most of what is useful in Chinese medicine, and that the concepts found in more comprehensive Chinese texts are not worth the trouble of understanding. Such feelings are unconstructive because failure to face the intellectual challenge of Chinese medicine means that people will superimpose Western ideas on Chinese concepts.[17] Inaccuracy in transmission is a far greater impediment to a deeper understanding of Chinese medicine than is the transmission of ideas that may, when subjected to closer clinical scrutiny, prove to be of little or no clinical value. The barriers to the mastery of Chinese medicine in the West lie in this reluctance to broach the topic of transmission difficulty, rather than in any difficulty inherent in the subject matter itself.

Whatever aspect of Chinese medicine is transmitted, and whether the source is conversations with Chinese doctors in the clinic, or the texts available in Chinese, the medium by which Chinese medicine is taught is language. For centuries the theory and practice of Chinese medicine have been transmitted by written records and the communication of daily experience through spoken language. Chinese physicians possess a relatively standardized technical vocabulary for the discussion of medical problems, whether writing or speaking. However, to date there has been no clear English counterpart for this clinical language.[18] Thus, in the initial transmission of Chinese medicine to the West, attention must be paid to developing a terminology that faithfully reflects Chinese concepts. The set of terms contained in this glossary is our proposal for such a terminology.

Western students cannot fail to be aware that Chinese medicine is presented in different ways and described in different words. They may infer from this that Chinese medicine is difficult to translate and that people hold different views about how the task should be accomplished. However, translators never speak plainly about the problems inherent in translations. While it is a tradition in sinological research to explain Oriental concepts in such great detail that term choices are implicitly clear, translators of English language clinical works have only recently begun to relate some of the terms they use to the original Chinese characters.[19] Few clinical writers have ever published a complete Chinese-English list of term choices, or explained the translation approach they have adopted.[20; *1] As a consequence, fellow translators are unable to review their work or access their terminology conveniently. Just as important, students and practitioners, unable to cross-reference the works of different writers, have difficulty expanding their knowledge.

Translation in any technical discipline relies on the existence of bilingual dictionaries. No precise set of equivalents that can be consistently used can be reliably applied or communicated to others if it is stored only in the mind of a human (unless the discipline is extremely simple, which is rarely the case). At the current time, there are few translator's dictionaries available. All have been compiled since World War II, after efforts to integrate Chinese medicine with Western medicine were already well underway. They so abound in translation of Chinese medical concepts into Western medical terms that they have to be consulted with extreme caution.[21]

Since transmission of a discipline from one culture to another involves both those who transmit the information and those who receive it, students and clinicians share with translators a common concern for how this transmission can best be accomplished. Greater awareness of the problems posed by the translation of Chinese medicine will make readers more discerning judges of what they read, and in the longer term will encourage the more rigorous application of translation principles. As readers come to understand the problems of translation, they will naturally assert their preference for accurate presentations that deepen their understanding. Clinicians who do not read Chinese have a right to know what the problems of translation are and what solutions have been offered. Until they understand these issues, they will be dependent on all too few individuals whose work is all too often closed to scrutiny by students, practitioners, and experts in related fields. In short, the Chinese medical community cannot objectively determine the most clinically viable solutions without an understanding of the problems associated with the transmission of Chinese medicine.

In the following paragraphs of this introduction, we will attempt to explain our conception of Chinese medicine and show how it applies to translation. We will demonstrate how certain translation practices and trends in term selection contradict the spirit of Chinese medicine, and therefore retard its understanding in the West. Although all conceptions of Chinese medicine are to some extent subjective, failure to state our assumptions would leave much of our translation rationale unexplained and open to misinterpretation.

What is being transmitted?

By the beginning of the first millenium, ideas that were to contribute to Chinese health care for 2,000 years had already crystallized. The ideas set forth in the Nei4 Jing1 (The Yellow Emperor's Inner Canon) demonstrated a new realization that the human body followed predictable patterns, and that its health was largely a matter of good sense and discipline on the part of each individual. These ideas embodied a rejection of the belief prevalent at the time that sickness was caused by jealous or angry ancestors, or the actions of evil spirits. Although The Inner Canon speaks of disease-causing influences

from outside the body as ``evils'' (xie2), it sees these as following an order in nature rather than as capricious demonic rule. The Inner Canon viewed the individual as able to avoid these evils by following sensible precautions. Although a belief in spirits as the cause of disease has remained in China even to the present day, the view that the body obeyed a natural order struck a chord in the intellectual elite of ancient China. It was this literate elite that refined and developed these ideas over many centuries.[22]

As belief that disease was caused by supernatural forces gave way to knowledge that it was the outcome of natural causes, attention shifted from warding off and exorcising demons to investigating the healthy body and the mechanisms of disease. The Inner Canon marked a clear start toward a ``rational'' approach to medicine. However, on closer examination we discover that the reasoning the ancient Chinese applied was in some respects quite different from the reasoning inherent to modern Western medicine. The conclusions that the ancient Chinese reached about the organs of the body, and their functions, as well as the causes and development of disease, while bearing some similarity to those of Western medicine, reveal striking differences. By examining Chinese theory, we discover features of Chinese medicine that can be understood not only through comparison but also through contrast to twentieth-century Western thought.

The basic features of Chinese medicine are heterogeneous. The theories that have arisen over the centuries contradict each other. Some are even based on different cognitive approaches. It has always been a characteristic of the pragmatic Chinese mind to be able to use theories like tools to perform different tasks. The Chinese do not regard theory, as we do in the West, as needing to be forever rewritten to achieve the highest degree of approximation to a coherent ``Law of Nature.'' They did not perceive theory as an exclusive means of reaching a one and only ``Universal Truth.'' The Chinese doctor can both look at the kidney as a machine and think of it as a reflection of universal propensities found in nature and human society. He can apply two different disease classification systems, cold damage (shang1 han2) or warm disease (wen1 bing4) where he feels it is appropriate, without being deterred by contradictions between the two. It is important to keep this syncretistic bent in mind if we are to understand the Chinese view of health and sickness.

It is of crucial importance for Western readers to take a cool-headed look at the questions: What is Chinese medicine?, What are its underlying features?, and What is the mind that created it? It cannot be over-emphasized that there is a mistaken belief prevalent in the West that Chinese medicine is completely different from Western medicine,[23] and hence a good alternative, when, in fact, of all the health care practices in China, the West has singled out those (acupuncture and herbology) that come nearest to its own conception of medicine. There is more than a grain of truth in the generalization that Westerners, like most cultural groups,

imagine themselves to want something different from what their own civilization offers, but, at a deeper level of their belief structure, they can accept only what is fundamentally the same.

Basic analysis

One method of gaining knowledge is analysis - the method of breaking things into component parts to understand the whole. This method has been applied in China, but nowhere and at no time has it reached such sophistication as in Western civilization since the Renaissance. Analysis is one of the salient features of all modern science and technology. Indeed, far more importantly, it has become so deeply entrenched in our day-to-day thought that it is an integral part of the Western mindset and indissociable from what we call ``reason.''

The analytical approach is the very foundation of modern medicine. Once Western investigators had identified all the organs of the body, they started to break each of them into component parts and determine what functions each of the parts performed. Having discovered the stomach, they proceeded to investigate its structure and analyze the composition of the chemicals passing through it. They determined that in its mucous lining are glands that secrete into the cavity of the stomach a gastric juice containing hydrochloric acid, pepsin, and various digestive enzymes. They learned that food mixed with this secretion to form a semifluid substance (chyme) from which the intestine absorbs water, electrolytes, and nutrients. These discoveries could not have been made without instruments and testing procedures, since these glands, enzymes, and electrolytes are undetectable by the naked senses. The process of splitting things into ever smaller parts requires tools to see what is too small for the naked eye. The invention of the microscope brought into view a whole world to which the naked eye was blind, while biochemical testing forced otherwise blank and unrevealing matter to yield its secrets.

Allied to the notion of analysis in the Western sciences are the technique of quantification and the idea of causality. Physiologic function in Western medicine is determined by the ability of organs to produce measurable increases or reductions in substances. Indeed, those substances are seen, at least partly, in quantifiable terms. Water is viewed as two atoms of hydrogen attached to one atom of oxygen, and the quality of liquidity is thought of as the binding power between those atoms. Analysis also naturally tends to focus on causal relationships. By determining precisely what functions are performed by what entities, analysis strives to identify what is caused by what. The notion of cause and effect is thus implicit in the analytic approach. The form and quality of water, for example, are seen as a subjective ``illusion'' caused by partially quantifiable factors determined by analysis.

Analysis is far less important to Chinese medicine than to Western sciences. The ancient Chinese did apply analysis in their investigation of the human body, but to a lesser degree.

Hazy though the origins of Chinese medicine are, we can be sure that analysis provided some important insights into the workings of the human body. It is obvious that certain functions ascribed to the organs were suggested by the form and contents of the organs themselves. The ancient Chinese knew, for example, that the stomach and intestines were organs of digestion, and that the lung drew air from the environment. They knew that the kidney produced urine, which was stored in the bladder ready for discharge. They also knew that the heart was connected to the blood vessels, and that the liver stored blood. Statements in The Inner Canon concerning the dimensions and capacity of the organs mean that the ancient Chinese must have performed rudimentary dissections that led to these discoveries.[24]

It is important to emphasize that the origins of China's medical knowledge are a matter of speculation rather than certainty. The ancient Chinese did not actually state how they arrived at their conclusions. The best we can do is to make reasoned guesses on the basis of the earliest statements. What seems to be clear from the assertions in The Inner Canon is that, while some rudimentary discoveries about the organs were made by the method of analysis, many, if not most, theories cannot be explained by this approach. It would appear that, when dissection revealed nothing further to the naked senses, the analytical approach was abandoned in the absence of the instruments needed to pursue it, and another approach was adopted in its stead.

Naked sense observation and relationships

Without microscopes and testing devices, what could the ancient Chinese hope to understand about the body? The answer is simple: they observed phenomena very closely, and identified relationships and patterns. Instead of breaking a thing apart to determine its composition or analyzing an event to see how it arose, they compared and contrasted gross phenomena, and saw how they related to each other. Rather than making from their observations complex deductions that required analytical proof, they confined themselves to simple inferences.[25]

This point is well illustrated by ``qi,' ' an entity that Westerners find hard to conceptualize, since it does not fit any known scientific category. Unless we wish to dismiss the concept as fanciful, it is clear that if qi was observed by the ancient Chinese, the only way it could be was by the naked senses. If we apply a little imagination to how it was observed, we will have a better grasp of both the concept and the way in which the Chinese pursued their investigations.

The ancient Chinese could see, for example, that when we are healthy, food is carried down the alimentary canal. They also noted that vomiting involves a rising movement that ejects food from the stomach, and is accompanied by sensations of heaving. They perceived this activity in terms of two movements: a

normal descending force and an abnormal ascending force. What we are loosely labeling as a movement, the Chinese loosely labeled as qi.[26] Stomach qi descends, carrying food in the digestive tract to the small intestine. Under some circumstances it rises counterflow to its normal movement throwing ingested food out through the mouth. The concept of stomach qi was thus inferred directly from visible events.

Note that what the Chinese call qi does not correspond in this context (or many others) to the Western notion of energy. Western medicine explains the normal downward movement of qi in terms of peristalsis, wavelike contractions that pass along the alimentary canal, pushing the contents downward. It understands the upward motion of vomiting as a reversal of the direction of contractions. Energy is consumed in the contraction of the muscles. However, the downward or upward force that the Chinese describe as qi is the dynamic product of the orchestration of muscle action. It is not ascending or descending energy.

Relationships observed between separate events were also perceived as the manifestation of qi. Imagine an ancient Chinese healer[27] who realized that the application of heat, pressure, or needle stimulus at certain points helped to relieve stomach disorders, and that these points were found in a line along the leg. This healer may have palpated patients and observed an increased sensitivity along that line, or on those points.[28] Perhaps his fellow healers recorded similar observations. Patients may have reported sensations along a similar line. Given any of these observations, it is difficult to fault the conclusion that the line where these points were found was an entity along which ``something happened.'' The something that happened was labeled ``qi.'' Though not directly perceptible, it could be demonstrated and directly inferred from reliable experience. Qi is ``seen'' with careful observation, almost as we ``see'' the wind by the way it moves the branches of trees.[29]

In these examples, an observable function and lines of observably-related activity were seen as the manifestation of the entity qi. This entity was not subjected to analysis. It was not considered a substance that could be broken down into component elements or an energy that could be isolated and measured. It was understood not by its parts, but by analogy to other phenomena that were more clearly understood. This is evidenced by its Chinese label: the original meaning of the character that represents qi was vapor rising from cooked grains, i.e., something that was barely visible and almost intangible, but nevertheless detectable by its heat, humidity, and smell.[30] The invisible but observable force that carries food downward or upward in the digestive tract is called qi, as is the invisible entity that explains the connection between a stimulus at an acupoint and a distant therapeutic effect.

Holism and quality

The same faculty for observing relationships also produced

China's two unique theories of correspondence that form the foundations for much medical theory. From the beginning established by The Inner Canon, the Chinese developed a medicine of systematic correspondences in which yin-yang and five-phase theory provided rich ground for understanding the body. These have been the principal elements of continuity in Chinese medicine to the present day. Since five-phase theory is most pertinent to a discussion of bodily functions, and reveals a useful contrast to familiar Western notions, it is an excellent place to begin this discussion.

The five phases - wood, fire, earth, metal, and water - may be conceived of as principal factors in the human economy: wood for construction; fire for warmth; metal for tools; the earth that produces the crops necessary to our survival; and the water upon which all life depends. This conception of the five phases is embodied in another name by which they are known: the five materials (wu³ cai²).[31] The ancient Chinese observed that these entities, all-important for the support of human life, reflected important facets of nature as a whole. Wood embodied the qualities of plant life (mu⁴ in Chinese also meaning tree, not just wood as a substance); fire embodied heat, etc. In addition, these five entities related to each other in specific ways. Since almost anything that burns is derived from plants (even coal and gasoline), wood was said to engender fire; fire, by reducing what it consumed to ashes, is said to engender earth, etc.

The five-phase system relates phenomena by qualitative similarity; summer, joy, laughter, bitterness, and the color red all share something with the notion of fire. There is no causal relationship between these things, since joy or laughter, for example, are not actually caused by fire. Even in the engendering relationship, the notion of cause is insufficient to explain the relation between wood and fire. We may see wood is a prerequisite for fire, but the cause of fire is more complex.

The Chinese medical view of the organs is expressed in statements found in The Inner Canon. Some of these statements, such as ``the large intestine governs the conveyance and transformation of waste'' and ``the lung governs qi''[32] were probably the result of rudimentary dissection. Other statements, however, are brief and unsubstantiated; we cannot know for certain how the authors conceived them. They are statements about functions and relationships, but notably include epithets that are images to be pondered, rather than rational explanations. The spleen, for example, is said to hold the office of the granaries, and to open into the mouth. It is also said to be averse to damp. The liver is said to govern the sinews and open into the eyes and to be the organ of wind and wood. It is associated with anger, and is even likened to a general of the army who is responsible for strategy.

The concepts of the five phases shed a bright light on the obscure statements of The Inner Canon. If we set aside our

Western concern for how these different statements relate to our analytic notion of physiology, we can see how qualitative five-phase correspondences provided explanations that were useful and coherent.

Look at earth in relationship to the spleen and stomach. Earth is associated with the central position. Its color is yellow (which in Chinese includes shades we call brown). It is associated with long summer, the time when crops ripen and plants bear fruit. Earth is the mother of all things, and, especially for an agrarian people, is man's provider. Without the food brought forth by the earth, we starve. Earth needs rain to bring forth crops, but it must also be well-drained; otherwise it becomes water-logged and produces nothing.

The Chinese noted that when people had a good diet, the body flourished; that absence of food brought death; and that lack of good food for an extended period caused emaciation and ill health.[33] Clearly, they were aware that something was taken from food and assimilated to keep the body healthy. They further observed that in certain illnesses, emaciation and ill health could arise when someone refused food through lack of appetite or even when appetite was normal. They thus understood by rudimentary analysis that there was a function by which food became flesh and physical strength, and that emaciation and weakness could occur by a lack of food, or by a breakdown of the desire to eat, or simply by the breakdown of the function that turns food into flesh (or various combinations of these). Their ability to discern such a function was enhanced by the fact that analogous phenomena are observed elsewhere in nature; the striking similarity between the way the earth brought forth crops and the way the body produced flesh did not escape their notice. For a population in which over 80% of adults were involved in working the land, ensuring that it brought a good harvest, this was not merely a passing observation (as it is for most of us). It was almost everyone's vital day-to-day concern.[34]

The ancient Chinese did not simply observe and record functions. They also ascribed those functions to specific organs in the human body. Simple dissection showed that ingested foods pass down the throat into the stomach, and on through the intestines, undergoing gradual change before being discharged from the anus in the form of stool. It would be only natural for anyone to deduce that the nutrients were absorbed into the body somewhere along this path. They observed that food was decomposed in the stomach, and assumed that the nutrients were absorbed and turned into supplies for all parts of the body by the action of the adjacent organ, the spleen. This conclusion was probably reinforced by the fact that the spleen and stomach are located together in the center of the trunk, below the lungs and above the intestines - that is to say, in the position corresponding to earth in five phases.

We might note parenthetically that the spleen is now known to play only a minor role in the functions the Chinese

attributed to it; but the Chinese, while realizing that the functions must be performed by organs, had no exact way of telling precisely what was done by each organ. Ascribing functions to the organs was of secondary importance. The prime concern was with maintaining healthy function and restoring it when it broke down.

Five-phase theory was of little significance in determining the actual ascription of functions to organs. It was, however, of paramount importance in determining how the Chinese conceived of and related the functions they observed. It is obvious that the spleen and stomach supply the body's daily needs just as the earth brings forth crops. Leaves and other organic detritus decompose into the earth, and the earth brings forth the crops necessary to our survival and the survival of our prey. Similarly, food decomposes in the stomach, and the spleen assimilates the nutrients (what the Chinese called ``essence of grain and water'') that make flesh firm and the body flourish with health.[35] When The Inner Canon says that the spleen holds the office of the granaries, it states the analogy precisely, through a correspondence to the realm of government. The department of agriculture is to the nation as the earth is to man, and agriculture is to the nation as the spleen is to the body.

Five-phase imagery provides other clues as to how the spleen was understood. Earth needs sufficient rain to grow crops. Yet, if it is poorly drained, it becomes water-logged and nothing grows. The spleen, although it needs fluids, is averse to damp. If damp is not drained away, it gives rise to fluid accumulations that affect the productiveness of the spleen. The analogy of the spleen to earth was taken beyond the purely physical. Just as the role of the spleen as the body's provider is the physiological manifestation of earth as the mother of all things, so thought, the mother of all invention and creations, is also associated with the notion of earth. Thought is the faculty that produces the ideas that solve our day-to-day living problems. It is as necessary to man's survival as is physical strength. The power to think is thus the direct psychological analogue of the physiological functions ascribed to the spleen. Physical and mental productivity are both functions ascribed to the entity spleen-earth.

If we abandon our Western conception of the spleen and what functions it performs,[36] we see that the Chinese considered the spleen and stomach - to put it in modern terms - responsible for digestive, anabolic, and mental functions linked by a qualitative analogy to earth.

The same logic can be applied to the kidney. Simple dissection of the human body doubtlessly revealed to the Chinese that the kidney produces urine. But only the associative thinking inherent in the five-phase theory can explain why the Chinese said that the kidney stored an essence that governed reproduction, growth, and aging (regeneration and its breakdown).

The kidney belongs to water in the five phases. Lakes and oceans are where water ultimately achieves relative stillness in the endless cycle of evaporation and precipitation. Water, by nature, descends to low places where it finds rest. By analogy, nature finds rest from each year's activity in winter. In winter, life withdraws to protect itself against the harshness of the cold. Many plants survive winter not as individuals, but through the progeny that develop from the seeds they bear. The seed is the minimum survivable form of the plant that can endure the rigors of winter. In the hardest winters, only the blueprint stored in the form of seeds survives. The ancient Chinese proposed that the human body had the same blueprint for regeneration, which they called ``essence'' (jing1). Given their belief in the five phases, it was natural for them to associate essence with winter and the water phase. The water phase through its association with winter symbolizes the way nature's forces are stored.[37]

Reproduction and regeneration were associated with the kidney by a qualitative analogy with water. These are the functions of survival of both individual and species. The notion of survival as a facet of water clearly explains the association of fear with this organ, fear being the response that comes into play when survival is threatened.[38] It also explains why the Chinese regarded the kidney as the root of the whole body or, in modern terms, the mystery of life. These connections are reflected in Taoist thought: ``The highest good is like water. Water gives life to the ten thousand things and does not strive. It flows in places men reject and so is like the Tao.''[39]

Let us take the liver as a final example. The correspondence between the wood phase and the liver is more subtle, though it reveals the same way of thinking that we saw with the spleen and kidney. We are told that wood is the ``bending and straightening.'' Wood as a material is used for its bending qualities, as well as for its ability to stay straight. In comparison with metal, it is pliable and easy to cut, though it also has great strength. We can understand more about the concept when we see that it includes living wood. In modern Chinese, mu4[40] means the substance wood, but in ancient China it was also used to mean tree. Trees are immobile, but have a suppleness that enables them to bend in the wind rather than be broken by it. The living wood also has the quality of orderly upward and outward reaching. It therefore symbolizes the growth and expansion of plant life in the spring, and by analogy the physical agility and vigor associated with youth, the springtime of life.

In the human body, the ``bending and straightening'' of wood is reflected in the ``bending and stretching'' of the sinews or muscles (jin1,[41] a concept we will discuss in greater detail later). The sinews hold the bones together and give the body its agility. They have the ``springy'' quality associated with wood. In fact, the meanings of the English word ``spring'' - the season, growth, jumping, and resilience - are all part of

the notion of wood.

The Inner Canon tells us that the liver holds the office of general. This symbol perfectly fits the qualitative associations of wood. As plant life stretches upward in the springtime, so a general leads a strong, youthful nation in asserting its power and expanding its territory. The general is a symbol for a nation flexing its muscles and extending its claws (the nails, or claws, being the surplus of the sinews). Since the strong general must make strategies, the faculty to plan and calculate must relate to wood. Since thwarted expansionism and the inability to express power results in anger, this emotion is also associated with wood. The sinews of a strong nation brace for attack; the sinews of a weak nation jerk with fright. Both these responses are associated with the liver. The image of the general adds another dimension to the qualitative connections between observable aspects of being human. The Inner Canon presents all these as being governed by or associated with the liver and the concept of wood.

Liver qi enjoys the freedom to stretch outward as trees stretch their branches, and does so unobservably in a healthy person. When it fails to do so in sickness, there are signs of stagnation or ``frustration'' which the Chinese called depressed liver qi. This manifests as lateral costal pain, swelling of the breasts, or as plum pit qi. Such conditions are often brought about by anger and emotional frustration, liver-related emotions. Making these associations, it is clear that the ancient Chinese were not talking about functions in strict relationship to a complex morphological entity, but about functions qualitatively associated with wood.

Suppleness is the only defense of trees. Being immobile, they must bend to foil their major enemy, wind. Healthy plants are sufficiently supple to survive a wind. The wood of the body can also be blown by wind, especially internal wind. When a wind arises in the body, it can shake the sinews, causing convulsions (chou1 feng1,[42] literally ``wind tugging''). In wind stroke it can - metaphorically - ``snap'' the branches (limbs), so that they no longer move at all. One Chinese expression for hemiplegia is pian1 ku1,[43] hemilateral ``withering,'' which describes the condition by analogy to the dry deadness of trees. Wind is swift and changeable, and takes its victim by surprise. Wind-stroke, epilepsy, tetanus (po4 shang1 feng1,[44] literally ``wound wind'') all share this characteristic. In the same way, a sudden fright can make the sinews jerk, so that liver disorders are sometimes characterized by susceptibility to fright.

It is clear that in theorizing about the liver the Chinese recognized all the aspects of the body and psyche that shared the expansive thrust of the living wood. They were not simply describing a mechanical system; they were describing aspects of being human that were related by qualitative analogy. All things that have to do with the bending, stretching, tensing qualities of the body were seen as belonging together within

the wood phase, and associated with the liver.

Qualitative correspondence was not limited to the similarity of function to five-phase phenomena. The organs were seen to relate to each other in the same way that five-phase groupings related. For example, the strength of the kidney was seen to have a beneficial effect on the liver, as water nurtures the living wood, and as winter gives way to spring. These recurring relationships are recurring patterns - that is, recurring qualitative configurations.

It should be understood that the five phases by no means provide a complete explanation for organ attributions. Had the Chinese dealt exclusively with phase-related groups of functions,[45] there would have been no need to mention the physical organs. Attributing aspects of physiology to physical organs clearly indicates an awareness that the existence of the various organs and their morphology were indissociable from these functions. Dissection, therefore, must have provided a logical starting point for their discussion of physiology. It was their inability to pursue the analytical process further that encouraged the correlation of observed phenomena and prompted them to apply the five phases as a systematic framework for organizing their observations. However, the link between the two modes of investigation is problematic. While the kidney is associated with water because it deals with the water (urine) in the body, and while the proximity of the spleen to the stomach would explain its involvement with the production of nutrients, the attribution of the liver to wood is less clear. While wood-like qualities are observed in the sinews, liver qi, anger, etc., they are not seen in the physical organ isolated by dissection. While it is possible that dissection could have given the Chinese a clue to the blood-storing function (a conclusion that they did reach), the connection between this function and the attributes of wood is tenuous. Furthermore, the connection between the eyes and wood is also difficult to argue. Thus five-phase theory provides a partial, not a complete, framework for explaining how the Chinese interpreted their observations.

Five-phase theory was not the only system of correspondence applied, and has perhaps never been attributed as much importance as the yin-yang theory that antedated it. Yin and yang constitute a binary system of correspondence that is logically identical to the five phases. All yin phenomena are alike in nature and relate to their yang opposites in like fashion. Any definition of yin and yang in words is complex; however, we all find the idea easy to grasp intuitively. Day is to night as heat is to cold, as summer is to winter, as high is to low, as activity is to rest.

day	>	<	night
heat	>	<	cold
light	>	<	dark

summer > < winter

If we take the examples out, the yin-yang view of the world is a series of relationships that follows a basic pattern:

| > < |

The ideas of yin and yang became universally applicable categories of quality and relationship. Cold and dark have something qualitative in common, and their relationship is a counterpart to yin and yang. Again, like qi, the response that occurs in the human observer links cold, dark, night, and winter without need for a causal explanation. Each pole of a yin-yang pair is dependent on the other and each complements the other. There is no light without darkness; cold cannot be known without heat. When cold grows, heat wanes, and when dawn breaks, darkness fades. Implicit in the notions of yin and yang is divisibility and inseparability. Each yin and yang phenomenon can be broken down into more yin and yang aspects. In the seasons, spring is yin within yang, while summer is the yang within yang. In short, the divisibility of yin and yang provides Chinese medicine with a form of analysis that emphasizes qualities that conform to correspondences.

In medicine, yin and yang are used to explain relationships between parts of the body, organs, and disease patterns. Making a correspondence between dark-light and interior-exterior, medical theoreticians were able to see, for example, that the interior of the body corresponds to dark as the exterior corresponds to light; thus, interior is yin and the exterior is yang. By the principle of divisibility, they determined that within the interior of the body, some aspects were yin, while others were yang. The organs having greatest contact with the outside (the digestive tract, for example) were seen to be yang within yin, whereas the organs that dealt with things produced by the body (blood, qi, and essence) were seen as yin within yin.[46] Furthermore, the yin-yang indivisibility later in the development of Chinese medicine allowed for both yin and yang organs to have a yin and yang aspect: the active/warming and receptive/nurturing sides of their functions.

Yin and yang have a significance that goes beyond mere classification. The Chinese doctor, not concerning himself with the details of anatomy, finds yin-yang relationships to be a clear guide for investigating the body. Of essential importance to him is the fact that the quiescent yin aspect of heart function is in intimate relationship to the active yang aspect of heart function. The valves and ventricles are merely incidental necessities peculiar to the heart. It is the qualitative relationships, not the component parts, that are the subject of the physician's clinical investigation.

Yin and yang show how the Chinese traditionally investigated the details of the universe by focusing on broader patterns. They saw creation as a primal differentiation of yin and yang from an original chaos (undifferentiated unity), subdividing

infinitely to produce the universe. Yin-yang theory views the world as differentiable, but interdependent. It is composed of elements that reflect both the original unity and its primal division. The Chinese mind never forgets the whole to which the parts belong.

Yin-yang theory is usefully applied to physiologic and pathologic processes. This is clearly seen in the duality of fire and water - the complementary antagonism between warming, activating yang qi and the nourishing, cooling yin fluids.[47] Chinese thinkers noted that when the body was healthy, fire and water were in balance. If there was an imbalance, there was disease; if there was disease, there was an imbalance. When there is heat in the body ``evaporating'' the fluids, urine becomes ``concentrated,'' that is to say, darker in color and lesser in volume. When heat is lacking, there are general or localized signs of cold, and in some cases water accumulates, giving rise to swelling of the extremities. By the principle of divisibility, the hot-active and a cold-quiescent aspects share features of the general fire and water images, while also bearing organ-specific qualities, which are most clearly seen in disease. Taking the yin and yang aspects of the heart as an example, if heart yang is vacuous, there will be signs of general yang vacuity, such as inversion frigidity of the limbs, and heart-specific signs such as palpitations, interrupted pulses, and heart pain.

Qualitative correspondences integrate well with the down-to-earth view of disease as the result of insufficient protection from the elements, of unbalanced diet, emotions, and actions, and of the general wear and tear that comes with age. The Chinese noted that disease states and environmental conditions could be clearly and reliably related on the basis of qualitative correspondence. They viewed wind, cold, heat, dampness, and dryness in the environment as causes of disease. When a person is exposed to one of these elements, and is not strong enough to resist it, he develops a disease characterized by corresponding symptoms that are qualitatively analogous to these environmental phenomenon. For example, heat can be characterized by signs such as fever, red complexion, dark-colored (reddish) urine, and a rapid pulse. Dampness is characterized by sensations of heaviness in the limbs, a glossy or slimy tongue fur (coating of the tongue), and a ``soggy'' pulse. ``Wind is swift and changeable,'' and is associated with diseases of swift onset, stiffness in the neck, migratory pain, and itching. Again, naked sense observation, organized by correspondences that cross the boundaries of the body, are the key to Chinese medical logic.

These external factors of disease are classified according to yin and yang. When they invade the body, they upset the yin-yang balance. Cold and damp are yin, and therefore damage the body's yang qi, while wind, and especially heat and dryness, are yang, and therefore easily damage the yin aspect of the body. These disease factors are prevalent at different times of the year, so they also have five-phase correspondences. Dryness diseases are more common in the fall,

cold diseases in the winter, wind diseases in the spring, etc.

Besides diseases of external origin, Chinese medicine also observed disease arising from poor diet, emotional disturbance, lack of exercise, overwork, and the normal wear and tear of advancing age. However varied their causes, most diseases were considered, from relatively early on, to involve wind, cold, heat, damp, and dryness to the extent that the symptoms are identical or similar to those produced by external forces. The Chinese observed that a weak spleen (assimilation function) gave rise to accumulations of fluid manifest in symptoms such as diarrhea, and typical signs of ``clogging'' associated with damp, such as poor appetite, fullness in the region of the stomach, a thick, slimy tongue fur, a moderate, soggy pulse, and a heavy cumbersome feeling in the limbs (sometimes with edema). This disorder was often described as ``damp encumbering the spleen.'' In looking at disease in this way, the Chinese followed the assumption that things having the same qualities are essentially the same thing, because the nature of a thing is defined by its qualities.

Some correspondences between the cause of disease and its manifestation are immediately apparent. For example, lying in a curled-up posture is a sign of cold; high fever is a sign of heat. But many are not so apparent, especially to Western students. The connection between a soggy pulse and spleen disease is not understood until the idea of water-logged earth is explicitly stated; nor is the connection between a wiry (bowstring) pulse and wood understood until it is explained that liver relates to tensing and flexing. The Chinese never explained all these connections explicitly, partly because the technical language of Chinese medicine sufficiently expressed these qualitative links, though probably more importantly because traditionally the Chinese, unlike the modern Westerner, never expected to find causal links that did not involve an observable connection between cause and effect. Chinese students grasped correspondences easily both because they were prevalent in Chinese culture, and because their language preserved them.

Since bodily functions and impairments viewed in terms of their qualitative appearance are seen to conform (with varying degrees of strictness) to the principles of yin-yang and the five phases, these two theories apply to all aspects of Chinese medicine including treatment. In both acupuncture and drug therapy, a major principle is that of correcting yin-yang surfeits and deficits. When yin or yang is insufficient, it is supplemented, and where it is superabundant it is drained. This supplementing and draining action can be directed toward any given organ or pathway of qi by the use of acupuncture, moxibustion, and medicinal agents. In some instances, the relationships between the five phases can be utilized. For example, vacuity in one organ can be treated by supplementing the organ that engenders it, while repletion in an organ can be treated by draining the organ that engenders it.

In drug therapy, both yin-yang and five-phase theory have

roles to play in the classification of agents. Agents that rise are yang, while those that sink are yin. Five-phase color and flavor correspondences also apply to some extent. Salty, black agents enter the kidney; sour green agents enter the liver; acrid, white agents enter the lung; and bitter, red agents enter the heart. For instance, Polygoni Multiflori Radix (he2 shou3 wu1,[48] which literally means black-headed [i.e., black-haired] Mr. He), enters the liver and kidney channels, and helps to reverse hair graying. In drug therapy the specific environmental counterparts are also addressed: cold is dissipated; heat is cleared; fire is drained; damp is transformed or percolated. While these methods are more akin to the Western medical method of eliminating disease-causing factors, the yin-yang balance of the body and how it is affected by drug action is never forgotten.

Learning the Chinese approach

Despite the fundamental simplicity of a medical system based on correspondences observed by the naked senses, many students complain of difficulties in understanding the basic concepts and in developing the skills required for general practice in the West.

For Westerners, qi poses conceptual problems because it fits none of the categories of phenomena to which they are accustomed. Having no form, it is clearly not a substance. Many are happy to consider it an energy, but since science has been unable to determine its nature, it can at best be called an energy only in an as-yet-undefined use of the word. Since science's probes cannot detect it consistently as a single phenomenon, its existence has to be taken, to a greater or lesser degree, on faith. For the Chinese, the notion of qi creates no such difficulties. Their culture, their language, and their experience support the concept of qi completely. They simply observe its manifestations. Qi is an observable phenomenon that may cross all currently known categories of science.[49]

The Chinese, living in the solid world of the human senses, no doubt regarded qi as an ``ethereal substance'' - something like ordinary matter, but simply less solid. They probably viewed it as the layman today views steam, or the scientist views light when it behaves as particles rather than waves. They did not make a strict distinction between energy and matter. Rather, they saw a continuum of tangibility and intangibility. This conception of qi is highlighted by Unschuld's rendering of qi as ``finest matter influences.''[50]

Essence is another entity that is the subject of definitional difficulties. One acupuncture book, for example, says, ``Kidney-Essence is a more specific kind of energy.... '' On the same page it also states, ``Essence is the organic substance which...''[51]

Any attempt to find a correspondence between essence and a category of Western science must be the product of an analysis of all its different meanings. As far as we can see, such an analysis would reveal that essence is related to reproduction, growth, and aging, i.e., the whole of human development (generation, regeneration, and degeneration) from conception to death, and that it corresponds to genetic information more closely than to a specific form of energy or matter. Careful analysis of Chinese entities can lead to definitions that please physicians, scientists, and scholars. Yet, forcing these entities into scientific categories, especially if it is done solely according to context, is no substitute for a serious attempt to see the concepts as the Chinese traditionally saw them. For the Chinese, it was only natural to expect that essence - that which is most essential to a thing or being - should lie beyond the grasp of the senses and even the imagination.

The five phases are another issue that cause students conceptual problems. Much modern Chinese literature warns against taking the five phases too seriously on the grounds that some of the relationships between the organs cannot be explained in terms of cause-and-effect relationships between organ functions.[52] As a result, many Westerners dismiss the theory completely, without considering that those warnings may be as much the result of a desire to assert the Marxist doctrine of materialism as solid clinical findings.

In judging five-phase theory, students would do well to follow their own common sense. The various methods, for example, of supplementing metal to engender water (e.g., using the transporting points) should not be dismissed simply because they cannot be seen as causal relationships between organ functions. That nutrients absorbed by the spleen are passed on to the lung, which helps distribute them over the body, is only one reason why earth could be said to engender metal. It fails to consider the possibility that the five phases may actually describe other aspects of physiology, whether or not they provide a way of viewing organ functions and relations. For example, they may be a yet-to-be-defined regulatory mechanism somewhat like the endocrine system. The filial qi and maternal qi spoken of in five-phase cycles may not be synonymous with the qi of the organs as understood in other contexts. This seems all the more likely when we remember that acupuncture therapy is more frequently based on five-phase cycles than is drug therapy, and that acupuncture operates through the channels, not directly on the organs. Refusal to entertain such possibilities shows a lack of faith and open-mindedness that trims clinical expectations to fit the logic of today's biomedical paradigm.[53]

Because Chinese medicine does not easily and simply fit Western models, it must be approached with a respect for the Chinese attitude. If we use our biomedical notions to judge statements from The Inner Canon on the nature and purpose of the organs, we will miss the spirit in which they were intended. We may also miss important cues and clues for more

radical scientific research. The paucity and brevity of these statements suggest that the authors were not trying to provide as much ``information'' as possible about the organs, but trying to sum their conception in as few words as possible. The images of wood and the general invite us to visualize rather than to analyze. The absence of substantiation for the statements shows that their concern for how things conformed to universal patterns was greater than their desire for cause-and-effect logic. Things which are so obviously like an understood analog require no explanation.

Understanding the conceptual basis of Chinese medicine is crucial in developing diagnostic skills. In the Western mind, there lurks a fear that a diagnosis based on qualitative signs that never repeat themselves exactly in any two individuals is unreliable. While in Western medicine the detection of a particular virus may be sufficient to diagnose, say, cholera, Chinese medicine uses only qualitative signs. Hazy though such signs may seem, careful observation and correlation can achieve reliable diagnoses when diagnosticians are appropriately trained. The ambiguity of one particular sign means that careful correlation of many signs is required for a clear diagnosis. Diarrhea is not in itself sufficient for a diagnosis of cholera. Neither is vomiting alone sufficient. Diarrhea and vomiting at the same time might lead the practitioner to suspect choleraic disease (``sudden turmoil'' in literal translation). However, the two symptoms in themselves are still inconclusive. Only when cramps begin can the diagnosis become clear. Correlation of carefully observed signs can produce reliable diagnosis.

Western students find most conditions considerably harder to diagnose than choleraic disease, and frequently complain that they fail to observe standard patterns in ``real'' patients. This is because Chinese diagnosis requires the identification of subtle variations and assessment of their significance in relation to each other. This is usually done by an act of synthesis, rather than analytical reasoning. Ability to synthesize a host of subtle clues into a clear picture and thus actually visualize a patient's condition is the mark of an experienced Oriental physician. This is holistic observation, observing all the parts in relationship to the whole. Although this ability cannot be transmitted from teacher to student in the form of information, it can be achieved through careful observation and practice.

Concluding remarks

Chinese medicine views human health and disease in terms of functional entities and disease-causing influences that are observed with the naked senses. Its sophistication lies in its observation of correspondences between gross phenomena, and its organization of these observations through the holistic systems of yin-yang and five phases. These unique features create difficulties for a Western student unaccustomed to this way of

thinking. As we shall see, the way in which Chinese medicine is translated and presented to the Western world has a direct bearing on the way it is learned and practiced.

How should we transmit Chinese medicine?

When we transmit Chinese medicine to the West, we must be aware of its principal features - qualitativity and holistic correspondence - so that we do not destroy them in translation. These features must be a yardstick for the translator. When making a decision, the translator must always think: By doing this am I injuring the fabric of qualitative correspondence? Am I hiding a useful clue to the overall understanding of Chinese medicine? Essential aspects of clinical practice depend on associations that must be faithfully represented. When transmitters do not preserve information that is crucial to clinical success, it is clinicians and their patients who pay the price of that failure.

This is not often a problem in the translation of Western disciplines from one Western language to another. The translation, for example, of bacteriological literature from French to English creates few problems because the essential information is rigidly identifiable via physical means shared by both cultures (e.g., microphotography). Chinese medicine, on the other hand, deals in subtle qualitative distinctions and logical processes that are little used in Western culture. Because learning Chinese medicine involves cultivating a way of observing and thinking that is different from our own, the attention paid to the meaning of words is critical. Inaccuracy in our choice of words has the capacity to obscure or destroy the Chinese concept, thus affecting performance in the clinic.

If we look at the basic principles for the translation of technical literature and how they are applied to Chinese medicine, we will see precisely how much the meaning of what is presented is dependent upon the right choice of words by the translator. We will also see that failure to apply those principles can change the meaning and feeling of the original text. Even changes that appear to be of minimal significance become important when repeatedly and consistently used.

Translation by conceptual analysis

Laypersons unacquainted with the specifics of translation judge translated literature on how well it sounds in English. Most clinicians, for example, imagine that the choice of familiar-sounding words is the goal of translation. However, the translation of Chinese medicine involves much more than turning nice-sounding Chinese words into nice-sounding English words. It involves finding words for concepts developed by a foreign people in a foreign language. Because many of the concepts crucial to understanding Chinese medicine never

developed in our culture, we very often have no convenient linguistic label for them. It is not that the concepts cannot be explained; nor that they cannot be easily understood. It is simply that we have no convenient word for them in our language. Thus, the task of the translator is to forge a set of words in the target language (English) that represents the Chinese concepts without distortion.

A good translator must produce a complete set of labels that correctly represent all the concepts. A poor translator chooses bad labels that do not fairly represent the concepts they translate. In some cases poor translators, failing to find a familiar label, have completely obscured concepts. However, the most difficult, and perhaps the most important problems are those created when the concept is not obscured, but is distorted. The transmission of Chinese medicine has suffered from both mislabeling and non-labeling (i.e., non-transmission) largely because of attachment to certain poorly founded concepts about what is and what is not an acceptable language of Chinese medicine.

There are many factors that influence transmitters' and readers' terminological preferences. Not least of these factors is the association of language and specific ``schools'' of thought, or sets of expectations about Chinese medicine. Words, in addition to representing concepts, can also act as trademarks. Familiar words, words that have acquired a following, and words that read easily ``sound right.'' However, clinical validity is not determined by familiarity; it depends on the accuracy with which an English word represents the original Chinese concept. If we assume that the Chinese know more about Chinese medicine than do we, what counts is how accurately our language of Chinese medicine matches the original Chinese.

Choosing the right word

Translation of a Chinese concept is like labeling a new invention in English. Imagine that someone invents a new computer chip that is blue in color and tetrahedral in shape with the exception that the three upper sides bulge outward. We will naturally want to find a name for this product. We could call it a tetrahedron (four-sided figure), but some people might argue that because only one side is flat, it is not strictly a tetrahedron. That objection would not be quite as strong if we coined a new word, ``tetrachip,'' which is easy to say and would probably be popular. Other approaches are also possible. For example, if the inventor were a Californian, we could call it a ``California blue.'' Either of these options could be viable.

As you can see, we have a certain freedom to call things what we will. However, some words are less viable than others. If we were brave enough, we could call our new tetrahedral computer chip a ``pineapple.'' In the context of computer design, readers would know that we did not mean a tropical fruit. Thus, any initial confusion might be offset by the

attention such a use would garner. However, we could not call it a ``circle.'' That would confuse people. Neither could we call it an ``typewriter,'' since this implies a function that the chip does not have.

The process of naming is almost exactly the same as the process of translating. We are finding words to label concepts. When transmitting Chinese medicine, the concepts are not as clear-cut as a tetrahedral computer chip. There are often no ready-made words for Chinese medical diseases and symptoms. Care is required in translation of their labels if they are to be properly identified and successfully treated in clinical practice.

There are simple examples of this process in Chinese medicine. When we boil medicinal agents, the result is called a tang1[54] in Chinese. In common language this means soup or broth (but can also mean gravy, or even the serous discharge from a wound). To call a formula prepared in this way a ``soup'' might sound a little vulgar. Westerners tend to think of thick soups like clam chowder, borscht, or minestrone, which are not much like most Chinese soups. Anyway, we might want to avoid the word soup to encourage the reader to think of Chinese medicine as a serious medical art. We therefore look for another word. We might consider the word infusion for its elegance. Unfortunately, infuse means to steep in hot water; an infusion is something that is brewed like a tea or a herbal tisane. This is clearly not the right word because medicinal substances are boiled. We might think of calling it a brew, which has no negative connotation, and can mean something boiled in water. We could also call it a decoction (meaning something that is cooked). Either of these last two, having meanings equivalent to the Chinese, would be acceptable. Since we have a choice of acceptable words, we can be free to reject the more literal word soup in favor of a term that pleases our ear as well as our reason.

Preserving concepts

A word chosen to translate a particular concept is inadequate unless it can be used in all the contexts in which the concept occurs in Chinese. If it cannot, a different term must be used; otherwise the relationship will be lost. This test is far more important to accurate translation than the sound or feel of the word. Clinicians need to learn a new or difficult word only once, but when an idea is lost, it may never be recovered. The most correct translation of a given concept is one that is always right. And to find that word involves examining different words until we discover one that is accurate in all contexts.

The concept of lao2[55] illustrates this process well. This character means labor, or the fatigue that labor creates. The exact meaning is determined by the characters with which it is combined. For example, lao2 li4[56] means labor force (li4 meaning strength), lao2 shen2,[57] means to tax one's mind with a problem (shen2 meaning spirit), and pi2 lao2[58] means

fatigue from too much hard work (pi2 being a common character that means fatigue).

In medicine, lao2 denotes continual wear and tear on various aspects of the body over extended periods of time. It connotes both the action that gives rise to a state and the state itself. For example, Chinese clinicians speak of damage by the five lao2, which are described in The Yellow Emperor's Inner Cannon in the following way:

Looking for [too] long damages the blood; lying for [too] long damages qi; sitting for [too] long damages the flesh; standing for [too] long damages the bones; walking for [too] long damages the sinews.

Straining the eyes for long periods ``wears out'' the blood, while absence of exercise has a deleterious effect on qi. The wear that lao2 describes is thus not the result of rapid or active stresses and traumas, but continual or persistent processes that take their toll gradually. If the basic meaning of lao2 is labor, or the fatigue that results from labor, the medical meaning is closer to fatigue - fatigue in the sense of the English technical term metal fatigue, a disease of old airplanes.

Another example of the use of the term in medicine is the lao2 of each of the five viscera (zang4). Here, the context is different, but the meaning of lao2 is identical - an enduring wear that eventually takes its toll in the form of severe dysfunction.

When we translate this word, we have a number of options. We could first try to use the word overexertion.[59] We would test this choice by using it in all the different contexts where the Chinese character is used. The word overexertion sounds right to the Western ear when used for some Chinese medical uses of the term lao2. However, because overexertion describes an active, mechanical cause, it fails to describe lack of exercise, a cause explicit in the term qi4 lao2. The five lao2, as Chinese clinicians will emphasize, are conditions created by lasting or repeated stress due to excessive or insufficient activity, not merely overactivity. Using overexertion is like trying to call a tetrahedron a ``circle'' or a ``typewriter.''

Strain is another suggested choice. Although its meaning is broad enough to cover the intended concept, its more immediate connotations are similar to those of overexertion. Modification of this word into overstrain tries to overcome the problem through neologism. Unfortunately, the word over only accentuates the inappropriate connotations of the word strain. If we use these words, students will look for the wrong clues and miss the right ones. In short, they will choose the wrong points or the wrong substances based on the misunderstanding these words create.

Another word we considered was fatigue because lao2 has a similarity to the English concept of metal fatigue. We know that general fatigue can be the result of inactivity as well as overexertion. People will say after a lazy Sunday, ``I'm tired because I've done nothing all day.'' But keeping in mind that there are concepts like pi2 lao2[60] or juan4 dai4,[61] which mean common fatigue due to overwork and poor health, we decided to reserve fatigue for this more frequent use. Unlike stress, strain, overexertion, or overstrain, the difference between the concept represented and the word fatigue is one of degree, not of essential meaning. When used consistently, clinical error need not result.

While testing equivalents for lao2, we decided that it was most important to preserve the conceptual unity of all the ideas represented by the character in Chinese medicine. Therefore, we chose taxation. As you may see for yourself in the following list, this word can carry the concept of lao2 accurately in many more contexts than any of the other proposed words. By using tax in the sense of ``tax one's mind,'' we can convey the idea of strain, but without creating an unjustified clinical emphasis on physical overexertion. In a medical context there is little chance that readers will misunderstand the term. Taxation fits two of the common lay uses of the Chinese term, and is familiar to any English speaker. The use of a less frequently used English word makes readers stop and think before they jump to unjustified conclusions based on Western ideas or notions associated with individual English words, and allows us to reserve fatigue for a more common condition.

Phrases where the idea of pathological taxation is not implied:

***** List of characters *****

Strain, overstrain, and overexertion fail several tests of accuracy, with potential clinical consequences. These choices are the equivalent of calling our imaginary tetrachip a ``circle.'' The choice between taxation and fatigue is less clear and depends on the translator's judgement. It is, in short, a choice between ``tetrachip'' and ``California blue.'' Again, we must be particularly guarded against choosing an inferior word, because the concept of lao2 is not defined by anything as objective as the presence of a virus. It is a conventionally recognized concept, and can easily be skewed by mistranslation.

How concepts are translated has subtle implications on clinical success. Using strain or overexertion creates problems for English-speaking practitioners by creating expectations that do not exist in the Chinese language and that are not found in Chinese clinics. When we reduce the concept of lao2 to overexertion, it is easy to forget qualities and relationships that do not easily fit this word. For example,

on page 249 of Chinese Acupuncture and Moxibustion there is a discussion of ``overstrain, stress or lack of physical exercise'' as a cause of disease. Here, the heading fairly reflects the meaning of lao2 in Chinese. However, the composite nature does not encourage the reader to see the conceptual unity of the term, and that conceptual unity is completely lost when the term is shortened or simplified. Only 26 pages later, when the same text discusses the interior patterns Chinese clinicians associate with lao2, overstrain and stress remain and lack of physical exercise has been lost.

How can we be sure that students will remember that words such as overexertion are meant to include their opposite? The only solution is to pick an accurate term that serves in all contexts. Furthermore, as this particular example shows, we must pick a term that is short enough to defy abbreviation and loss. If an idea is always called by the same name, it will not be lost. If two familiar words must be used to label a single concept, the link must be made clear and be consistently applied. If lao2 is polarized into notions of overexertion and inactivity in translation, is it not obvious that the original concept has been lost?

Preserving distinctions

Individual concepts are not labeled in isolation. When seeking the right word to fit the concept of lao2, we needed to remember that there are similar concepts for which we would need different words.[62] For example, there is another term pronounced as lao2[63] and distinguished in Chinese from the other lao2 only by the sickness radical. This word is used in the combinations lao2 zhai4[64] and fei4 lao2,[65] which are synonyms for disease characterized by coughing of blood, tidal fever, night sweating, emaciation and other signs of yin vacuity. In these conditions these signs eventually give way to a pattern of yin and yang vacuity. Since a Western doctor would almost certainly diagnose a patient displaying these signs as suffering from pulmonary tuberculosis, we chose to render this lao2 as consumption, an old word for tuberculosis that is free of the specific biomedical criteria for its detection that are associated with the modern Western term. This rendering means the same thing to both Chinese and Western doctors.

Unfortunately, the translator's difficulties do not end here. Amongst the lao2 of the five viscera, the term fei4 lao2[66] is used not only to denote pulmonary taxation (which is characterized by cough, fullness in the chest, pain in the back, aversion to cold, an emaciated face, and dry skin), but is interchangeable with the fei4 lao2[67] that means pulmonary consumption (characterized by steaming bone tidal fever). Being able to make a distinction between these two lao2 (taxation and consumption) serves to reflect the Chinese concepts accurately. Glossing over such distinctions deprives students of useful concepts that can enhance clinical performance. The signs that distinguish these conditions are different, and lack of precision in translation can clearly

lead to poor decisions in the clinic.

Although taxation and consumption describe diseases that are consumptive in the general sense (i.e., diseases characterized by wasting), distinctions recognized between the two are more easily preserved when two separate terms are used. While some may argue that the conceptual distinctions are not clinically valid, failure to make the terminological distinctions made in Chinese denies readers the knowledge that others assert that these distinctions do have clinical validity.

Since the Chinese have preserved disease categories and clinical distinctions through the centuries, we must assume that the concepts labeled and defined in Chinese texts have some clinical validity. Although Chinese ideas were never traditionally based on statistics, they were nevertheless validated by repeatable use, which is the root of statistical evidence. Thus, distinct concepts must be retained until we have convincing evidence that they are invalid. Translation decisions are not clinical evidence; without clinical evidence, we cannot treat any clinical distinction as empty and superfluous. ``Proof'' and ``belief'' that something is not clinically valid are two different things.

Helping your reader, your peer, and yourself

There is no law that says that we cannot invent a word or give a word a special meaning. On the contrary, technical advancement demands that we do. The words acupuncture and moxibustion are themselves examples of new words created for concepts that did not exist in the West. Nevertheless, it is obvious that if we create a new word, we must tell our readers about it. In fact, any word used in an other-than-ordinary sense without explanation causes misunderstanding and confusion.

If we establish taxation as our rendering of lao2, it is useless to do so unless we explain the concept the word represents. If we do not provide an explanation, readers will attach a common or individual meaning to it. We must define the term clearly, so that readers encountering the word will associate it with the concept the Chinese authors intended. To be absolutely sure, we must also provide the word in the original language. In Chinese medicine, this means adding the Chinese characters, or, where this is financially unfeasible, at least the Pinyin. [*2] By doing this in the preceding discussion of lao2, other translators could immediately see our meaning.

Failure to label, define and relate terms to the original Chinese inevitably leads to a loss of information. Most readers who see mental restlessness in Maciocia's work, irritability in Bensky's work, and vexation in our own are likely to take the words at face value, that is, attach to them the meanings they have in common speech. However, while these three English expressions are by no means exact synonyms, they are all used to render the same Chinese idea. They all represent fan2.[68] It would be logical to suppose either that

one of the English equivalents is closer to the Chinese than the other two, or that all the terms are only partially synonymous with the Chinese term fan2, and that none of the terms is necessarily any better than the others. In the first case, the assumption is that some translators are better than others, and in the second, the assumption is that the lack of exact equivalents means that no translator can do a perfect job. Whichever assumption is closer to the truth, this situation leaves the student uncertain and unable to recognize the symptom correctly. Incorrect labeling in a healing art so heavily reliant on qualitative conditions means that clinicians are, without knowing it, looking for the wrong clues, or missing clues that would be clinically useful.

How can this confusion of concepts be avoided? Clearly, translators must strive to find the most appropriate equivalent. But where the best equivalent available to the translator still fails to reflect the whole meaning and nothing but the meaning of the original term, a good translator has another option: he can provide the reader with the definition of the original term. In the example of fan2, we must inform clinicians that the Chinese explain this idea in terms of restlessness and ``hot-headedness'' as a subjective feeling, in contradistinction to zao4,[69] which includes exaggerated physical movement (i.e., an objective facet). Once the concept is clearly explained, the shortcomings of the best equivalent are overcome. Students thus attach the Chinese definition to the English equivalent, which then takes on the role of a technical term in professional discussions, as does the term fan2 in Chinese.

Neglect for the task of defining terms easily creates confusion for the English reader. When both fan2 and zao4 are translated by different writers as restlessness, as is sometimes the case, the distinction between the two Chinese concepts is lost, and the dividing line with other concepts is blurred.[70] How many readers have as clear an understanding of the difference between irritability (fan2) and irascibility (nu4) when their associations are not made explicit? A good translator chooses his words carefully, but also makes clear what he means when no universal standard exists.

When we make what we are saying clear, clinicians understand the detail of what we present, and fellow translators can discover what Chinese concepts we are translating. Without peer review, a process whereby translators and practitioners comment on each other's work, the field cannot grow or achieve broad acceptance. Until there are dictionaries with universally accepted standard equivalents for all the terms of the discipline, good translation will require published lists of terms.

Translation into Western terms

There is a tendency among translators to render certain Chinese concepts, especially symptoms and diseases, as Western medical equivalents, even when the clinical studies Western

standards demand for such equivalence have not been performed. In many instances Western terms are used when the symptom and sign equivalents are not exact. There is also an insidious trend toward rendering terms that have no Western medical equivalents in a quasi-scientific jargon. Transposing Chinese ideas into a different frame of reference in this way is a breach of the rules of accurate translation that affects all readers.

Translation into biomedical equivalents

The practice of labeling Chinese concepts with ready-made Western medical terms is used by its proponents to help integrate Chinese medicine by conforming its concepts with those of Western medicine. Although, theoretically, this allows Chinese therapeutic techniques to be more broadly adopted into world-dominant biomedicine, it also leads Chinese medicine into danger. The substitution of biomedical disease categories subordinates the qualitativity of Chinese medicine to the quantitativity of biomedicine.

The replacement of Chinese medical concepts with rough Western medical equivalents in translation poses one specific danger to the acupuncture and Chinese medical community as a whole. Health care legislation imposes strict limits on competence. When practitioners of Chinese medicine use Western medical concepts without training recognized by the law, they are in danger of working beyond their competence. This problem applies mainly to the use of Western disease categories as a basis for treatment. Many Western practitioners of Chinese medicine are not qualified to diagnose hepatitis, and to base a treatment diagnosis on that disease label may leave them with no legal justification for their actions.

It is clear that as acceptance of Chinese medicine increases, practitioners will require greater communication with health care providers and insurers who are dominated by the principles and practices of biomedicine. It is very likely that practitioners of Chinese medicine will be required to be proficient with concepts, procedures and terms belonging to Western medicine. They will need to know how these ideas relate to Chinese medicine. In regard to both medical and legal communication, this will require eliminating the confusion of Chinese medical concepts with Western medicine that is evident in modern Chinese glossaries. Drawing a clear line between Chinese and Western medicine may be crucial to the survival of the former.

There are many simple examples. The term qing1 mang2[71] labels a form of blindness that develops gradually and is characterized by the absence of any visible physical obstruction in the eye, such as a cataract. The term is usually translated in books from China as optic atrophy (i.e., atrophy of the optic nerve).[72] If we adopt this suggested equivalent, we are claiming at least two of several possibilities. First, we are supposing that reliable research has shown that Chinese doctors predictably diagnose qing1 mang2

when Western doctors find optic atrophy (or vice versa). Second, this translations assumes that there are no instances where qing1 mang2 does not describe optic atrophy. The logical and practical results of this translation are not trivial. For example, when the acupoints or medicaments that Chinese medicine recommends for qing1 mang2 do not cure optic atrophy as diagnosed by Western physicians, can it be taken as ``proof'' that Chinese medicine does not work? The answer is not clear.

Such translations are leaps of faith, not statements of fact. They are not only inaccurate concept labels but they also destroy the credibility of Chinese medicine. Translators who choose such methods have not referenced clinical trials establishing the relationship between Chinese and Western diagnoses. The Chinese physicians who defined qing1 mang2 did not know of the nervous system and did not even have the means to detect it.

Most Chinese-English glossaries commit this error time after time. Skin diseases are very frequently ``translated'' into Western medicine. This often leads to an unfortunate loss of information concerning the Chinese method of looking at disease. The terms chan2 yaol she2 dan1 (snake girdle cinnabar)[73] and chan2 yaol huo3 dan1 (fire girdle cinnabar)[74] describe a specific type of sore (lesion) by its manifestations. Cinnabar describes the color of the lesion, while fire describes both the sensation felt and the pathogen involved, and snake reflects the form of the lesion. This condition does correspond to herpes zoster in Western medicine. While the vernacular English term shingles (from the Latin cingulum, girdle, cincture) is an acceptable translation, herpes zoster incorrectly suggests that the ancient Chinese had knowledge of the varicella-zoster virus that Western medicine determines to be its cause. While it may be useful to establish an equation between snake girdle cinnabar and herpes zoster in the student's mind, the substitution of the latter term for the former represents a breach of translation principle for those who wish to preserve the Chinese tradition. Where a one-to-one correspondence exists between Chinese and Western medicine, such a ``purist'' attitude toward translation may be regarded as an academic nicety. However, just a few of the many examples available will show how the use of Western medical terms in Chinese medicine can violate the integrity of traditional Chinese concepts.

When Chinese medical texts adopt the definitions of Western medicine, inaccuracies are bound to arise because clinically demonstrable one-to-one equivalents are rare, if not nonexistent. Although most dictionaries translate dan1 du2[75] as ``erysipelas,'' the Dictionary of Technical Terms of Chinese Medicine (Zhong1 Yi1 Shu4 Yu3 Ming2 Ci2 Da4 Ci2 Dian3) tells us the term can include snake girdle cinnabar (herpes zoster, shingles). Cinnabar describes things red in color. Herpes zoster is red; erysipelas is red; there the identity ends in Western medicine. If we translate dan1 du2 with the Western medical term erysipelas, we eliminate all the general cases of

dan1 du2, including herpes zoster, that the original Chinese word conveyed. Thus, what is currently standard practice for translators who follow Chinese-English dictionaries constitutes raw inaccuracy.

To translate dan1 du2 as erysipelas is not only to translate inaccurately; eventually it is to translate diagnosis out of the hands of the Chinese practitioner. If the Chinese practitioner talks about erysipelas, or any other Western medical disease, sooner or later some authority (very likely a judicial one) will question the method by which it is diagnosed. Western medical diseases require biochemical or other objective evidence for accurate diagnosis. Thus, the use of Western disease categories will eventually lead to basing Chinese therapies on Western diagnoses. If this occurs, it is difficult to see how Chinese medicine will survive as an independent discipline. If its independence is lost, the holistic health care which Chinese medicine might have provided the West will also be lost.

An example with obvious clinical implications is biao1 ju1,[76] a term defined in the Qian1 Jin1 Fang1 (Priceless Prescriptions) as ``a spot suddenly arising in the flesh, as big as a bean or as small as a millet seed, and in serious cases as big as a plum, with a root, and with a pain response in the heart.'' This definition is repeated almost word for word in the Comprehensive Dictionary of Chinese Medicine (Zhong1 Guo2 Yi1 Xue2 Da4 Ci2 Dian3.[77]) Today, mainland dictionaries translate the Chinese entity biao1 ju1 as ``whitlow'' or ``felon.'' [78] Whitlow is a tumor of the nail bed that may be characterized by melanotic tissue at the border of the nail. Here, the loss and invention of information due to mistranslation is obvious. The traditional frame of reference is absolutely lost. Specific biochemical diagnoses are added without clinical evidence, or even reasonable approximation. Clinicians using standard Western medical sources will be led astray. Therapeutic decisions based on the resulting translations will be in error.

It is clear to see how this problem arose. When the Chinese were adopting Western medicine they used the Chinese medical term biao1 ju1 to translate both felon and whitlow. They were unconcerned that biao1 ju1 was defined differently in Chinese medicine. Chinese practitioners of Western medicine never held Chinese medicine in high regard and did not think there was any need to relate biomedicine to their indigenous healing art. They borrowed the characters and changed the definition. When a later generation came to make Chinese-English dictionaries of Chinese medicine, they wrongly assumed that the same word meant the same disease. Now, when Western translators use those dictionaries without linguistic research, practitioners in the West are entirely misled.

If we use felon or whitlow for biao1 ju1, we must redefine the term as did the Chinese translators of Western medicine. However, to avoid all confusion, it is safer to select an unambiguous term. Given that the term biao1 ju1 has a

different definition in Chinese and Western medicine, we decided to represent the Chinese concept by the Pinyin transliteration alone. However, this does not solve our problems. Since Western medical disease categories are now liberally used in modern Chinese medical texts, we cannot know for certain whether, when reading a Chinese text, biao1 ju1 represents the Chinese or the Western concept. The translator is left to make his own decision when, as is usually the case, he is not given any clarification by the writers of the Chinese text.

There is clear evidence that the confusion created by translating a Chinese medical term into a Western medical term is interwoven with the much greater problem that has been created by confusing Western and Chinese concepts. Again, biao1 ju1 is by no means an isolated example. When Chinese physicians described conditions marked by frequent, painful urination, often accompanied by the passing of stones, they used terms such as: wu3 lin2, lin2 zheng4, and lin2 bing4.[79] The traditional terms were wu3 lin2, or lin2 zheng4. When Western medicine was translated into Chinese, lin2 bing4 was adopted as the equivalent of gonorrhoea, which falls within the scope of the Chinese medical notion of lin2, but is far narrower in meaning. Hence when the translator sees lin2 bing4, it is not always clear whether it means gonorrhoea or the traditional Chinese concept.

The concept of feng1 shi1,[80] wind-damp, provides further evidence of how Western medicine has had an insidious effect on Chinese medicine in China. This term is used infrequently in Chinese medical literature since it is included in the more precise technical term bi4;[81] which denotes diseases caused not only by wind and damp, but also cold. The term is, however, used in conversation, and has been taken as the Western medical equivalent of rheumatism. If we analyze the indications of drugs in the Xin1 Bian1 Zhong1 Yao4 Da4 Ci2 Dian3[82] we thus arrive at an unexpected statistic. Well over five hundred agents are said to treat feng1 shi1 wind-damp, while less than fifty are said to treat bi4 or wind-cold damp bi. While this is a dramatic reversal, the authors do not define what they mean by feng1 shi1; we are left to decide whether it is used in the strict Western medical sense or simply meant as a colloquial equivalent for diseases roughly classed as bi in Chinese medicine or rheumatism in Western medicine. It is unlikely that they mean wind and damp bi as opposed to cold bi, but the possibility nonetheless exists. If the term reflects traditional indications, did they change the term bi4 to feng1 shi1 to align Chinese medicine with Western medicine? If so, what studies establish this correlation between Chinese and Western medical categories? If a drug is said to treat rheumatism because it has been tested on patients diagnosed by Western medicine as suffering from rheumatism, this is acceptable. However, if a drug traditionally said to treat bi4 is said to treat rheumatism simply to align the terminology, important information and clinical validity are lost. Bi4, for example, also includes sciatica, and neuralgia.

This and many other modern Chinese books so liberally mix Western and Chinese disease categories that the reliability of the information for students of either medicine is sorely reduced.[83] Chinese disease categories have been largely displaced by ``more precise'' Western categories even though, by so doing, an incongruous element is grafted onto Chinese medicine. The danger is that this practice will invalidate the information that arrives in English, if not that of the Chinese original itself.

Changing ``loose'' Chinese medical terms into ``precise'' Western medical terms gives Chinese medicine a veneer of scientific credibility that appears to satisfy Chinese and Westerners alike. Chinese who regard their medicine as ``primitive'' and Westerners who regard it as ``exotic'' both feel more comfortable when perceived correspondences with Western medicine allow the interchangeability of terms. But the veneer is nevertheless thin, and is no substitute for determining the exact state of correlation or non-correlation between two partly similar, partly dissimilar medical paradigms. Application of analytical methods in research into Chinese medicine might eventually do more for Chinese medicine and wreak less destruction than has the simple switching of terms.

The desire for a scientific veneer is evidenced by the willingness to sacrifice not only accuracy but also style. Commonly Used Chinese Herb Formulas With Illustrations by Hong-Yen Hsu⁵ and Chau-Shin Hsu⁵ abounds in words such as pyorrhoea, cerebromalacia, hemoptysis, gastroptosis, nephroatrophy, ephidrosis, osteophthisis, nephrophthisis, caseous necrosis, myelophthisis. When even a basic term such as aversion to wind is rendered as anemophobia, how are readers untrained in Western medicine to assimilate useful information? How are they to find the fabric of qualities and relationships on which Chinese medicine depends? How are we to explain to our biomedical colleagues why terms such as frigorism are only found in obsolete medical dictionaries?[84] Even familiar terms such as bronchitis and hepatitis are meaningless to the practitioner who has no access to the biomedical means of diagnosing these diseases.

Although the problem of - to coin a term - ``biomedicization'' is most damaging when it affects disease categories, there are also other examples. The term jin1[85] is variously translated as ``tendons,'' ``ligaments,'' or ``tendons and muscles.'' In all these renderings the Chinese concept is squeezed into a Western physiological concept. Western medicine describes in very precise terms what tendons, ligaments, and muscles are, but when the Chinese speak of jin1, they are referring to something much more amorphous. A good way to demonstrate what the Chinese meant is to look at how they used the word and what they actually observed.

For example, The Great Compendium of Acupuncture and Moxibustion (Zhen1 Jiu3 Da4 Cheng2) says that GB-31 is located ``between the two sinews on the outer side above the knee, at

the end of the middle finger, when the hand is placed on the thigh.''[86] It is clear that at this point there are muscles, not tendons.[87] Could jin1 include what we call muscle? It would seem so. Where English speakers would naturally describe a location in terms of muscle or tendon, the Chinese use the word jin1, which embraces both English categories. While official texts now use the modern equivalent of muscle (jil rou4),[88] Chinese doctors often use the older expression because it has a deeper root in everyday language. To think of, and hence to translate jin1 as tendons or ligaments is wrong since the concept includes not only these but also muscle.

In the Chinese tradition, the notion of a muscle, as defined by Western medicine, never existed. The Chinese had only the categories jin1 and rou4.[89] Neither The Great Compendium, nor any other book, describes point locations in terms of rou4,[90] ``flesh.'' This is because rou4 cannot be counted. While it is possible to say two jin1, it is no more correct to say two rou4 in Chinese than it is to say ``two fleshes'' in English. Flesh is the substance of muscle, and insofar as jin1 includes our notion of a muscle, it is synonymous with the idea of flesh. Jin1 and rou4 thus overlap morphologically. However, the important difference in the use of these terms is functional: uncountable flesh turns into countable sinews by the action of contraction. This, to the Chinese doctor's eye, is a function associated with the liver. The distinction between flesh and sinew is a qualitative, functional distinction, not purely one of anatomical categories. Of course, it is always possible to contend that the term jin1 is used in acupoint descriptions in a sense that is different from the way it is used in the physiologic context. Yet, unless we wish to ignore the ascription of sinews to the liver and flesh to the spleen, this contention cannot be upheld.

To render jin1 as tendon or ligament is thus categorically wrong, and fails to take into account its relationship to the liver. To translate it as muscles and tendons is acceptable, but not ideal because it involves transferring a Chinese concept to a different frame of reference in which it is viewed as two things rather than one. We believe a single Chinese concept should be thought of and represented as a single term in English. We therefore chose the term sinew to carry this meaning. This word is free of technical meanings in Western medicine, and beautifully conveys the notions of strength, power and resilience inherent in the Chinese term in its association with the liver. Its lack of strict anatomical associations in biomedicine also enables it to be used where ``muscles'' and ``tendons'' cannot. When the Chinese speak of the penis as zong1 jin1,[91] the gathering sinew, our looser equivalent can still be used, whereas ``muscle'' and ``tendon'' would be inappropriate. Whether or not this is simply a special usage of the term jin1 that might allow us to waive the principle of one-to-one translation is not clear. Regardless, our goal is to preserve as much of the original meaning and flavor of the Chinese as possible. Those who translate jin1 as muscle and tendon would no doubt translate zong1 jin1 simply as

penis. This would matter little for the translator because he can read the Chinese. Only his reader suffers.

Translating quality into quantity

Western students, practitioners, and writers prefer to express Chinese concepts with words that are familiar to them. Unfortunately, familiar words often have connotations that do not fit the original Chinese terms. In some cases, the English words miss the Chinese idea entirely. In short, a serious loss of accuracy occurs because ideas that are familiar to modern Western readers were entirely alien to the founders and traditional practitioners of Chinese medicine.

This practice is clearly illustrated by the habit of referring to qi as ``energy.'' It is possible that qi does correspond to a form of energy that modern physics has not yet defined. So far it has not been found to correspond to any form of energy known to physics. When people use the word energy and do not define precisely what they mean, they are clearly using a familiar word in an effort to help themselves understand qi.

For Westerners it is much easier to conceptualize qi in familiar Western words, with their comfortable connotations, than to understand how the Chinese conceived (and still conceive) of qi. To the Chinese, qi refers to anything that is perceptible but intangible. It is used in conversational Chinese to refer to anything we know to be present, but cannot actually touch. Nathan Sivin summarizes this idea very well when he says that qi is ``what makes things happen in stuff'' and (depending on the context) ``stuff that makes things happen'' or ``stuff in which things happen.''[92] But to say that qi is energy is to falsely narrow its meaning.

A smell is intangible, but perceptible; it does something to the nose. It is naturally called a qi. Waste passing through the intestines is sometimes referred to as zhuo2 qi4,[93] turbid qi, which stands in complementary opposition to qing1 qi4[94] which the spleen produces from food (i.e., fresh nutrients). We can think of turbid qi as ``stuff in which things happen,'' (waste in movement), or of clear qi as ``stuff that makes things happen;'' but, to the Chinese, it is the same: it is qi. Neither zhuo2 qi4 nor qing1 qi4 can be equated absolutely with energy in a biomedical sense, or in any colloquial sense.

Qi is used too broadly to be covered by the limiting concept of energy. Using the word ``energy'' narrows our understanding and encourages an insidious process of redefinition. It is a practice that overwhelms the observations essential to understanding Chinese medicine with the expectations attached to familiar ideas. It is like calling a four-sided figure a ``circle,'' or, as Unschuld puts it, like translating gui3 (ghost, demon) as ``virus'' or ``bacteria.''[95] What is worse is that related concepts must bend to fit the comfortable (but erroneous) assumption, and that some aspect of clinical reality

is thereby lost.

The way that people conceive of qi in the West has led to the invention of the concept of ``energetics.''[96] Originally, energetics was a scientific term denoting the branch of physics that deals with energy. Although the term is given no clear definition by those who use it in Chinese medicine, it appears to mean the study of energy (qi?) in the body or, more commonly, the behavior of energy (qi?) in the body. Since it is impossible to translate this concept into Chinese or Japanese without recourse to the words used for the concept in physics, which become meaningless in a medical context, energetics can hardly be said to be an Oriental concept. When English speakers use the term even more loosely, as they often do, they are, to put it bluntly, entering a conceptual world of their own creation. When a published drug therapy handbook[97] lists formula indications under the heading ``Energetic and functional presentation,' ' to what clear conceptual framework does the word ``energetic'' refer?[98] What translational principle does it express? Would it make sense to Chinese or Japanese traditional practitioners? Or is it an invocation of a set of beliefs and expectations about Chinese medicine that have little relation to anything originating anywhere in the Orient? In Western Chinese medicine ``energetics'' is little more than a buzzword that is de rigueur for books intended for practitioners geared to providing ``alternative medical care.''

How can Western dreams and expectations, no matter how sincere, substitute for 2,000 years of clinical experience? To argue that Chinese medicine must adapt to Western conditions if it is to be acculturated[99] is to hide from the inescapable truth that the depth and breadth of Chinese medicine must be fathomed before its full potential for adaptation can be understood. Jumping the gun only serves short-term goals at the expense of deeper understanding.

The two basic stimuli in acupuncture evidence a process of clinical redefinition similar to what we see in referring to qi as energy. Bu3 and xie4,[100] which are called supplement and drain in this glossary, are often called tonify and sedate. Although the verb form ``tonify'' is not recognized as an English word by the Random House Dictionary,[101] and the roots of ``tonic'' in Greek relate to muscle tone and whole body medicines, the use of the neologism ``tonify'' indicates that it shares with supplement a similar idea of acupuncture stimuli. Something, qi, is added to, supported, increased. ``Sedate,' ' however, is not as easy to accept.

The character xie4 literally means to flow swiftly, rush down, or pour out, drain. In medicine, the term is used to mean allowing something to flow away or flow out. We chose drain because traditional descriptions of the needle techniques used to accomplish this stimulus in acupuncture were explicit in their intent of causing replete qi to drain away. Yet, how can this notion possibly be expressed by the word ``sedate?'' Sedation is clearly not what the Chinese were describing. It is interesting to examine the circumstances of this

redefinition because it sheds light on the dangers Chinese medicine faces in transmission.

When Felix Mann was writing about acupuncture in 1962, technology had enhanced its ability to trace and measure nervous system responses. In China, traditional forms of acupuncture had been absorbed into a new Chinese synthesis of Western medicine, natural drugs, and acupuncture. The presentation of Chinese medicine with Western medical equivalents was well underway. Mann, not surprisingly, identified acupuncture stimuli with nervous system responses. The qualitative and relational aspects of qi were ignored and observations that could be recorded and quantified were emphasized. Of course, the terms chosen were part of the process of fitting acupuncture into a neurological model operating with an ``energy'' understood in the West. Thus, we find ``sedation,'' a term that nicely fits what can be done to nerves.

It is important to note that Mann was putting forth an explicit theory of acupuncture and labeling it consistently. There is nothing wrong with that. However, when others adopted the words he chose without transmitting the assumptions that determined their selection, the meaning of a basic concept was lost. Sedate means to repress activity. How can it possibly be used to describe the stimulus used to eliminate the cold pathogen, which represses bodily activity? In Chinese medical logic, the sedation of cold would make the body even colder!

When we look at Chinese terminology in the light of the historical facts of its creation, we see that parts and functions of the body were labeled with the names of natural phenomena, man-made phenomena (sluices, etc), and references to social and political organization (office of general, office of the granaries). These names reflect the technological and political unification of China that occurred at the time The Inner Canon was compiled. The Chinese were just beginning to deal with the problems of communication by road and water on the vast scale of a newly unified empire.[102] Keeping the rivers flowing and the carts moving were the things that occupied society's mind at that time. How can we describe what the Chinese saw when they looked at the body by borrowing words from a space-age medicine? Was an ``energetic'' view of the body possible in ancient China? Is it not, in part, the fact that ``sedate'' reflects 20th century problems that makes it popular? How can a word like sedate, which describes how pains and problems are switched off by modern drugs, describe what was seen by a traditional physician for whom qi was quite real?

The transposition of ideas into a different frame of reference seen in the word sedate is no unique occurrence. The terms xul and shi2,[103] which have come into common use as excess and deficiency, are another good example. These concepts are a yin-yang complement, and we know therefore that they are concepts of quality and relationship. Xul[104] means hollow, empty, weak, whereas shi2[105] means solid, dense, or (in classical Chinese only) to fill. These words are used in

everyday Chinese. As the following list shows, they are paired with other characters to produce new meanings by synthesis:

***** Character List *****

All these expressions are common and without exception can be heard daily among even less educated Chinese. They will say shi2 zai4[106] almost as often as we might say ``real'' in English. In all these expressions, again without exception, xul and shi2 refer to qualities. Not one refers to a quantity, a count, a quantifiable relationship, or a statistic.

When Chinese study Chinese medicine and learn xul and shi2 in the technical sense, they instantly grasp their meanings. They describe xul as like a bag loosely packed with cotton balls and shi2 like a balloon bulging with water. They do understand these two conditions as being the result of too much or too little of something, but when they use xul and shi2 they are describing not the cause but the state. In short, xul and shi2, though they have quantitative implications, are essentially qualitative terms.

To convey the qualitative essence of the word more exactly, we always translate these terms as vacuity and repletion. By the same token, we translate you3 yu2,[107] and bu4 zu2[108] as superabundance and insufficiency (``too much'' and ``not enough''). This more faithfully mirrors the quantitative emphasis they convey. By making this distinction, and choosing words that resist misapplication, we hope readers will be able to see to what extent the Chinese see things as qualitative or quantifiable entities.[109]

It is instructive to see why ``excess'' and ``deficiency'' have become popular equivalents for the Chinese terms. Xul and shi2 are hard to translate and a nice-sounding equivalent is difficult to find. Preserving these ideas makes it necessary to learn a new word like vacuity or asthenia, and this is not popular because everyone likes to ``express the thing in their own terms.'' However, as with using ``energy'' to represent qi, the words appear natural not because they faithfully translate the ideas of Chinese medicine, but because they faithfully represent ideas that are our own. It is the Western intellectual habit to measure something before we can prove it to anyone. It is the Western intellectual habit to center on ``cause'' rather than ``condition.'' We need to quantify things, or at least see them as being quantifiable, before we can understand them. So when we use excess and deficiency, we are not translating the Chinese concepts, but converting them into something that, being causal and potentially measurable, makes us feel more comfortable.

Whereas some do consider such distinctions academic

niceties, we feel that on a long journey the most minute error at the beginning is massive by the end. Use of words like excess and deficiency contribute to the reduction of Chinese medical ideas to Western terms by making it easy for quantitative, causal logic to fit the tone of its words. At those points where it is most important that we set aside our habits, and learn the subtleties of Chinese medicine, such words falsely reassure us that we need not look beyond our own experience. While some of the Chinese writers who select these words may be evidencing nothing more than an insensitivity to the English language, the integrity of Chinese medicine in translation is nonetheless jeopardized.

How to avoid the problems

The examples of how the integrity of Chinese medicine is violated by translating it into terms that are incompatible or alien to it offer a logical conclusion. Each concept should be labeled with an English term that faithfully reflects its meaning. Ideas imparted by the word chosen in English must be free of misrepresentations that encourage an English-speaking readership to make false assumptions. The English term must not imply a concept, measurement, or method that is alien to the original Chinese idea.

Translation into ``plain'' English

Many, if not most, clinical translators and writers endorse the view that Chinese medicine has very few technical terms and thus can be simply expressed in common language. This is apparent both in the language they use, and in the number of terms they see a need to define. However, when we take a closer look at this assumption, we see that ``plain'' English is not quite as plain as these writers imagine. Vernacular terms are not always clear in meaning and insistence on their use when they are inexact equivalents can cloud, rather than illuminate, the concepts they are intended to represent. Preference for colloquial expression also harbors the danger of translating according to context, which destroys the conceptual unity on which Chinese medicine is based.

There are very good reasons for rejecting an obscure word when a simple, every-day word will do. Why translate *jing1* as *structive potential* (as Manfred Porkert does) when the word essence is just as clear? The word essence conjures up in our minds nearly as many ideas and associations as *jing1* does in the minds of Chinese people. In the West we have the habit of labeling technical concepts with words from Latin and Greek that have few everyday associations. The Chinese have rarely borrowed foreign words, so their technical terms carry the associations of everyday language and the other disciplines in which they are used. Therefore, when we translate Chinese medicine, vernacular words are the best renderings - provided they fit the meaning as well or better than a more obscure word.

Students and practitioners generally state a preference for simple terms. However, there are certain consistent patterns to this preference. People generally dislike the term heteropathy for xie2. At the same time, they prefer the term pathogen or pathogenic influence to the word evil, when in fact, the simpler word evil comes much closer to the meaning of xie2 than any other English word. In effect, simple words are preferred unless they interfere with cherished preconceptions of Chinese medicine, or too clearly evidence its ancient and Eastern roots. Choosing words by unanalyzed preference is no substitute for determining clearly what a concept means, and labeling it with the best and most practicable label we can find. If we can do this with simple terms, so much the better. However, we should not fear a more obscure term if it better suits our needs.

Use of vernacular words without definition

Translation into vernacular terms can lead to loss of technical precision when the words used are not very carefully defined. When people speak of backache, they mean any pain in the back, or the most common form, lumbar pain. English-speaking patients will say that they suffer from ``backache,' ' and let us know where they are actually experiencing discomfort with either gestures or answers to our (hopefully) insightful questions. But if in writing a case history practitioners describe what the Chinese call yaol tong4 (lumbar pain)[110] as backache, are they not being imprecise? Will other practitioners be clear about the condition?

There are also clinical consequences. ``The lumbus is the dwelling place of the kidney,' '[111] and pain in this area (lumbar pain) is often associated with kidney vacuity. Pain in other parts of the back is due to other causes (e.g., wind-cold). Thus, backache is a colloquial term that fails to recognize basic Chinese medical distinctions. It is best avoided in a clinical context. This is particularly critical in transmissions that have clinical or legal repercussions: textbooks, case records, etc.

It is true that in Chinese yaol tong4 is a colloquial expression. Indeed, the word yaol is an equally colloquial term. The problem in English is that we have no precise colloquial equivalent of the Chinese word except for ``lower back.' ' This term implies that lower back is merely a subcategory of the concept of back. To the Chinese, however, yaol is considered distinct from the bei4,[112] back (or upper back).

Stomachache presents a similar problem. To many people, especially those who are not sure where their stomachs are, this word means any abdominal pain. The term sounds natural, but who knows what is actually intended by the word? In colloquial English, the word stomachache has assumed a wide meaning to avoid the use of socially objectionable alternatives; bellyache is shunned because it sounds ungracious, and abdominal pain is avoided because it sounds

pedantic and pretentious in conversation. In Chinese, no such problem exists because the colloquial *du4 zi3 tong4*, [113] bellyache, is considered to be no less elegant than the condition it labels. In conversational English, stomachache has come to mean abdominal pain in the absence of a more precise expression. Even in these simple conditions, vernacular words are simply unclear, and should be avoided just as they are in Western medicine.

Although it is always possible to give a vernacular term a specific definition so that it can label a technical concept, to do so in this instance leads to danger. If we use stomachache specifically for pain in the stomach proper, how will those who think of it as meaning tummyache (abdominal pain) know what we mean? Of course, we define it. But if we define it at the first occurrence in a text, will those referencing another part of the book have the benefit of our explanation? What would prompt them to seek an explanation for an everyday word if they did not find it by chance? [114]

The Chinese term *li4* [115] provides an example of how recourse to the vernacular in the interpretation of a character and the choice of its English rendering fails to inform readers of its clinical meaning. This term is often translated as benefit, [116] presumably because that is its most common use in colloquial Chinese. A glance at the origin of the term and closer scrutiny of its usage in colloquial Chinese should suffice to make the real meanings of the word clear, and examination of the specific use in Chinese medicine should demonstrate which of the meanings applies in a technical context.

The character *li4* is composed of grain growing in the fields on the left, and a knife on the right. The two parts together convey the notion of grain being cut at harvest time. This image provides the basis for all its usages: *li4* can be used to mean sharp (e.g., *li4 dao1*, a sharp knife), since a sharp knife is needed to cut the grain. A sharp knife cuts smoothly, so *li4* describes the smooth course of events. When everything goes smoothly with the harvest, there is benefit or advantage to man. Thus we see from this that benefit is only one aspect of the meaning of this character.

In Chinese medicine, *li4* occurs almost exclusively in phrases where it denotes restoration of normal movement of a body part, or the normal movement of water, damp, qi, etc., through or out of the body. How can one speak of ``benefiting water'' or ``benefiting the joints'' without loss of meaning? The English word *disinhibit*, though a partial neologism, clearly conveys the Chinese idea in nearly all contexts. [117] For example, while *benefiting water* misleadingly suggests the idea of increase, *disinhibiting water* suggests the meaning of release clearly and precisely. Admittedly, *benefit* is a plainer English word than *disinhibit*. However, in the Chinese medical context *benefit* is so imprecise as to be meaningless.

The problem of translating Chinese medicine into unqualified

vernacular terms is not limited to the loss and invention of information about specific conditions. Because it is simply another form of translating Chinese thoughts into Western ideas, it also results in the partial or complete obliteration of concepts essential to Chinese medical theory. In works produced by both Western and Chinese writers, concepts like qiao4,[118] which we translate as portals and others translate as orifices, are often simplified in the theoretical discussions, then eliminated as clinical realities. When a concept becomes difficult to fit into the Western milieu, that concept is too often lost.

In English books, the ``nine portals'' are often enumerated (two eyes, two ears, two nostrils, mouth, genital and anal orifices). Writers present the ideas seriously, or at least do not dismiss them as worthless. However, at the point of clinical application, the Chinese idea disappears. For example, ``reviving consciousness'' in Chinese medicine is seen as ``opening the portals'' (kail qiao4).[119] Here, the portals mean the portals of the heart, or else the ``clear portals'' (qing1 qiao4),[120] that is to say the portals of the head, which are the sense organs. The concept is not difficult to understand: opening the portals is a method of treatment that gives the heart spirit access to the senses, which means that consciousness is restored. This method of treatment is used in patterns like phlegm obstructing the cardiac portals (tan2 zu3 xin1 qiao4).[121]

In practical contexts, however, writers skirt the problem by using paraphrases that do not mention the portals. Their only explanation is that Westerners will not understand the original Chinese concept, or will reject it as strange and unscientific. While this may happen, elimination of a Chinese concept for reasons of readership acceptance is misrepresentation.

Writers do have solid reasons for assuming what readers cannot do or will not understand. It is not dishonest to simplify Chinese medicine into vernacular concepts. However, to label these simplifications ``Chinese medicine'' rather than ``Chinese medicine explained in a Western frame of reference'' is dishonest. Western difficulty in accepting a concept should not be equated with lack of validity, lack of clinical utility, or conceptual simplicity.

Translators willing to put themselves in the shoes of the general reader can understand the consequences of translation into the unqualified vernacular. Many readers have never considered the problems of translation and take words at face value. Unless they are expressly informed that a particular common term is being used to label a specific Chinese concept, they assume that it carries the most familiar meaning. Furthermore, they may not understand that accepting the lay meaning is depriving them of useful information and thus retarding their understanding of Chinese medicine.

The terms fan2 and zao4 (vexation and agitation) discussed above showed how useful information is lost in this way. They

are by no means isolated examples. When Chinese Acupuncture and Moxibustion, for example, speaks of vitality in the chapter on diagnostic methods, those who read Chinese and those who have Chinese teachers may be able to relate it to the word spirit more widely used in other literature. Adept students may be fairly sure of the identity if educators have encouraged access to other texts so that the relevant chapters may be compared. But when Chinese Acupuncture and Moxibustion discusses ``stench smells'' and ``stinking smells'' without a word of explanation, the terms become meaningless. While a deep red tongue can be cross-referenced to crimson tongue, it is doubtful that ``hesitant bowel movements'' can be related to anything at all. Vernacular words are acceptable if they represent concepts clearly. But even vernacular words that have a technical meaning must be explained and glossed.

When Formulas and Strategies speaks of collapse, the authors mean jue2,[122] whereas we use the word collapse to render wang2.[123] Careful readers are spared error or frustration because the terms are included in accompanying glossaries. The student or practitioner who does not read Chinese can, with a little work, learn that what Bensky and Barolet call collapse, Wiseman et al., call inversion. However, even the most assiduous reader cannot reference the ideas in Essentials of Chinese Acupuncture, because it contains no glossary.

Overuse of vernacular terms to represent technical concepts not only leads to loss of clinical information, but also creates a false impression of familiarity and simplicity. Writers who reduce to an absolute minimum the number of terms requiring special attention foster the impression that Chinese medicine is less sophisticated than it actually is. In Foundations of Chinese Medicine, for example, a glossary of only 56 technical terms gives naive readers the false impression that these are the only technical terms in Chinese medicine. The author states that he has ``reviewed afresh all Chinese medical terms'' and refers to the list as a ``full glossary.''[124] Those who read Chinese know that the Comprehensive Dictionary of Chinese Medicine (Zhong1 Guo2 Yi1 Xue2 Da4 Ci2 Dian3), for example, comes in four volumes (at least in some editions). Its authors would clearly disagree with Maciocia on the scope of Chinese medical terms and the technical concepts they represent.

Although a healing art based on qualitative phenomena perceived with the naked senses is expressed in a relatively simple language that lacks the steely precision that characterizes the Western sciences, this should be no invitation to casual translation. In China, much importance is placed on the meaning of the words used in the classics and their proper interpretation. Barely the slightest reflection of this tradition is found in the West. Translation in the unqualified vernacular fails to inform readers which English words represent Chinese concepts with clinical meanings. When writers fail to acknowledge and draw attention to words that have potentially useful meanings, they lull their readers into a false sense of security that what they have learned has the

minimum of ``loose ends.'' Students with a genuine desire to learn are given no clues as to how to refine their understanding of the subject matter.

Translation by context

Translating into the unqualified vernacular very often goes hand-in-hand with ``free translation.'' Translators who choose this approach translate words according to context, picking the word they believe to be right in a particular context or for a particular readership. This method is perfectly acceptable for explaining technical information to laypersons. There the emphasis is on choosing terms with which the readership is familiar. It is also necessary in the translation of poetry, where preserving a rhythm or a rhyme may be as important as preserving the meaning of a word. It is not, however, acceptable for the translation of a technical discipline, even one such as Chinese medicine, where language has ``poetic qualities.'' Although this method of translation is tempting because of the effort it saves in term selection and linguistic research, it is not suitable for the translation of a technical discipline for a professional readership, where the preservation of concepts is of prime importance. Practically, this approach destroys important conceptual links, and makes it impossible to provide useful glossaries and indexes. The resulting loss of ability to cross-reference hampers both student learning and peer review.

Translation by context damages the conceptual fabric of Chinese medicine. Taking up the example of lao2 (taxation) again, the free translator compiling a book or essay on taxation of qi and taxation of the flesh, which The Inner Canon tells us are caused by lying and sitting for too long, might ignore the meaning of lao2 in all its other contexts, and render the term as ``sloth''! In a discipline where ``facts'' are qualities and their interrelationship, rather than cell counts and cholesterol levels, the free translator is the proverbial bull in a china shop. He may be very prolific, but his readers will be left cleaning up the mess forever.

Haste to translate terms into the most suitable word for a particular readership can be imposed on translators by a need to serve the status quo of a particular readership. However, in Chinese medicine this practice destroys important qualitative correspondences. Chinese medicine does not primarily discuss distinct entities. Rather, it discusses qualities and correspondences between qualities. While qualities, as perceived by all human beings, form a continuous scale, language labels no more than a few useful positions on that scale. Unfortunately, different languages do not always pick the same positions.

Take color as an example. It changes gradually from red, through orange, yellow, green, blue, and indigo to violet. We can visualize colors as a gradual progression, a continuum of an infinite variety of shades, but language cannot label the

colors so finely. Language does what a prism does: it separates the colors. Different languages are different prisms, and each separates the spectrum in different ways. For instance, there are colors that the Chinese describe as yellow that we also classify as yellow. However, there are other colors we describe as light brown that the Chinese describe as yellow. For the Chinese, the word *huang*² covers a wider area of the spectrum. Why else would it be said that yellow is the color of earth? The answer is not simply that the soil is yellow along the Yellow River in northern China. Chinese people call light tan shoes yellow as well.

In most technical disciplines, color is used for simple identification purposes. In Chinese medicine, however, color is of much greater importance because it acts as a link in a delicate chain of correspondences. *Qing*¹, another color that has no exact correspondence in English, describes the blue of the facial complexion seen in cyanosis. Systematic labeling of such complexions as blue may be acceptable to a Western readership, but they violate the integrity of Chinese medicine: *qing*¹ is also the color that is associated with wood in the five phases, in which context it is normally translated as green! We do not have an English word that means both green and blue. Whereas *qing*¹ is a single concept in Chinese, we perceive it as two. While the Chinese do have other words for green or blue, they have preserved *qing*¹ as a concept that covers both colors.

In some cases, a *qing*¹ complexion can indicate a disease of the liver or the related pathogen wind. If the Chinese concept is not preserved in language, the clinician will never think to ask the right questions. Inconsistency not only provides inaccurate information (the wrong color), but also isolates the practitioner from the means with which to seek further information (the five phase associations). In a medicine based on quality and relationship, data loss of this kind can have considerable clinical consequences.

The problem raised here is that while *qing*¹ is a vernacular concept in Chinese, its preservation in English requires the creation of a technical concept with a technical label. We can only preserve the Chinese concept if we invent a technical term to describe the Chinese view of the color spectrum. In FCM we chose the word cyan, and in response to our readers' suggestions, have since switched to green-blue. Even though Chinese practitioners use the idea, books produced in China for English readers simply drop the concept and provide so little information that the connection between what they call a ``blue'' complexion and the liver is unmentioned. The very obvious five-phase associations of the other colors are also lost unmentioned.

The identity of the concept represented with different words can only be preserved when the translator provides explicit statements that inform readers that links exist. If we inform readers that we are using two words for one idea, the link survives (at least for a very small set of terms). However,

explicit links between two terms have two practical disadvantages. First, it is difficult to ensure that the reader will forge the link in his or her mind. In technical studies people do not read textbooks or clinical manuals from cover to cover at one sitting as they might read novels, and therefore may miss the passage where the link is made. Second, the method fails when a third related concept is introduced. Warning the reader that he should think of brown as yellow does not help when we must also say that Chinese people see some shades of brown as red. Brown might be useful for describing a single color, but it cannot preserve the distinct associations of the five phases.

One of the most important reasons why free translation should not be used for medical works is that all students or practitioners must be able to cross-reference different books. In a field where there are still many terminological differences between writers, cross-referencing is not easy. When the unity of concepts is splintered by the use of vernacular terms the task becomes impossible. A book that is translated according to context can only provide an index of words. It cannot provide an index of concepts that can be referenced to other books. Neither can it provide a list of concepts that may be referenced to Chinese texts. In a discipline that has not defined its concepts in the form of standard reference works, students cannot develop their technical understanding by cross-referencing different writers. A freely translated discipline has, by definition, no agreed set of concepts and will never allow readers to cross-reference. In short, it is not a discipline at all.

Work that cannot be cross-referenced not only hampers communication between members of a community, it obscures the decisions and assumptions of translators from their readers and their peers. Thus biomedical and other scientific experts, philologists, as well as clinicians of Chinese medicine cannot fully scrutinize work in the field. No writer, however good, is above scrutiny. By not allowing his work to be cross-referenced to the works of others, he is setting himself as a standard. No writer lives forever or is expert in everything. No-one will conquer the mountain of Chinese medical literature alone. No profession can afford to be dependent on individuals. Without peer review and interaction, no skill becomes a profession in the West.

In sum, while the advantages of translation by context into ``plain'' English are considerable for commercial books, introductory books, and writing meant for laypersons, the adoption of this approach for clinical manuals introduces serious problems. Not only does free translation lead to inaccuracies and inconsistencies, loss of technical meanings, and difficulty in cross-referencing, it also makes the development of standard references practically impossible. It creates a dependence on individuals that may be appropriate in an apprentice system, but which cannot be supported in the modern Western or Chinese context. Technically, it tends to reduce the specificity and scope of Chinese medicine by

generalizing and reducing the relationships and qualities that are transmitted. This leads to another area of difficulty, inappropriate simplification.

Simplification in translation

While we are grateful to the Chinese for their efforts to bring acupuncture to the West since World War II, we believe it is lamentable that their texts present such an oversimplified view of the field. It is even sadder that such texts have been adopted as standards for the training of professional acupuncturists.

If we take as an example one common, simple, qualitative symptom in Chinese medicine, a white complexion, we can see that comprehensiveness gives utility, and that decisions to include or exclude information from Western texts can influence the readership's view of Chinese medicine.

Essentials of Chinese Acupuncture, a direct translation of the Zhong1 Guo2 Zhen1 Jiu3 Xue2 Gai4 Yao4, by the Beijing, Shanghai, and Nanjing colleges of Chinese medicine, is one of the early books produced for physicians attending acupuncture training in China. Concerning white complexion, it states:

. . . pallor, which indicates existence of cold or xu (deficiency) of blood.

In contrast, the equivalent passage in Chinese from FCM (our 1985 translation of Zhong1 Yi1 Xue2 Ji1 Chu3), written as an introductory textbook for Chinese medical students in China, states:

White (or pale) complexions usually indicate cold or vacuity. A drained white complexion with facial vacuity edema generally indicates yang qi vacuity and occurs after massive bleeding, in chronic nephritis, or in wheezing dyspnea patterns. A pale white, lusterless complexion, together with general and facial emaciation, normally points to blood vacuity. The Spiritual Axis states, ``Blood desertion is characterized by a white, perished, and sheenless complexion.'' The sudden appearance of a somber white complexion in acute diseases is usually attributable to fulminant yang qi desertion and is seen in various forms of shock. However, somber white may also be observed in cases of exogenous wind-cold diseases characterized by aversion to cold, shivering, and severe abdominal pain due to interior cold.

In addition, there are grayish white macules that occur in infantile ringworm, known as ringworm patches.

The text intended for Chinese physicians clearly provides more information. Although simplification is good for didactic purposes, detail is necessary for clinical practice. In Zhong1 Yi1 Xue2 Ji1 Chu3 (Fundamentals), distinction is made between three different pale complexions and four conditions (leaving aside the information about macules). However, the three complexions are subcategories of the pale complexion, and the four conditions are subcategories of cold and vacuity. Each condition is a unique clinical concept (e.g., fulminant yang qi desertion), regularly found in Chinese books that discuss the indications for acupoints and medicinal substances, clinical histories, methods and procedures.

In contrast, the less detailed Essentials text limits its information to the generic categories (pale complexion; cold and vacuity). These categories are so broad they cannot specify a particular treatment. Both pale and cold, by whatever terms we call them, must be further differentiated before therapy can be effectively chosen. Thus, the problem is not that they are wrong, or that the terms have been poorly selected. It is that the reader has not been provided with enough information to use the concept effectively.

Leaving aside the question of the quality of translation, the critical difference is in the selection of information thought appropriate for a Western readership. While there is no doubt that Chinese medicine can be simplified and still appear coherent, there is also no doubt that the greatly simplified versions of Chinese medicine presented to Western readerships are of questionable clinical utility. Chinese medicine, by its nature, sees phenomena in categories and subcategories of qualities. Vacuity and repletion each represent not one but many conditions. It is possible to strip away detail, and still have a general understanding of the whole. Like television, we can watch a film in black and white and understand the story, even though the reality of color is missing. However, simplification cannot go on forever. Inevitably, loss of distinction and detail leads to a loss of utility.

The goal of translation must be a system - a method and a terminology - that is sufficiently comprehensive for the practical acculturation of Chinese medicine on a broad scale. While simplification is necessary for didactic purposes, the system must be built to present the broader, more detailed picture of an advanced discipline. Terminological solutions that might work for a simple book may break down when applied to other texts in which specific issues are brought into focus. Distinctions that appear of minimal importance to be disregarded in an outline presentation cannot be ignored in more detailed texts unless clinical utility is sacrificed. How can a methodology for the translation of a holistic discipline be anything but holistic? Failure to devise a system of translation that can represent the maximum scope and detail of the discipline translated ultimately result in the oversimplification of the discipline itself. Clinical practice and the development of the field are both retarded through the

confusion generated.

The subtle way in which clinical practice can be simplified is exemplified by the problem of qing1 (green-blue) discussed above. Any discussion of five-phase relationships between color of complexion and affected organ becomes unclear if we insist on the easy and familiar (but inaccurate) word ``blue.'' The fact that modern beginners' books do not discuss these relationships suggests that these theories are proven or believed to be of little or no clinical value, or else are considered to belong only to the realm of advanced studies. However, only conclusive proof that they are of no clinical value would be sufficient reason for a translator to ignore the unity of the concept in translation. In Western medical literature, the lymph system is not ignored or renamed in simple texts that do not deal with it in detail, since it is always presumed that sooner or later the student will have to come to grips with this area of study. Qing1 is a single concept, and if there is any reason to suppose that the unity of the concept plays (or has played) a role in Chinese medicine, it should be translated as a single concept in English. Failure to do so results in the general impression that the concept is somehow arcane, and thus limits clinical expectations.

Allow us to note that a translator who wishes to transmit a personal concept of Chinese medicine is perfectly free to do so, provided he labels it as such. Translators are not obliged to present discussion of theories on the relationship between complexions and the five phases, or of any other specific aspect of the discipline, if they believe them to be clinically useless. However, the translator who feels that such theories represent potentially useful clinical insights that cannot be ignored, should apply a translation system that applies to all texts regardless of whether they deal with that theory in detail. If there are important correspondences, let them be seen in an entire body of translated literature, and let the practitioner decide whether or not they are also seen in the clinic.

Confusion and retardation in the development of Chinese medicine in the West are also natural consequences of simplification. As the body of clinical information in English becomes larger, more distinctions will be necessary. When choosing words today, we must ask if they will still be precise enough for the expanded and more detailed knowledge of tomorrow. When determining the English or Latin nomenclature for 400 commonly used agents, wouldn't the field benefit if the set of terms chosen distinguished the 800 agents that will be required next year? To refer to cinnamon twigs and cinnamon bark simply as cinnamon may help beginning students, but once these students have progressed to books where the distinction is made, the simplified term becomes as confusing as it is useless in clinical practice.[125] The short-term gains in student learning mean long-term sacrifices for the field. This sacrifice has been made all too often.

The best way to deal with the terminological problem is to take a comprehensive approach from the start. If we set the number of terms to be translated higher than required by the current state-of-the art, we are more likely to achieve an accurate and consistent naming system. For example, the formula nomenclature used in some English texts identifies formulas by the agents they contain.[126] This is not done in Chinese and the method breaks down when the scope expands. The clearest way to name formulas is to translate the name they were given by those who devised them.

Translators' decisions concerning the scope of the list of technical terms, drugs, and formulas, and the clinical level of texts to translate for an English-speaking readership, all have some effect on how people in the West view Chinese medicine. While some degree of simplification is necessary in the early stages of transmission, it is not clear that acupuncture and Chinese medicine can be clinically viable in the simplified forms now offered to Western readers. Until we acquire greater experience in our own societies, we must assume that Chinese medicine will be as complex in English as it is in Chinese if its clinical utility is to be preserved. If this assumption is correct, the patch-work method of translation will have to be replaced by a holistic approach.

In sum

The medicine of systematic, holistic, qualitative correspondences is based on repeatable naked sense observations shared by a community of practitioners who speak a common technical language. Although these observations were not traditionally tested by criteria that are as objective as those applied by Western medicine, they have an empirical validity proven over time. Chinese medicine deals in commonly agreed concepts that are based on highly trained naked sense observation, and expressed in a relatively standardized language. Its literature can be translated according to principles broadly recognized as necessary for preserving accuracy in technical translations. The principles of accurate, consistent, comprehensive, and transparent translation apply to Chinese medicine as much as they apply to any other discipline. In fact, because Chinese medicine is a discipline that relies on qualitative information, it is more dependent on accurate translation than are Western sciences that rely on quantification and more objective criteria.

The need for rigor in translation cannot be avoided by adopting biomedical or quasi-scientific vocabularies. Because Chinese medicine is so heavily reliant on qualitative ideas, translation into terms with quantitative, material, and biomedical definitions results in the destruction of relationships essential to Chinese clinical logic. Translation into other terms with which a modern readership is already comfortable is equally dangerous because Chinese medicine is not a product of the same culture or approach to knowledge.

In a medicine based on relationships, correspondences, and

associations, consistency of translation is the most important goal. Without rigorous consistency the unity of Chinese medicine and its overall integrity will be lost. ``Free,`` translation into ``plain`` English destroys the fabric of associations on which clinical practice is based, and reduces the broad, cultural validation of Chinese experience to the opinions of individuals. In the absence of terms that can carry the meaning in all contexts we must coin a new term that fits.

A medicine based on the information produced by the naked senses does give the impression that a vernacular language is sufficient to describe the concepts. However, because the clinical practice of Chinese medicine requires the development of an ability to recognize fine distinctions through skilled observation, the words that label those distinctions must be preserved in the language by which students are trained. Although Chinese medicine is partly expressed in terms that coincide with lay language, the technicality of lay words in the medical context cannot be ignored. Accuracy in the translation of concepts requires extra care in discerning the technical meanings implicit in ordinary Chinese expression.

A holistic medicine requires a holistic approach to translation. We need a coherent terminology that facilitates the discussion of Chinese medicine in its full scope and detail.

In short, all the standards of professional technical translation apply to Chinese medicine. However, these standards must be more rigorously applied because it is necessary to preserve Chinese medical meanings that do not fit the Western conceptual frame. Without adherence to the principle of noting definitions for terms, referencing them to the original Chinese, and including them in glossaries that enable peer review, Chinese medicine will be unable to advance in the West.

As Chinese medicine grows and matures to take a place in the professional community, it will be subject to closer scrutiny and regulation. Those responsible for curriculum approval and licensing, for insurance reimbursement, and for judging Chinese practitioners' clinical documentation in courts of law, will examine in detail the field's statements concerning clinical competence. Chinese medicine, like all practices with economic and legal consequences, will require a precise language to describe what it does. Failure to produce broadly-shared concept labels will have unfortunate consequences.

This glossary

Many aspects of Chinese medicine touch on the question of the language used to discuss the concepts of a profession. At this time we perceive an urgent need for Chinese medicine in the West to apply more rigorous standards of translation to meet the challenge of the future. This glossary is intended as a contribution to that effort.

This glossary is the product of applying a methodology to the translation of Chinese medical concepts. It enables peers unfamiliar with our terminology to assess our translation options. It enables students to cross-reference our terminology with that used by others, and thus build their knowledge of Chinese concepts.

As a computer database, this glossary has enabled us to track our own translation choices and to achieve a high degree of consistency in terms and in the forms of complex terms. The use of database technology has also enabled us to register changes in our terminology. For instance, when we decided to change kou3 yan3 wai4 xie2 from wryness of the eyes and mouth to deviation of the eyes and mouth, we were able to create reminders for ourselves and our readers so that cross-referencing was preserved. It is clearly impossible for any translator to instantly create a set of choices that meets his own standards or satisfies all readers. Thus, this glossary has been in creation for six years and has been continually refined. Computers have been our ``memory,' ' storing evolving terminological solutions during the production of over 2000 pages of technical literature.

Furthermore, this glossary is a statement of our terminological choices for peer review. It provides those who wish to use, or at least consider, our terminological choices the ability to do so conveniently. As such it completes the glossaries included in our previous works. Readers may be assured that in this glossary they have a comprehensive listing of Chinese medical terms that neither depends on biomedical terms for clinical detail nor ignores distinctions that Chinese practitioners consider clinically relevant.

In presenting this glossary we do not presume that our terminological choices are the only valid selections. Our concern is primarily with a method of achieving accuracy, not a particular set of words that result from that method. Different term selections are acceptable because subtle aspects of meaning can only be learned through the juxtaposition of different term choices. However, failure to reflect the concepts and distinctions of the original Chinese, failure to use terms consistently, and failure to relate terminological choices to the Chinese language are entirely unacceptable because these practices violate the integrity of Chinese medicine.

We hope that our work will help other writers to see that adopting a more rigorous translation approach does not necessarily result in a terminology that is unwieldy or unsightly, and that recourse to unusual English words need be no more than minimal. We are nevertheless aware that the set of terms here presented requires greater effort on the part of students and teachers. In an evolving profession, the imposition of a more rigorous standard of translation is a particular burden for professionals who have already entered the field. We hope that they will share our confidence that

overcoming these difficulties will reap greater rewards for the community at large.

Peer review

Prior to the publication of *Fundamentals of Chinese Medicine* in 1985, we sent a list of the terms used in that book to nearly fifty translators, teachers, and clinical experts. After publication of that text, we asked readers for their opinions. We would like to reply to those comments and indicate how we have responded.

Non-capitalization

The most frequent complaint about the terms list and *Fundamentals of Chinese Medicine* terminology was that we had rejected the convention of capitalizing Chinese concepts. Capitalization is not a universal convention and is not applied in English texts produced in China. Neither is this convention applied consistently by those who use it. For example, *Foundations of Chinese Medicine* applies different criteria than those adopted for *Acupuncture: a Comprehensive Text*. Neither is this convention consistent within texts. Maciocia, for example, uses capital letters for pulses and tongue colors inconsistently, showing that the criteria for determining what is a ``special'' Chinese term are not particularly clear. As is seen in *Formulas and Strategies*, this practice can now only barely be called a convention at all.

In a Chinese medical text comparable to those used in China, the frequency of ``special'' Chinese medical concepts is so great that the use of capitals in translation would be visually unacceptable and meaningless. When applied strictly to all words having a technical meaning in Chinese medicine, nearly every word on the page would be capitalized. We therefore continue to reject this criticism. Determining what is a technical term and how readers should be informed of its meaning is a matter for the principles discussed in the preceding section of this introduction. Graphic convention cannot replace linguistic research.

Desire for simpler language

We received some suggestions from a number of quarters for the use of simpler English terms to prevent the impression that Chinese medical concepts are more precise than they are, and to make for lighter reading. As a result of these comments, we completely revised all the terms in our database with a view to finding simpler, more self-explanatory equivalents. We have also incorporated into our translation policy the principle that, where two terms are equally accurate renderings of a concept, we will choose the simpler word. We would note that where readers discover an unusual or newly-coined term, they should take it as a signal that that the concept it labels is an idea that has no exact equivalent in everyday English. Such a term is ultimately intended to make things clear for the reader, although at the expense of learning a new word.

Conversations with respondents after the publication of FCM showed that their judgments were largely not based on the terminology, but on the presentation of Chinese medicine found in that text. FCM is a direct, unexpurgated and unsimplified translation of the Zhong1 Yi1 Xue2 Ji1 Chu3 by the Beijing, Nanjing, and Shanghai colleges of Chinese medicine. In that text, readers see Chinese medicine as it is currently taught to Chinese medical students. It is clear that Fundamentals of Chinese Medicine requires didactic support, or considerable work with dictionaries, when presented to students who have neither an Asian clinical experience nor the background expected of students in Chinese medical schools. However, it is the Western student's unfamiliarity with Chinese intellectual process that is the root of this difficulty. For Chinese students the text is a simple discourse on the subject.

Objections to changes in basic terms

Practitioner reviewers suggested that we preserve those fixed terms that have become familiar through prior use. Where this suggestion could be accepted without compromise of the conceptual distinctions that give clinical power to Chinese medicine, we have made the changes requested. However, in many cases we have kept to our original choices in the interests of preserving the integrity of Chinese medical concepts. Because many of the concepts central to Chinese medicine were the first to acquire an English use, it is exactly those terms for which a variety of views, as expressed by a variety of English words, are the most important. Since this concerns only some twenty or thirty terms that are given technical definitions in current English texts, this approach should not cause readers too much trouble. We hope that the arguments that we have put forward for a broad range of terms will convince the reader that our choices are well substantiated, if not superior to those selected by other writers.

Changes

Since the publication of the Fundamentals of Chinese Medicine, our continuing research into the meanings of terms and the acceptability of term choices to readers have led to a number of term changes.

Most of the term changes have been prompted by a desire for simplicity, both to make life easier for the reader, and to more accurately reflect the original Chinese concepts. Eructation has been changed to belching, endogenous changed to internal, vulpine to fox-like, borborygmus to rumbling intestines, struma to goiter, ocular rubor to red eyes, and tympany to drum for this reason. Many of these changes were suggestions by our readers.

Some changes have been made to correct mistakes. For example, balloon head scourge has been changed to massive head scourge, because our original choice suggested an analogy that

the Chinese did not and could not have made when the term was coined (balloons, at least in the modern sense of the word, did not exist prior to the modern era). We changed cottage cheese tongue fur to beancurd (tofu) tongue fur for the same reasons (most Chinese still do not know what cottage cheese is).

Some changes were made because others offered a more precise term. Diabetic disease was changed when we saw that Bensky had used wasting thirst. Similarly we changed plum-stone globus (modelled after globus hystericus) to plum-pit qi, when others used this much more precise and attractive term.

Some unclear vernacular terms were changed. We changed our equivalent of wei4 tong4 from stomachache to stomach pain because stomachache can (at least for some speakers) loosely convey an idea of abdominal pain not intended by the Chinese. Backache was changed to back pain because it is often used in the specific sense of low back pain (lumbar pain), while we had used it as the equivalent of bei4 tong4, pain in the upper part of the back. The reasons for these changes are explained in detail earlier in this introduction.

Endnotes

Abbreviations used in the text and Endnotes

ACT: O'Connor, John, and Bensky, Dan, *Acupuncture: A Comprehensive Text*, Eastland Press, Chicago, IL, 1981.

Approaches: Unschuld, Paul U. (ed.), *Approaches to Traditional Chinese Medical Literature*, Kluwer Academic Publishers, Dordrecht, Netherlands, 1989.

CA&M: Cheng, Xinnong (chief editor), *Chinese Acupuncture and Moxibustion*, Foreign Languages Press, Peking, 1987.

CDT: Manaka, Yoshio, Itaya, Kazuko, and Birch, Stephen, *Chasing the Dragon's Tail*, unpublished manuscript.

CUCHF: Hong-Yen Hsu⁵ and Chau-Shin Hsu⁵, *Commonly Used Chinese Herb Formulas With Illustrations*, Oriental Healing Arts Institute, Long Beach, CA, 1980.

Essentials: Beijing, Shanghai, and Nanjing Colleges of Traditional Chinese Medicine and Acupuncture, Institute of the Academy of Traditional Chinese Medicine, *Essentials of Chinese Acupuncture*, Foreign Languages Press, Beijing, 1980.

FCA: Ellis, Wiseman, Boss, *Fundamentals of Chinese Acupuncture*, Paradigm Publications, Brookline, MA, 1988.

FCM: Wiseman, Ellis, and Zmiewski, *Fundamentals of Chinese Medicine*, Paradigm Publications, Brookline, MA, 1985.

Formulas and Strategies: Bensky, Dan, and Barolet, Randall, *Chinese Herbal Medicine: Formulas and Strategies*, Eastland

Press, Seattle, WA, 1990.

FT: Unschuld, Paul U., *Forgotten Traditions of Ancient Chinese Medicine*, Paradigm Publications, Brookline, MA, 1990.

Foundations: Maciocia, Giovanni, *Foundations of Chinese Medicine*, Churchill Livingstone, Edinburgh, UK, 1989.

HOI: Unschuld, Paul U., *Medicine in China: A History of Ideas*, University of California Press, Berkeley, CA, 1985.

Nan-Ching: Unschuld, Paul U., *Nan-Ching: The Classic of Difficult Issues*, University of California Press, Berkeley, CA, 1986.

T&P: Requena, Yves, *Terrains and Pathology in Acupuncture (Volume One: Correlations with Diathetic Medicine)*, Paradigm Publications, Brookline, MA, 1986.

TMICC: Sivin, Nathan (gen. editor), *Traditional Medicine in Contemporary China*, University of Michigan, Ann Arbor, MI, 1987.

Editor's Notes for the OrMed file edition:

*1 This was written in 1990, fuller glossaries have begun to appear.

*2 This was written prior to the Council of Oriental Medical Publishers system of Stylebooks. Materials related to a Stylebook would not necessarily need to include characters in each text.

Original Notes

[1] Unschuld, FT, Paradigm Publications, 1990, p. 1. Sivin, in TMICC, (1987), p. 16, puts the figure at roughly 10,000.

[2] Standard book trade sources show far fewer. Redwing Book Company's commercial catalog lists approximately this number.

[3] Unschuld, FT, p. 1. Sivin, TMICC, introduction.

[4] The development of Chinese medicine in the twentieth century is discussed by Paul Unschuld in HOI, (1985), pp. 249-262, and by Nathan Sivin TMICC, (1987), pp. 60-30.

[5] Unschuld, HOI, p. 252. Sivin, TMICC, p. 17-18.

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[7] XXXX

[8] Sivin, TMICC, p. 23.

[9] Sivin, TMICC, p. 27.

[10] See, for example, James F. Crow, ``Genetics in Postwar China,' ' in Science and Medicine in Twentieth-Century China: Research and Education, University of Michigan Center for Chinese Studies, Ann Arbor, 1988, pp. 167-168.

[11] Unschuld, HOI, p. 262.

[12] Zhong1 Guo2 Zhen1 Jiu3 Xue2 Gai4 Yao4, available in English as Essentials of Chinese Acupuncture, page 21.

[13] Sivin, TMICC, p. 113, discusses the new way in which jaundice is explained.

[14] What is and what is not, for example, clinically valid is often determined by the ``philosophy' ' of the translator, rather than by historical or scientific research: See, ACT, Bensky and O'Connor, p. 8.

[15] For example, many diseases and symptoms are not found in English texts, e.g., XXXXXXXX jin1 gu3 teng2 tong4, sinew and bone pain; XXX]XXXX gu3 zheng1 chao2 re4, steaming bone tidal fever. The explanation of such symptoms, and why they are so labeled, unveils certain ``unscientific' ' aspects of Chinese medicine that can be avoided by translation into Western medical equivalents. Coinage of new terms also masks difficult aspects of the original Chinese concepts and simplifies texts by eliminating footnoting and glossing. For example, child fright wind is often translated as infantile convulsions.

[16] Unschuld, in Traditional Chinese Medicine: Some Historical and Epistemological Reflections, Soc. Sci. Med. Vol 24, states, ``... emphasis appears to have been placed on an early application of Chinese medicine rather than on long-term efforts to understand the historical, cultural, and conceptual background of acupuncture and other Chinese modes of therapy.' ' Nathan Sivin echoes the same thoughts on page 31 of TMICC.

[17] Again in Traditional Chinese Medicine: Some Historical and Epistemological Reflections: ``... the cognitive aesthetics of European culture and Western science have influenced the selection of specific concepts from a heterogeneous pool of traditional Chinese conceptual systems of health care by Western authors in recent years.' '

[18] The Koreans and Japanese, who adopted the Chinese characters to represent technical ideas, avoided the problems of translation that we face in the West, and provide no useful precedent in the translation of this discipline.

[19] Approaches to Traditional Chinese Medical Literature, (Paul U. Unschuld, ed.) is a unique compilation of papers dealing largely with the problems of Chinese medical translation. The authors, researching various aspects of Chinese medicine - philological, historical, sociological, pharmacological, dietary - all agree that there is a translation problem to be addressed.

[20] Ou Ming, executive editor of Chinese-English Glossary of Common Terms in Traditional Chinese Medicine, Joint Publishing Co., Hongkong, 1982, and author of Chinese-English Manual of Commonly-Used Prescriptions in Traditional Chinese Medicine, Joint Publishing Co., 1989, is a notable exception.

[21] Sivin, TMICC, p. xxv.

[22] These ideas are fundamental themes to HOI. Special attention is paid to ancestors and demons as causes of disease in chapters 1, 2, and 8.

[23] This mistaken belief is discussed by Unschuld in Traditional Chinese Medicine: Some Historical and Epistemological Reflections, quoting T.J. Kaptchuk (The Web That Has No Weaver), and Manfred Porkert (Die Klinische Chinesische Pharmakologie) for their part in fostering it.

[24] Unschuld, HOI, pp. 78 and 83; Nan-Ching, p. 416 (42nd Difficult Issue); also Matsumoto, Kiiko, and Birch, Stephen, Hara Diagnosis: Reflections on the Sea, Paradigm Publications, Brookline, MA, 1988, pp. 133-135.

[25] Unschuld, HOI, p. 79.

[26] Here we are talking of stomach qi as equivalent to what in modern terms we express as ``stomach function.'' We are not referring to the qi of the stomach channel, nor to stomach qi as an aspect of the pulse.

[27] In this paragraph we speculate about the origins of acupuncture, not about its originators. Unschuld, in HOI, p. 97, points out that the idea of acupuncture and theories about it may have come from India. He discusses the origins of acupuncture from page 92 to page 98.

[28] Li Dingzhong, in Jing Luo Phenomena, the Visible Manifestation of the Meridians and Collaterals in Skin Diseases, Yukonsha Publishing, Kyoto, Japan, 1984, documents visible skin conditions that could also have stimulated this recognition.

[29] The notion of wind may not only help us to understand the concept of qi by analogy but may partially explain how the concept of qi in medicine actually arose. See ``Terminological Problems Encountered and Experiences Gained in the Process of Editing a Commentated Nan-Ching Edition,'' Approaches, p. 105.

[30] Note that these are the same phenomena by which disorders are observed and labeled.

[31] XXX This term, as well as the other technical terms used in the context of this discussion, may be referenced to the Chinese and Pinyin in the accompanying glossary. When terms are discussed as terms, the characters are also included in the Endnotes.

[32] Qi being understood in this context as breath or respiration, and qi in the body.

[33] These are simple observations for which no medical knowledge is required; in fact, they are more immediate observations to an agrarian population living at subsistence level poverty than they are to us.

[34] Even today in China, as much as 60% of the active population is involved in agriculture, animal husbandry, and fisheries, as compared with 2% of the total population of the United States living on farms. In industrialized society, technology enables sufficient food to be produced by so few people that the land-working aspect of life makes little mark on the attitudes of society at large.

[35] It is not surprising that there should be a clearly observable analogy between the earth and spleen-stomach since they symbolize processes that are repeated again and again in ecological cycles.

[36] These are probably of little help since the function of the spleen is not fully understood in Western medicine.

[37] Rochat de la Vallee, ``Obstacles to Translating Classical Chinese Medical Texts into Western Languages,''
Approaches, p. 68.

[38] It may be a mere coincidence that fear (amongst other things) triggers the glands located on top of the kidney to release adrenalin, which increases blood pressure and cardiac output (i.e., gives us extra power in life-and-death situations). Other organ functions determined by Western analysis also match functions ascribed by systematic correspondence. For example, as Requena notes, the protein synthesis that occurs in the liver may be directly related to edema and serous effusions such as ascites due to a resulting drop in osmotic pressure (T&P p. 189). Both the Eastern and Western method base conclusions on observation of the same human body. That there is some coincidence should be no surprise. However, in Chinese thought it was the qualitative relationship that mattered.

[39] Lao Tsu, Tao Te Ching, Chapter 8, translated by Gia-Fu Feng and Jane English, Vintage Books, 1989.

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[41] XX

[42] XXXX

[43] XXX.

[44] X}XXX

[45] Like the orbs of function of which Porkert speaks. See *The Theoretical Foundations of Chinese Medicine*, Chapter 3.

[46] We are here concerned only with generalities. The lung's classification as a yin organ, for example, is not as clear as, say, the heart or liver.

[47] Fire and water are the most yang and yin of the five phases.

[48] XXXXX

[49] Manaka, Yoshio, and Itaya, Kazuko, ``Acupuncture as Intervention in the Biological Information System (Meridian Treatment and the X-Signal),'' *Collected Essays of Yoshio Manaka (Manaka Yoshio Ronbunsho)*, 15th Anniversary Issue of the Shinkyu Topology Gakkai, Kyoto, 1988, pp. 132-146.

[50] Unschuld, *HOI*, p. 72.

[51] Maciocia, *Foundations*, p. 39.

[52] This seems to be a foregone conclusion in *Fundamentals*, p. 18. See also Ted Kaptchuk's *The Web That Has No Weaver*, Congdon & Weed, 1983, Appendix H.

[53] Manaka et al., *CDT*, Chapter 4.

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[58] XXX

[59] Maciocia, *Foundations*, p. 136.

[60] XXX

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[62] This is a general principle of translation also emphasized by Constantin Milsky in a paper entitled ``In Search of a Term Translation Strategy for Chinese Medical Classics,'' *Approaches*, page 77.

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[67] XXXX

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[70] The term fan² is glossed in Fundamentals of Chinese Medicine and Formulas and Strategies. In other clinical manuals, the term is translated inconsistently with no single rendering and the meaning of the term is not discussed.

[71] XXX

[72] The term optic atrophy is used notably in CA&M.

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[74] XXXXXXXX

[75] XXX

[76] XX

[77] Xie Guan, Zhong¹ Guo² Yi¹ Xue² Da⁴ Ci² Dian³, Taiwan Commercial Publishing, 11th edition, Taipei, 1979.

[78] As for example in The Chinese-English Medical Dictionary.

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[80] XXXX

[81] XX

[82] Xin Bian Zhong¹ Yao⁴ Da⁴ Ci² Dian³ (Revised Comprehensive Dictionary of Chinese Medicines) Xin Wen Feng Publishing, Taipei, 1985.

[83] Bauer, ``Chinese Studies and the Issue of Fachprosa Research,' ' Approaches, p. 4.

[84] We found the term in Taber's Cyclopedic Medical Dictionary, 1965 edition, but not in Dorland's Illustrated Medical Dictionary, 26th edition, 1981.

[85] XX

[86] Ellis et al. FCA, p. 318.

[87] GB-31 is located seven cun above the transverse popliteal crease on the lateral aspect of the thigh. The muscular branches of the femoral artery and vein and the cutaneous and muscular branches of the femoral nerve are located here. Ellis et. al., FCA, p. 318.

[88] XXXX

[89] The character XX jil goes beyond the scope of the present discussion; jil is synonymous with rou4, but in some contexts has the meaning of skin.

[90] XX

[91] XXX

[92] Sivin, TMICC, page 47.

[93] XXX

[94] XXX

[95] Unschuld, ``Terminological Problems Encountered and Experiences Gained in the Process of Editing a Commentated Nan-Ching Edition,`` Approaches, p. 105.

[96] The term energetics is notably used by Mark Seem, in *Acupuncture Energetics* and in *Bodymind Energetics*, Thorsons, 1987.

[97] Fratkin, Jake Paul, *Chinese Classics: Popular Chinese Herbal Formulas*. Shya Publications, 1990. Note that while Mark Seem attempts to explain his use of the term, Fratkin does not.

[98] In Chinese, indications are invariably placed under the heading XX zhu3 zhi4, which literally means ``mainly treats,`` which is as direct as the English term indications.

[99] Seem, Mark, and Kaplan, Joan, *Bodymind Energetics: Toward a Dynamic Model of Health*, Thorsons Publishers, 1987.

[100] XXX

[101] *Random House Dictionary of the English Language*, 2nd Edition, Unabridged, Random House, 1987.

[102] Unschuld, HOI, pp. 81 and 82.

[103] XXXX

[104] XX

[105] XX

[106] XXX

[107] XXX

[108] XXXX

[109] In making these remarks, we are aware that the use of insufficiency and vacuity is determined to some extent by a purely linguistic preference for two-character or four-

character phrases, e.g., XXXXXXXX fei4 jin1 bu4 zu2 (insufficiency of pulmonary liquid), and XXX fei4 xul (lung vacuity). However, the linguistic reasons are not the only factors determining usage.

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[111] XXXXXXXXXX

[112] X

[113] X{XX

[114] Ju5rgen Kovacs draws attention to the misleading nature of familiar renderings in ``Linguistic Reflections on the Translation of Chinese Medical Texts,' ' in Approaches, p. 92.

[115] X

[116] Lade, Arnie, Acupuncture Points, Images and Functions, Eastland Press, Seattle, WA, 1989, p. 3.

[117] Disinhibit is a back formation of disinhibition.

[118] XX

[119] XXXX

[120] XXX

[121] XXXXXXXXXX

[122] XX

[123] X

[124] Maciocia, Foundations, p. xiii and xiv.

[125] Inadequate distinctions such as between cinnamon twig and cinnamon bark can be seen in CUCHF. The authors, whose book is meant to explain the use of their own ready-made formulas, may have simplified nomenclature for commercial rather than linguistic reasons.

[126] Hsu5, CUCHF