SCIENCE, POLITICS, AND THE MAKING OF "TCM"

CHINESE MEDICINE IN CRISIS

by Heiner Fruehauf

"In recent years, the unique characteristics

of Chinese medicine, its advantages over

Western medicine, and its standards of

academic excellence have not been

developed according to the wishes of the

people, but have rather been tossed into a

state of severe crisis and chaotic actions.

Underneath the bright and cheap glitter at

the surface, the essence and the

characteristics of Chinese medicine are

being metamorphosed and annihilated at

a most perturbing rate. The primary

expression of this crisis is the Westernisation

of all guiding principles and methodologies

of Chinese medicine."

This article¹ is based on the conviction that the traditional art of Oriental medicine is dying - both in mainland China, home of the mother trunk of the field, and, consequently overseas where branches of the tree are trying to grow. It

may be an anachronistic piece, written at a time when TCM administrators around the world are celebrating major advances in the field, such as increasing numbers of students, practitioners, patients, colleges, universities and hospitals, which all appear to reflect a booming state of Oriental medicine. But if we truly respect our tradition as a living organism and listen intently to the deeper layers of its pulse, it becomes evident that the original vitality of the system is expiring, although its true condition may be obscured by a steroidal glow on the surface.

The following is primarily an epitomised narrative of the development of "TCM," the medical system that has monopolised the practice of Oriental medicine in mainland China, and that has come to

serve as the main mould for the budding profession of Oriental medicine around the globe. It exposes a system that has been conditioned by a distinctly political agenda, and reveals its logo "TCM" (Traditional Chinese Medicine) as a grave misnomer - designating a medicine that is not at all aiming to preserve the traditional characteristics of Chinese medicine, but on the contrary, to expurgate, reform, and control the classical and folkloric texture of the traditional record in the name of progress. Between the lines of this argument resides the warning that the progressive removal of the unique foundations of Chinese medicine is far more than just a philosophical issue. It affects the heart of our medicine itself, namely the nature of the clinical encounter and the quality and the results of therapy. It greatly diminishes, moreover, the unique edge

that the traditional science of Chinese medicine has over allopathic medicine and its various offshoots.

Mine is thus an urgent call for a re-evaluation of the direction and the fundamental convictions that we set for ourselves as individual Oriental medicine practitioners.

Otherwise we may become thoroughly entrapped in the spiritless mechanisms of state agencies, insurance companies, and most of all, our modern mind that has been conditioned to fancy the unambiguous, standardised, packaged approach. It is admittedly an opinionated warning, but a sincere and, I believe, reasonably informed one. From both my own perspective and that of my most respected teachers in China (including high ranking administrators within the TCM system), modern TCM in East and West is about to reach the "fall height" of the classical tragedy - featuring the vainglorious protagonist luxuriating at lofty heights (i.e. mainstream acceptance and doctoral level ratification), while blindly cutting into the life supply

Lü Bingkui, former director of the PRC's Ministry of TCM Administration, July 1991

blindly cuttin

First Impact: The Modernisation of China During the Late 19th and Early 20th Century

line without having a clue of the consequences.

The end of dynastic China marked a peak season for Chinese medicine. Although nearly every other aspect of society was in a state of collapse and disarray by the middle of the 19th century, the culture of traditional medicine was alive with the multihued color and texture of a 2,500 year-old art. There was the stimulating discourse between the newly founded fever school and the school of the neo-classicists, there were numerous scholar physicians publishing influential discourses, and there was the arcane realm of esoteric discipleship, alchemical experimentation, and the kaleidoscopic facets of folk wisdom that have always

characterised the sensuous heart of the profession.

The advent of Western medicine presented the traditional healing tradition with its first major challenge from which it never completely recovered. It lost its rank as the one and only "medicine" (yixue) and became "Chinese medicine" (zhongyi), defined in contrast to "Western medicine" (xiyi). Immediately, however, there developed an early brand of progressive physicians who did not lament this situation, but attempted to integrate some of the paraphernalia of modern medicine into the traditional system. These pioneers are now collectively referred to as the Chinese-Western Integration School (zhong xi huitong pai). Main representatives are Wang Qingren (1768-1831), Tang Zonghai (1851-1908), Zhang Xichun (1860-1933), and Zhang Shouyi (1873-1934). It is important to note that these initial "integrators," often cited by TCM administrators as early visionaries of their own system of integrated medicine, were not proponents of the hierarchical superiority of Western medicine, but rather tried to embody the traditional ideal of the broadly educated master physician. It was their erudite skills in the art, philosophy and science of the traditional thought process that allowed them to break new ground by, for instance, categorising Western drugs in energetic terms, or by relating the Triple Warmer to certain anatomical tissues described by Western medicine. Although it was their declared goal to incorporate some of the useful mechanics (yong) of Western medicine into the traditional mother body (ti) of Chinese medicine, their parameters remained clearly "traditional at the core" - as the programmatic title of Zhang Xichun's collected writings announces, Chinese at Heart But Western Where Appropriate: Essays Investigating An Integrated Form of Medicine (Yixue Zhong Zhong Can Xi Lu, 1933).

This day in which curious Chinese physicians could explore the phenomenon of Western medicine from an equal footing was soon eclipsed by a period characterised by the hierarchical structure which still defines the relationship between modern medicine and any traditional system of life science today. During the first half of the 20th century, a variety of events politicised Chinese medicine as the despicable symbol of everything old and backward. It became a pawn that reformers from all political camps sought to abolish. When this endeavor failed due to vehement public protest, the new stewards of state settled for forcing the unruly gargoyle of Chinese medicine into a controlled existence that was subject not only to a rigorous purge of diagnostic methods and therapeutic modalities, but - most damaging to its integrity as a system in its own right - the creeping replacement of its essential standards with the "correct" parameters of modern science.

The political voice of Sun Yat-sen, the leader of the Republican revolution that toppled the dynastic system in 1911, had been shaped against the backdrop of his Western science education, and always rumbled with the deep suspicions that its master harboured against the old system of medicine. Later on, Kuomintang public health officials took

this personal bias into the legislative arena and presented the radical proposal "A Case for the Abolishment of Old Medicine to Thoroughly Eliminate Public Health Obstacles" (feizhi jiuyi yi saochu yishi weisheng zhi zhangai an)². Authored by Yu Ai and Wang Qizhang, the proposition aggressively infers that "the theories of yin and yang, the five elemental phases, the six atmospheric influences, the zang-fu systems, and the acupuncture channels are all illusions that have no basis in reality" and warns that "old medicine is still conning the people with its charlatan, shamanic, and geomancing ways"3. The proposal, containing three major clauses (severely restrict the practice of Chinese medicine; prohibit Chinese medicine advertisements; bar the establishment of Chinese medicine schools), passed the first legislative session of the Central Ministry of Public Health on February 26, 19294. Although the proposition was not implemented due to thousands of protesting doctors and patients who took their passionate disapproval to the streets, the production of anti-traditional sentiment in an official document had a tremendous impact on the general mood of Chinese medicine practice during the 1930s and 1940s.

Around the same time, the outlawed "communist bandit" (gongfei) Mao Zedong promulgated thoughts that were very similar to those of his nationalist adversaries. In 1942 he instructed his guerilla government to uproot all shamanic beliefs and superstitions in the Yan'an area and establish model public health villages⁵. Around the same time, he wrote that "old doctors, circus entertainers, snake oil salesmen, and street hawkers are all of the same sort"6. This brief line would have a truly devastating impact twentyfive years later when Mao's works became the one and only source for the country's definition of political truth. It was quoted in millions of copies of red "Mao Bibles" (Mao Zhuxi yulu), serving as the Red Guard's main license for the uncompromising persecution of the rich culture of traditional medicine and its unique modes of practice, education, and theoretical discourse.

In Servitude at Mao's Court: Chinese Communism and the Conception of TCM, 1953-1976

The years 1953-59 witnessed what appears like a remarkable reversal of Mao's earlier views on Chinese medicine. Having graduated from the task of creating national respect for the "communist bandit" who now donned the emperor's robes, he began to gradually advance his private ambition of asserting leadership over the legion of budding communist countries around the world. This objective required the conception of a socialist model that distinguished itself from the Russian paradigm of Marxist-Leninism by incorporating the regional attributes of third world countries. Chinese medicine fit well into this general scheme, since it embodied a medicine that was "self-reliant," "among the people," "native," and "patriotic" - all slogans that had been used to promote Mao's unique brand of communism. Mao sensed, furthermore, that China was beginning to

become overly dependent on the influx of Soviet goods and expertise, especially in the areas of modern medical equipment and pharmaceutics. The catastrophic famines and the far-reaching collapse of infrastructure that followed the Russian walkout in 1961 were to dramatically confirm his premonitions.

It was for primarily political reasons, therefore, that Mao began to publicly embrace Chinese medicine during the mid-1950s. This was the time when he issued the famous calligraphy that graces the front pages of so many TCM publications: "zhongguo yiyao xue shi yige weida baoku, yingdang nuli fajue jiayi tigao" (Chinese medicine is a grand cache of knowledge that we should actively bring to light and further evolve). In the wake of this apparently new direction, two ministers of health, Wang Bing and He Cheng, had to resign due to their exclusive loyalty to the Western medical system that had made them trustworthy candidates for the position in the first place. In 1956 premier Zhou Enlai signed papers that authorised the immediate establishment of the first four colleges of Chinese medicine, namely Chengdu College of TCM, Beijing College of TCM, Shanghai College of TCM and Guangzhou College of TCM, followed by Nanjing College of TCM the following year. At the same time, a group that was to become the influential voice of the first generation of institutional TCM teachers all of them still trained under the pre-institutional model of discipleship education - formed in Beijing. They are generally referred to as the "five elders" (wu lao), including Qin Bowei from Shanghai, Cheng Shenwu from Beijing, and Ren Yingqiu, Li Chongren and Yu Daoji from Sichuan.

As if to set a good example for the new course that he had outlined, Mao publicly ingested the traditional remedy Yin Qiao San (Lonicera and Forsythia Powder) when he fell ill during the historic announcement of the Great Leap Forward at the Chengdu Conference in 1957. He restrained his onetime prejudice against "snake oil salesmen" and allowed Li Shizhi and Peng Luxiang, both first generation elders of Chengdu College of TCM, to be present at his bedside for an entire night.

In 1958, the political motives of Mao's actions fully revealed themselves when he issued his decreeing vision about the concept of "Chinese-Western medicine integration" (zhong xi yi jiehe)7. The integration movement, in essence, mandated the establishment of "TCM" - a medical system which restrains the "wildness" and the "feudal elements" of the traditional art by taking it out of the hands of its lineage holders and assigning it to the control of modern science, one of the most trusted tools of marxistmaterialist ideology. Mao announced a nationwide search for "2,000 first rate Western medicine physicians who are to assist in the evolvement of Chinese medicine." Special "Seminars for the Study of Chinese Medicine by Western Medicine Physicians On Leave" (xiyi lizhi xuexi zhongyi ban) were established, administering bite-size pieces of a highly standardised extract of traditional knowledge over a period of 1-2 years. Qualifying participants were required to hold or exceed the "physician in chief" rank within the Western medical system. Of 2,000 doctors who initially entered into the program, only about 10% graduated. This low success rate may in part be due to the fact that the study of Chinese medicine, even in abridged form, involves the memorisation of specific detail which all participants, including the successful graduates, had previously been conditioned to condemn as the nefarious byproduct of a social system riddled with feudalist superstition. Nevertheless, these Western doctors who participated in the "traditional medicine reform" efforts of the years 1959-62 came to provide the main pool for TCM administrative positions in later years. Most top level TCM administrators of the 1980s and 1990s are, in fact, Western medicine graduates of the reform/integration seminars.

This situation is the primary reason for the woeful plight of Chinese medicine under the TCM system - traditional medicine in mainland China is managed by individuals who for the most part, and often openly, entertain deepseated suspicions of the field that they are supposed to represent. In a radical sense, the history of TCM can be described as the history of implementing anti-traditional sentiments into the general atmosphere of Chinese medicine education and practice. I personally know of very few TCM administrators who resort to traditional modalities when they become sick. TCM students and faculty, moreover, regularly take antibiotics when contracting a cold -"because it is more convenient and works faster and better." One of the shocking personal memories that I associate with this topic is a conversation with the grandson of Li Shizhi (the founding elder of Chengdu College of TCM who once prescribed Yinqiao San to Mao Zedong) - himself a TCM doctor, scholar, and administrator at the College which is generally regarded as the "most traditional" among TCM institutions in China - in which he expressed concern about my enthusiasm for traditional herbology. He flatly admonished me to curb my faith in the efficacy of Chinese medicine. Many of my more classically oriented teachers, therefore, cautiously asserted that Mao may have had good intentions at the time, but that the "integration" project marked the beginning of a process that ruined the true nature of traditional medicine.

On the surface, however, this course of events gave a boost to the status of Chinese medicine. The government had encouraged individuals with scientific expert status to immerse themselves in the subject of indigenous medicine and foster the betterment of the field. Furthermore, for the first time TCM departments were established in many city hospitals. The actual result, though, was the genesis of a situation in which the old, clinically experienced Chinese medicine practitioners were barred from participating in major league TCM. All of the doctors in charge were "Western doctors with Chinese knowledge" (xi xue zhong) experts who styled their diagnosis entirely in Western terms, but sporadically included some cookbook-style Chinese medicine modalities in their approach. Distinguished

"folk" physicians, unable to practice privately under the communist system, were accessible only in outpatient departments, or occasionally summoned for a second opinion. Many observers of this practice bitterly remark that if a remedy prescribed by one of these elders resulted in a cure, it was most likely that all the credit was given to the Western modalities - even though it was their ineffectiveness that had initiated the traditional consultation. Chinese medicine, after all, was not recognised anymore as a clinical science in its own right, and the traditional diagnostic approach of bianzheng (diagnosis by synthesis of pulse, tongue, and symptom profile) was progressively becoming eclipsed by the standardised procedure of bianbing (diagnosis by Western disease name).

In the aftermath of these events, the status of Western medicine became dramatically elevated with regard to institutionalised TCM education. Planned in 1961 and executed in 1962, all TCM colleges adopted a curriculum according to which incoming students first studied Western medicine for 2 years, then Chinese medicine for 2 years, and finally entered into an "integrated" clinical internship for one year. The five elders immediately realised that this educational setup was responsible for an increasing loss of respect for the fundamental principles of Chinese medicine, and composed a letter to the central government that summarised their concerns. Although their protest led to an abolishment of the new curriculum and ushered in a brief revival of classical values - spawning a college program that started out with three years of exclusive Chinese medicine training, including the reading and memorisation of all major classics in their entirety, as well as palpation of 10,000 pulses and inspection of 2,000 tongues - the exigencies of the political sphere were soon to interfere in a most severe manner again.

In 1966, Mao found himself locked in an internal power struggle and unleashed the "Great Cultural Revolution" to neutralise his antagonists. For ten years, all forms of higher education came to a screeching halt. In the field of Chinese medicine, only the entering class of 1963 was able to complete a TCM curriculum that for the first time truly deserved the label "traditional." Since it was the main rallying cry of the Cultural Revolution to eradicate every trace of feudalist influence, all of the old master practitioners of Chinese medicine, including the five elders, became subject to criticism, ridicule, and in some instances public thrashing. As many physicians frantically burned their stitch-bound volumes and other old-fashioned belongings to avoid persecution, and as others died from grief or physical abuse, much of the physical legacy of Chinese medicine perished irretrievably.

In this vacuum, Western medicine reasserted its defining influence on TCM, while itself having to adapt to a political environment that despised erudite learning of any kind. Already during the previous year, in a speech given to health care professionals in Beijing on June 26 1965, Mao had set the stage for the anti-intellectual direction of the new medicine to come: "Medical education needs to be

reformed - it is completely unnecessary to engage in so much studying. How many years of formal education, after all, did Hua Tuo have? And how many Li Shizhen? There is no need to restrict medical education to people with high school diplomas, middle school and elementary school pupils studying for three years will do. The real learning will happen during actual practice. If this type of lowly educated doctor is then sent to the countryside, he will always be able to do a better job than the charlatan shamans; and the peasants, moreover, will be able to afford such care. Studying is a stupid endeavor for a doctor"⁸.

During the years 1966-1971 therefore, no new students were admitted by any educational institution, including schools of Chinese medicine. In 1972, so-called Colleges for Workers, Peasants and Soldiers (gong nong bing xueyuan) were established, offering three year vocational programs under the maxim of "open door schooling." This meant that there were no entry exams; the admission of students was entirely based on their political status as well as the social background of their parents. Textbooks were filled with quotes from Mao Zedong's Collected Works. The doctors produced by this system received a very rudimentary training in both Chinese and Western modalities, and provided the human resource for the well-known Barefoot Doctor Movement (chijiao yisheng yundong). The barefoot doctors, naturally, were never introduced to the essential concept of differential diagnostics. Meanwhile, the generation of Chinese medicine elders was either dead or locked up as "bovine demons and snake-like goblins" (niugui sheshen) in so called "ox stalls" (niupeng). Of the five elders, only Ren Yingqiu was still alive. He was banished to Qinghai Province, China's equivalent of Siberia, and was allowed to bring only one cherished book, Li Shizhen's Outline of the Materia Medica (Bencao Gangmu).

In the Name of Progress: The Introduction of "Superior Methodology," "Scientific Standards" & "Research Axioms" During the 1980s and 1990s

Another blow to the integrity of the traditional system, or what was left of it, occurred during the period of 1980-85. At this time the concept of "Chinese medicine improvement by methodology research" (zhongyi fangfa lun yanjiu) was introduced. The political leaders of TCM colleges, i.e. the communist party secretaries who are generally more influential than the president, selected several fashionable theories of Western science and applied them to the domain of Chinese medicine - once again motivated by the habituated resolve to "further evolve" the field. These endeavors were generally characterised by the attempt to sanctify the "scientific character" of selected aspects of Chinese medicine, and consequently deny scientific validity (and the ensuing right to be preserved and transmitted) to other aspects. During the period in question, the theories elected for this purpose were cybernetics (kongzhi lun), system science (xitong lun), and information theory (xinxi lun).

The result of this "assistance" was the affirmation of the TCM system on theoretical grounds. The methodologists concluded that Chinese medicine classics such as the Yellow Emperor's Classic of Medicine (Huangdi Neijing) already contain evidence of these progressive theories in embryonic form, apparently recommending an affirmative stance toward the tradition of Chinese medicine. On the other hand, this position always implied that the classics were like dinosaurs - interesting to look at in a museum, but, in terms of their pragmatic value in a contemporary environment, vastly inferior to the eloquent treatises of information theory, cybernetics, and other domains of modern science. As a result, many TCM colleges actually established museums, and many publishers dared again to issue reprint editions of classical texts. The original regard for the classics as the primary source of clinical information, however, dwindled as the presence of original texts in the curriculum became minimised. Again, it was a situation where a group of individuals with no traditional medical background attempted to "reform" Chinese medicine - motivated by ideological rather than clinical considerations.

The 1990s, in the opinion of many of my more classically oriented teachers and myself, have seen the most severe erosion of traditional core values. I will cite the following reasons for this assessment:

- a. Due to market driven priorities, none of the numerous TCM journals make an effort anymore to cover the philosophical foundations of Chinese medicine. The government, furthermore, provides no money for the traditional category of textual research (which had been a possible area of specialisation for graduate students until 1988), and no graduate research projects are permissible that involve only Chinese medicine theory.
- b. The new market economy obliges TCM hospitals to be profitable. The subject of profitability is intimately tied to a standardised fee structure that is based on an official ranking system which, in turn, is defined by Western medicine values such as the quantity of modern diagnostic equipment and the number of available beds. The hospitals thus devote a tremendous amount of effort to the acquisition and application of paraphernalia that will boost both their quality ranking and their diagnostic income. As one TCM physician put it, "little money is to be made by just feeling the pulse." This tendency is echoed in private street clinics, where doctors are encouraged, even required, by the herbal pharmacies that employ them to prescribe large amounts of preferably expensive herbs to maximise profits.
- c. In 1994-95, the ministry of health published a host of official guidelines aimed at standardising the mandatory process of researching the effect of new patent remedies⁹. Along with the establishment of a Chinese FDA, it was decreed that the research into Chinese medicine patents must be conducted according to the

- standards of Western pharmaceutical research. Most consequentially, this meant that the traditional system of differential diagnosis (bianzheng) had to be completely replaced by allopathic diagnostics (bianbing). According to these guidelines, research on the constitutional multi-purpose remedy Four Frigid Extremities Powder (Sini San) for instance, must be conducted and marketed in the context of only one diagnostic category, i.e. "cholecystitis." Theoretical background research into the traditional rationale of a remedy is confined to 10% of the proposal, while disease oriented research has to account for 70%. Another point that mirrors the research protocol of Western medicine is the obligatory focus on laboratory animal research. This development has started to turn the broadly defined clinical science of Chinese medicine into a discipline that is dominated by the narrowly defined and, most importantly, completely disparate parameters of modern pharmacology. It finalises the process of "evolution by integration" that Mao had originally prescribed for Chinese medicine 40 years ago - a process that involves gutting the indigenous art of its spirit and essence, and subsequently appropriating its material hull (i.e. herbs and techniques) into the realm of a medicine that declares itself scientifically superior.
- d. A new class of graduate students is developing who can no longer diagnose in differential terms at all, but are completely steeped in the allopathic system of medical terminology and diagnosis. Virtually all of the doctoral theses presently produced in China fall into the field of Chinese-Western integration research, or laboratory animal research related to the ratification of new patent remedies. Integrated standards for students of Chinese and Western medicine, moreover, have produced the grotesque situation where Chinese medicine researchers are required to utilise unwarranted equipment such as electron microscopes to achieve doctoral level approbation. In addition to the conceptual crisis outlined in this paper, the bastion of Chinese TCM is thus also facing a grave financial crisis. Most institutions simply cannot keep up with the steeply rising cost of the very narrowly defined type of research that the system prescribes.
- e. Of an impressive sounding five years in the present bachelor curriculum, much is taken up by classes in foreign language, physical education, political studies, and computer training. By far the most extensive classes are dedicated to Western medicine contents such as anatomy, physiology, immunology, parasitology, and other topics that are unrelated to the diagnostic and therapeutic procedures of classical Chinese medicine. From both a quantitative and a qualitative perspective, therefore, it would not be entirely inappropriate to state in slightly dramatised terms that the Chinese medicine portion in the contemporary TCM curriculum has been reduced to the status of a peripheral supplement ap-

proximately 40% or less of the total amount of hours. This issue is compounded by the ongoing division of students into Western-style areas of specialisation, such as acupuncture or bone disorders. None of the specialty students, including acupuncture department graduates, are required anymore to familiarise themselves with the realm of original teachings, not even in the radically abridged form of classical quotations that still serve to bestow an air of legitimacy on most official TCM textbooks.

Perspectives On "TCM" and Classical Chinese Medicine - A Comparative Outlook

It has been the main purpose of this article to characterise the framework of "TCM," a system which presently is the standard model of Chinese medicine in mainland China, and which increasingly influences the practice of Oriental medicine in the West. By creating a record that makes "TCM" transparent as a historically and politically conditioned system that is fundamentally different from the multifaceted traditions that constitute traditional Chinese medicine, I have attempted to draw a base line that helps individual practitioners, schools and agencies to determine what their own position in this matter is. In this process, it is not my point to denounce the phenomenon of "TCM." The trademark standardisation procedures of "TCM" are perhaps the main reason that Chinese medicine is still alive and thriving today, after a prolonged period in which China and the rest of the modernising world was willing to forsake everything in exchange for the power of Western medicine. Its barefoot doctor approach, moreover, did save many lives when expert healthcare was not available in the Chinese countryside. It is my intention, however, to expose the common practice of advertising the education and clinical practice of "TCM" under traditional insignia that suggest the transmission and application of an ancient Eastern healthcare system that is based entirely on holistic principles.

The general discourse on Oriental medicine in the West appears to have reached the realm of the 10,000 details (i.e. "what points work best for diabetes," "how to treat headaches with Chinese herbs"), while leaving the basic parameters of its scientific approach unexplored. To help stimulate a broader discussion on Chinese medicine methodology, I have created a table that contrasts the characteristics of "TCM" with those of traditional Chinese medicine - here labeled "classical Chinese medicine" in order to distinguish it more clearly from its modern cousin - as I and my senior Chinese teachers describe it. This table is simply meant to be a starting point, a tool that may help Oriental medicine practitioners and institutions assess their mode of teaching and practice. It may be incomplete and, due to the nature of the black-and-white table format, overstate some of the differences that set the two systems apart (see

With regard to the positions outlined in this table, most of us will find that our own convictions and modes of practice follow propositions that can be found on both sides of the dividing line. In particular, it is my experience that Oriental medicine practitioners in the West often proclaim to embrace the principles stated on the left, while their modus operandi in terms of diagnosis and treatment is much more closely aligned with the attitudes outlined on the right much like Chinese officials used to aspire to the image of the Daoist philosopher-poet in their private life, while adhering to pragmatist Confucian values when acting in public. Others, after surveying this table, might find that although they were not aware of a "TCM issue" in the past, they certainly like the premises of "TCM" better than the mystifying conjectures of the classical path.

It is therefore not my goal to dignify the classical way(s) of Oriental medicine and malign "TCM," although it has become clear in the course of this essay where my own biases are. Neither do I suggest that any deviation from pre-20thth century ways of diagnosis and treatment automatically establishes the practice of "TCM." The use of modern equipment to measure electric resistance on acupuncture points, for instance, perfectly adheres to traditional zangxiang theory ("examine the surface to determine the hidden factors inside"). The traditionalist school of Japanese Kanpo medicine, on the other hand, with its unrelenting insistence on the prescription of unmodified *Shanghan Lun* formulas and its formulaic way of interpreting the *zheng* (symptom picture) concept, shares many aspects of standardised "TCM" as I have outlined it in this paper.

Due to the flexible and change-oriented nature of the truly traditional approach, therefore, the term "classical" does not mean to turn the clock back to the times of Zhang Zhongjing or Sun Simiao, but rather to utilise the unchangeable principles of the art and science of Chinese medicine to assess, appreciate, and potentially incorporate new information from all branches of knowledge.

Most of all, this article is yet another call for respecting the art of Oriental medicine as a science in its own right¹⁰. In my opinion, it is one of the most tragic problems of 20th century Oriental medicine that it feels compelled to scour for legitimacy by conducting "scientific" tests that conform to the parameters of Western medicine. To illustrate the absurdity that can spring from this situation, I would like to relate an incident that I witnessed at the teaching hospital of the Chengdu College of Traditional Chinese Medicine in 1990. A famous doctor at the hospital was widely known for prescribing a herbal remedy that appeared to be highly effective in bringing about the speedy and painless delivery of babies by first-time mothers. Expecting mothers sometimes came to the hospital from as far as fifty miles away to obtain a prescription. After two decades of consistently positive feedback, a local pharmaceutical company decided to produce his formula as a patent. Before "modernisation" had become an issue, the positive testimonies of hundreds of patients would have sufficed to get the project started, but now new codes demanded that direct action of the herbal solution on the uterus must first be verified in a

CLASSICAL CHINESE MEDICINE	"TCM"
Based on naturalist philosophy (Daoism)	Based on pragmatist philosophy (Confucianism, scientific materialism, communism)
Alchemical (synthetic) approach: scientific endeavor defined as acknowledgement and exploration of the complexity and multi-dimensionality of nature and the body	Analytical approach: scientific endeavor defined as elimination of complicating factors and unpredictable occurrences
 Based on traditional parameters of Daoist science (yin/yang, wuxing, bagua, wuyun liuqi, jing-qi-shen, etc.) Views medicine as a branch of the Daoist mother sciences (HuangLao, zhouyi, fengshui, etc.) Source oriented: reliance on tradition (experience) 	 Primarily based on parameters of modern science (virus, inflammation, blood pressure, etc.) Views medicine as a branch of modern science Branch oriented: reliance on progress (experiments)
Requires broad base of knowledge due to intimate relationship to other traditional arts and sciences	Technical and highly specialised trade
Body is treated as a microcosm that follows macrocosmic laws and is continually informed by macrocosmic influences (totality of cosmic/calendric/seasonal patterns created by conjunctions of sun, moon, and stars)	Body is treated as an independent entity
Based on experience of human "subject" in environment of geo- centric universe	Based on "objective" heliocentric world view
Based on dualistic cosmology of becoming (process oriented world view observing the continuous change of physical phenomena, symbolised by the changing pattern of the moon) Impartial view of reality as continuous interplay between heaven and earth, light and shadow, "demons" (gui: lunar influences) and "spirits" (shen: solar influences), birth and death, male and female, yin and yang Sexual" world view (life is product of ceaseless intercourse between heaven and earth; human beings are principally sexual beings)	Based on cosmology of being (concept of singular, meta-physical truth, symbolised by fixed position of the sun) Confucian/materialist method of dividing heavenly and earthly spheres and "rectifying the names" (zheng ming: convert the binary symbols of lunar mythology into the immutable and one-sided terminology of the solar perspective, and dignify an absolute position as "right/good/ correct") Monistic world view (human sphere is separate from heaven; human beings are principally individuals); astrology, sexuality and ecstasy taboo
 Communicates through symbols which contain and correlate multiple layers of meaning Preserves the lunar element of complexity and "obscuring" mystery that defies exacting definition (wuwei maxim: "do not define categorically") 	 Communicates through words and terms which refer to narrowly defined contents Demystifies and demythologises the traditional record by "illuminating" aspects of lunar ambivalence, and by creating "clear and simple" textbook definitions (youwei maxim: "define as firmly and precisely as possible")
Views body as field (traditional zang/xiang theory: zang/fu are primarily viewed as functional systems)	Views body as materiality (influence of modern anatomy: zang/fu are primarily viewed as structural organs)
Body - mind - spirit medicine	Body - (mind) medicine
Physician is intermediary to the sacred, cultivating the dual roles of the shaman (master of intuited knowledge) and the sage (master of scholarly knowledge), connecting above and below, inside and outside, energy and matter	Physician is skilled technician who rectifies imbalances between bodily humors and calibrates the structural composition of the body (eliminate viruses, etc.)
 Physician aspires to the Dao of medicine, a process which requires the actualisation of his/her individual path by working to become a self-realised being (<i>zhenren</i>) Major tools: qigong meditation, music, calligraphy, painting, poetry, ritual journeys 	 Physician is part of a legally defined profession with standardised ethical standards Major tools: mandatory courses/tests on legal responsibility and liability issues
 Highly individualised discipleship based training Teachers are individual "master" figures who emphasise the creation of a lineage-inspired atmosphere/culture Transmission of "understanding" (may include qi transmission from master to disciple) 	 Highly standardised institutionalised training Teachers are assigned to standardised curriculum items, and thus in principle exchangeable Transmission of cerebral knowledge through "words" and "terms"
Multi-directional memorisation: Memorisation of classical texts that are interpreted situationally according to individual circumstances	Mono-directional memorisation: Use of standardised textbooks that prepare for testing of knowledge in multiple choice format; classics are placed in museum
Health defined as the active process of refining body essences and cultivating vital forces: concept of "nourishing life" (maximising physiological functions)	Health defined as the absence of pathology

CLASSICAL CHINESE MEDICINE	"TCM"
Clinical diagnosis primarily based on "subjective" experience of the senses	Clinical diagnosis primarily informed by "objective" instrumental data (as provided by prior Western medicine diagnosis)
Clinical outcome primarily based on patient's subjective feeling of well-being and physician's collation of sensory information (tongue, pulse, etc.)	Clinical outcome primarily monitored through instrumental data (reduction of viral load in blood, disappearance of lump on x-ray, etc.)
Highly individualised diagnosis: emphasises bianzheng (diagnosis by symptom pattern)	Standardised diagnosis: emphasises bianbing (diagnosis by disease name)
Highly individualised treatment: favours flexible therapeutic approach which freely chooses from a wide variety of modalities, and within them, favors a flexible usage of prescription items	Standardised treatment: favours fixed modalities (herbs or acupuncture), and within them, promotes fixed herb regimens (patent medicines) and fixed point recipes
Use of wide range of clinical modalities, including the external application of herbs to acupuncture points, umbilical therapy, qigong exercises, waiqi emission, five-phase emotional therapy, alchemical dietetics, ziwu liuzhu acupuncture, etc.	Selective ratification of certain modalities that have a measurable effect on the physical body and that can be explained from the perspective of modern science, such as the internal administration of herbs and ashixie acupuncture
All-inclusive scope of practice (includes emergency medicine, bone fractures, serious diseases such as cancer, etc.)	Selective scope of practice (chosen areas in which modern studies have shown an advantage of TCM over Western medicine, such as chronic pain or allergies)
All encompassing training (may lead to clinical specialisation in a traditional field, such as external medicine, if inspired by the clinical expertise of a specific teacher)	Progressive clinical specialisation according to the model of Western medicine (acupuncture, internal medicine, external medicine, gynaecology, paediatrics, tumours, cardiovascular diseases, digestive diseases, etc.)
Combination of Western and traditional modalities, if employed, is performed according to Chinese medicine criteria (e.g. Zhang Xichun's method of energetically classifying aspirin and integrating it as an alchemical ingredient into traditional formulas)	Combination of Western and traditional modalities is recommended in most cases; combination follows Western medicine criteria (e.g. abdominal surgery plus post-operative administration of herbs with antiadhesive effect such as magnolia bark)

laboratory setting. The lab director went through great pains to exclude factors that could potentially effect the outcome of the experiment. He put a female rabbit in a sterile incubator, stabilised the temperature and light exposure, surgically isolated the uterus and placed it outside of the rabbit's abdomen, and finally injected the herbal solution directly into the carefully extrapolated organ. To the researcher's surprise, nothing happened, even when he repeated the experiment with a number of other animals. In a second series of experiments, he injected a variety of other substances into rabbit uteri and, after observing that some of them induced contractions, proclaimed that they were more suitable for mass production. However, when the newly "discovered" herbs, which in traditional pharmacopoeias are not at all related to uterine effects, were tested on eager mothers by the old obstetrician, they failed to produce any clinical results. Thoroughly confused, the managers of the company decided to withdraw from the project.

To me, this incident exemplified how the elaborate procedures of reductionist science can project a highly distorted picture of the reality of the human body, producing results that are essentially non-scientific. The traditional doctor and most of his colleagues seemed undisturbed by the outcome of the experiment, since they adhered to a set of entirely different scientific principles which demand verification through non-sedated, intact people who deliver babies in an uncontrolled real-life environment. According to their reasoning, a) rabbits are different from humans, b)

human beings usually do not give birth in completely controlled conditions with their own uterus hanging from their bellies, and c) the remedy in question is designed to work via the digestive process of metabolic transformation rather than through direct injection into an isolated part of the organism.

Does not the prolific depth of Chinese medicine present a scientific approach that bears the power and the promise to work the other way round? Do we always have to wait for a related discovery in Western medicine before we sanctify Qigong or other aspects of Chinese medicine that were previously deemed "unscientific"? Could we not utilise so far inexplicable *Neijing* concepts such as *wuyun liuqi* (cosmic cycles) and *ziwu liuzhu* (chrono-acupuncture) to actively inspire the nature and direction of modern scientific experiments? As the profession of Oriental medicine is stepping into maturity, it needs the inner respect for its own wisdom, which no gloss of doctoral level ratification and other marks of progress can deliver from the outside.

If we must look to China as a model, we should pay attention to the fact that the main problem raised in this article - the demise of traditional Chinese medicine under the "TCM" system - has not gone unnoticed in the People's Republic itself. In recent years, for instance, the concept of the lab-oriented TCM doctorate has been matched by a degree program that systematically facilitates the succession of traditional knowledge from "famous doctor" (ming lao zhongyi) to "master disciple" (jicheng ren). Chengdu

University of TCM, moreover, has just launched an educational pilot project for a segment of its incoming class that is modelled after the 1963 curriculum - teaching the fundamental concepts of Chinese medicine through the classics, reading the major medical classics in their entirety, and studying Western medicine only in a rudimentary fashion. "If we don't do this," the program director Prof. Deng Zhongjia says, "very soon there won't be much left of traditional Chinese medicine"¹¹.

Notes

- I owe the inspiration for this article, as well as much of the detailed information contained in it, to my mentor Prof. Deng Zhongjia, Dean of the College of Medical Theory at Chengdu University of TCM. In it, I am trying to outline more than just my own perception of the critical state of TCM education, and to synthesise a chorus of important voices that is growing louder and louder in the People's Republic of China itself. In 1997, for instance, the collated publication of a series of openly critical articles, written by leading Chinese administrators and scholars between 1985-95, projected the TCM crisis topic from its hitherto "taboo" status. A sampling of the reprinted titles, often first published under a pseudonym or presented as speeches behind closed doors, may convey a flavor of this steady underground chorus: "Rectify the Developmental Direction of Chinese Medicine, Protect and Foster the Uniqueness of Traditional Chinese Medicine" (by Lu Bingkui, former director of the National Ministry of TCM Administration); "Chinese Medicine is Presently Faced by a Serious Crisis - My Urgent Recommendation to the Responsible Party Leadership to Address This Crisis" (Lu Bingkui); "On the Gradual Abolishment of Chinese Medical Theory and the Belief Crisis in Chinese Medicine" (Fu Jinghua, director of the National TCM Research Academy), "Some Critical Thoughts on the Modernisation of Chinese Medicine" (Li Zhichong, director of the Chinese TCM Association). See Cui Yueli, ed., Zhongyi Chensi Lu (Pondering Core Issues of Chinese Medicine), Beijing, Zhongyi Guji, 1997.
- 2 Wa Zhiya, ed., Zhongguo Yixue Shi (A History of Chinese Medicine), Nanchang: Jiangxi Kexue Jishu, 1987, p. 278.
- 3 Wa Zhiya, ed., *Zhongguo Yixue Shi* (A History of Chinese Medicine), Beijing: Renmin Weisheng, 1991, p. 488.
- 4 Ibid., p. 489.
- 5 Wa Zhiya, 1987, p. 288.
- 6 *Mao Zhuxi Yulu* (Sayings by Chairman Mao), no editor, no publisher, p. 54.
- 7 See a series of articles published in 1958 in China's official newspaper, Renmin Ribao (The Peoples' Daily); i.e., "Dali kaizhan xiyi xuexi zhongyi yundong" (Let Us Give Strong Momentum to the Western Doctors Studying Chinese Medicine Movement). See Yu Zhenchu, Zhongguo Yixue Jianshi (A Brief History of Chinese Medical Science), Fuzhou: Fujian Kexue Jishu, 1983, p. 446.
- 8 Mao Zedong, "Dui weishengbu gongzuo de zhishi" (Instructions Regarding the Work of the Ministry of Public Health), in *Ziliao Xuanbian* (A Collection of Materials), no editor, no publisher, 1967, p. 312.
- 9 See the authoritative work in two volumes published by the Chinese Ministry of Health in 1994-95, Zhongyao Xinyao Linchuang Yanjiu Zhidao Yuanze (Guidelines for Clinical

- Research Pertaining to New TCM Remedies).
- 10 The issue of respect for the Chinese scientific tradition as a stand-alone body of science and its demise at the hands of P.R.C. administrators was first introduced by the prolific work of Joseph Needham, and more recently, specified for the field of Chinese medicine by Manfred Porkert, Leon Hammer, and Bob Flaws. See Leon I. Hammer, "Duelling Needles: Reflections on the Politics of Medical Models," *American Journal of Acupuncture* (AJA), 19/3 (1991); Bob Flaws, "Thoughts on Acupuncture, Internal Medicine, and TCM in the West," *Journal of Chinese Medicine*, 38 (1992); Manfred Porkert, *Chinese Medicine Debased*, Phainon, 1997.
- 11 In an interview with the author at his Chengdu home on September 4, 1999.

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