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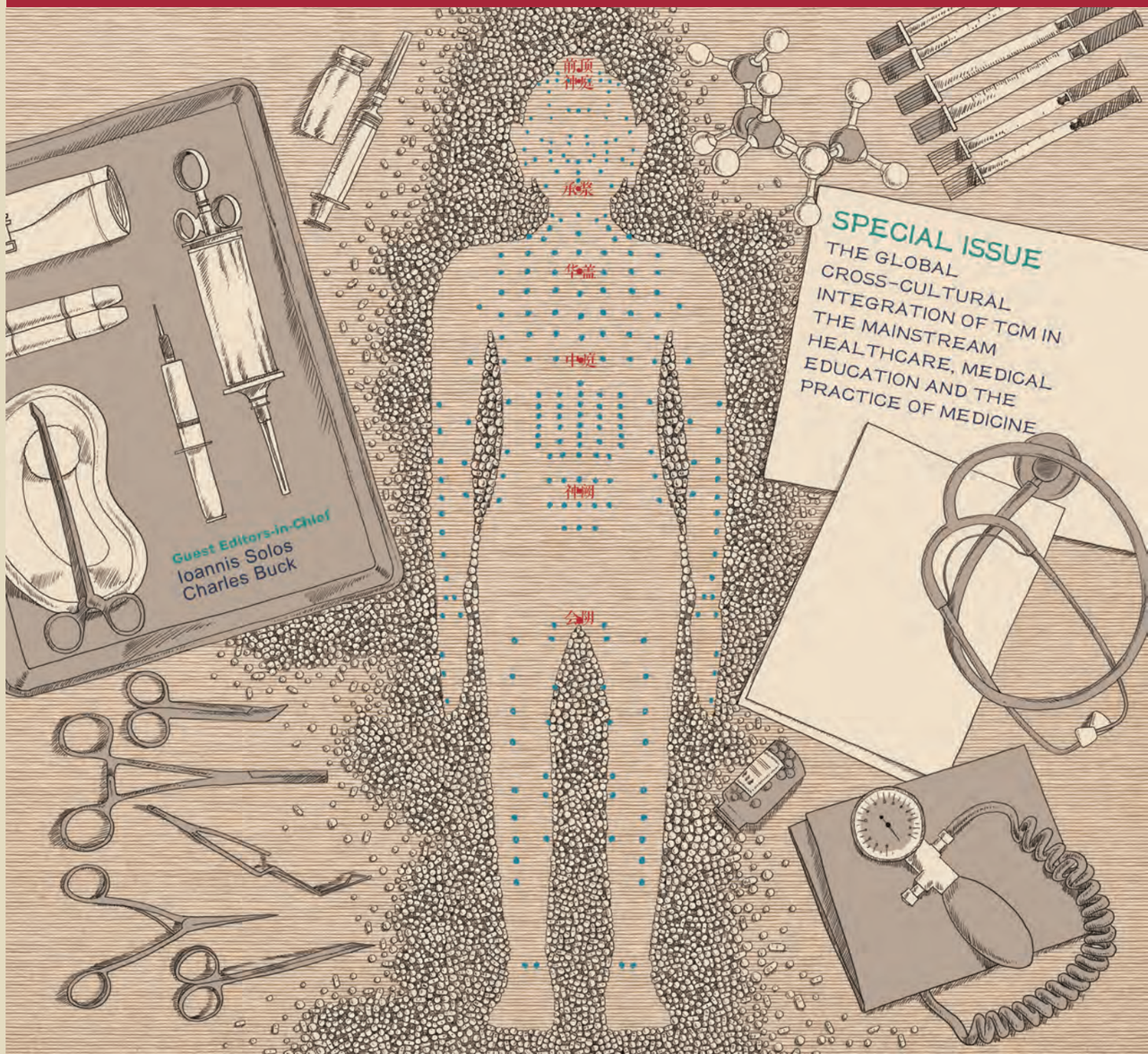

Chinese Medicine and Culture

中医药文化（英文版）

Special Issue: The Global Cross-cultural Integration of TCM in the Mainstream Healthcare, Medical Education and the Practice of Medicine

Guest Editors-in-Chief:

Ioannis Solos

Ioannis Solos Ph.D., M.D.(China), L.Ac. currently serves as President and CEO at the Saint George Clinic and Research Institute, Scottsdale, AZ., and Associate Editor for *Chinese Medicine and Culture*. Professor Solos has earned his Master of Medicine in Traditional Diagnosis at the Beijing University of Chinese Medicine, and his Medical Ph.D. in Chinese and Western Integrative Medicine at the Jinan University in Guangzhou. He practices and teaches integrative clinical medicine, *Jing Fang* (经方 TCM formulas), martial lineage acupuncture, and his personalized style of "tendon and fascia reconditioning manipulations for bone and joint disease". Professor Solos is an established academician with numerous peer-reviewed SCI articles. He is the author of *Gold Mirrors and Tongue Reflections, Developing Internal Energy for Effective Acupuncture Practice: Zhan Zhuang, Yi Qi Gong* and *Art of Painless Needle Insertion and Tongue Diagnosis in the management of Epidemics* (forthcoming). He has also co-authored *Ao Shi Shang Han Jin Jing Lu: Shi Sheng Du Shu Bi Ji* (《〈敖氏伤寒金镜录〉师生读书笔记》, in Chinese), and the *Chinese Medicine Diagnostics* for the World Textbook Series for Chinese Medicine Core Curriculum (in Chinese). He is registered as a Board-Certified Acupuncturist with the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM)®, and he maintains an Acupuncture License in the State of Arizona.

Charles Buck

Charles Buck is a TCM practitioner for almost four decades. He is an experienced clinician, educator and author known for his lucid and engaging communication style. His diverse interests include classical Chinese medicine, medical sciences, communication and advocacy of the TCM professions. Conducting brain research in the 1970s, Professor Buck encountered the neurophysiology research behind acupuncture and this prompted a career diversion into acupuncture study and practice. In the early 1980s he pioneered Chinese herbal medicine teaching and practice in the UK and, as a faculty member at a leading UK TCM College, he led the UK's first formal Chinese medicine training course and in 2000 gained a TCM masters. Professor Buck held academic posts for over 20 years, and has acted as a university external examiner in TCM. He has published extensively and has presented at conferences across the world. Notable is his textbook *Acupuncture and Chinese Medicine: Roots of Modern Practice*. As a past chairman of the British Acupuncture Council, Professor Buck has long worked for TCM advocacy focusing especially on the ways that science can help us gain increased legitimacy. He has been awarded fellowships from all three of the UK's TCM professional bodies.

Purpose of the Issue

On July 26th, 1971, an article by James Reston in the *New York Times* has been seen as the starting point for the popularization of acupuncture in the Western world. The 50th anniversary of the publication of the Reston article also signifies 50 years of Chinese medicine development in the West. In the last 50 years, medical sinologists have devised terminologies for the translation of Chinese medical tests and many scholars have studied in China, Japan, Korea and Vietnam with a view to gaining authentic knowledge of the system. TCM colleges have flourished across the world, textbooks are available in many languages and lobbyists strive for the integration of acupuncture and Chinese medicine into mainstream healthcare.

But various cross-cultural difficulties remain. The meeting of East and West medicine presents many ongoing challenges. The thematic special Issue of *Chinese Medicine and Culture* aims to review these challenges and chart the progress of integration of the Chinese medicine around the globe. It brings together leading contributors—from across Europe, the United States, Australia and internationally—to shine a light on the development of the theory, practice, teaching, and politics of Chinese medicine as a global phenomenon.

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General Information

AIMS AND SCOPE

Chinese Medicine and Culture is an interdisciplinary academic journal focusing on the study of Chinese medicine. It aims to promote communication and dialogue between researchers in the natural sciences and humanities of Chinese medicine. The objectives are to build an interactive platform for interdisciplinary research on Chinese medicine and to comprehensively reflect the high-level and latest research results of Chinese medicine in the fields of medical science research, cultural exchange and historical heritage conservation.

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Editorial

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MEDICINE AND CULTURE

OPEN

The Transmission, Establishment and Cross-cultural Integration of Chinese Medicine in the Mainstream Healthcare, through the Eyes of a Generation of Visionaries and Pioneers

Ioannis Solos[1,✉], Charles Buck[2]

Abstract

It has historically been very difficult to trace the history of the westward transmission of Chinese medicine through the accounts of its protagonists. Many of the early scholars such as *Jack Worsley, Dick Van Buren*, and *Joe Goodman* were reluctant to divulge information about the source of their knowledge, or their professional qualifications. Others, such as *John Shen* and *Hong Yuan-bain* were early 20th century immigrants who transmitted highly personalized versions of acupuncture and Chinese medicine to select disciples. Eventually, a new class of scholars appeared, including names such as *Ted Kaptchuk, Peter Deadman, Nigel Wiseman, William Morris, Peter Eckman, John McDonald, Charles Buck*, and the late *Giovanni Maciocia* who looked for answers back in China, developed translation methodologies and terminology, compiled the main textbooks currently in use at TCM colleges, overcame enormous scholastic adversity, developed courses and pursued the regulation and accreditation of TCM in various countries. This special issue synopsizes the path towards the global acculturation of TCM over the last 50 years, the main protagonists, the enormous accomplishments they have achieved for the profession, their philosophy, their clinical perspectives and visions for the future.

Keywords: Chinese medicine; Cross-cultural integration; Westward transmission; James Reston; Acupuncture; History

Chinese medicine and European medicine have interacted since the establishment of the Afro-Eurasian Silk Roads and the Maritime Spice Route during the Hellenistic and Roman Eras.[1] However, the first mention of a *Chinese medicine* in Western sources can be traced in the traveling journal of William of Rubruck, in the 13th century.[2]

By the 16th century, the practice of acupuncture had already spread into Europe, as is attested by *Gerolamo Cardano*.[3] Cardano described an early form of European acupuncture, with exponents traveling from place to place, and practicing their trade by rubbing needles with magnets and other substances, pretending that this will facilitate a painless insertion. However, the medical theory, training specifics and relationship of these doctors to the established practices of Chinese medicine is not clear. The route of transmission of this practice from Asia to Europe is also uncertain.

Historically, after the fall of the Eastern Roman Empire in 1453, the *Age of Exploration* allowed the Western Europeans to reach eastwards for trade and knowledge. With the land silk roads being firmly closed down by the Ottomans, the only path still open to the Europeans was the maritime *"spice"* route first described in the *Periplus of the Erithrean Sea*.[4] Then either traveling like Vasco da Gama around Africa, or starting from Alexandria and following the established Greco-Roman network, Western Europeans first reached India, and soon after, China. With the increased communication with the Far East, the Roman Catholic Church decided to establish the China mission, with the dispatch of St. Francis Xavier.[5] Unfortunately, for decades, the European missionaries found it very challenging communicating with the local populations of South East Asia. But this was remedied with the appointment of Michal Boym, who first developed the foundations of the Sino-European lexicography, and a novel translation methodology.[6] Nevertheless, Chinese medicine coded as it is in a specialist technical language, proved a bigger challenge to transmit in a reliable way. And that's why some of the early translation works of the Jesuit fathers, are a combination of translation and interpretation.

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Despite their shortcomings, the works of *Michal Boym*, *Athanasius Kircher* and others provided translations of some key Chinese medicine texts to a Western audience. Several doctors affiliated to the Dutch East India Company also published important texts, especially *Hermann Busschof* and *Andreas Cleyer*. Hermann Busschof's *Het Podagra, Nader Als Oyt Nagevorst* (1675), allowed moxibustion to become a popular treatment for gout in London and elsewhere in Europe.[7] At the same time, Andreas Cleyer's extensive work on botany, zoology and medicine became highly influential in the late 17th century.

Unfortunately, all of these works, especially Kircher's *China Illustrata* (1667),[8] and Boym's *Specimen Medicinae Sinicae* (1682)[9] appeared almost half a century after William Harvey's *De Motu Cordis* (1628),[10] a time when Western medicine was moving towards experimentation and the scientific method, and distancing itself from the Hippocratic and Galenic traditions.

Therefore, even though these texts did exert a certain influence in the practice of European medicine, ultimately, they appeared otherworldly and outdated. As a result, Chinese medicine missed a great opportunity to grow roots and become an established practice at a pivotal time in history.

While the European interest in Chinese medicine was waning, allopathic medicine was gaining a foothold in China.

A story that clearly demonstrates the level of infiltration is related to the emperor Kangxi (康熙 1654–1722), who contracted malaria in 1693. After the court physicians failed to provide a successful treatment, Jesuit missionaries offered him *cinchona bark*. Kangxi's symptoms quickly improved, and after his treatment he became convinced of the superior power of Western medicine. Ironically, Chinese medicine itself had equally effective medicinals for malaria, such as *Qing Hao* (青蒿 Artemisia Annua) and *Chang Shan* (常山 Dichroa Febrifuga). Had Kangxi's court physicians known about these treatments and/or had treated him more skillfully, the acceptance of Western medicine might have been less enthusiastic.[11]

During the colonial years (1840–1945), a European romance with orientalism increased exposure to East Asian culture and medicine. Some English physicians began to adopt acupuncture needling techniques, using hat pins for the treatment of back pain. French and British doctors continued to pursue an interest in acupuncture and moxibustion as an exotic novelty therapy and, from here, it reached the United States through their links with France. Important works included *"Memoir on Acupuncturation"* translated by Benjamin Franklin's grandson, Franklin Bache in 1825.[12] Or the *"Treatise on Acupuncturation, Inoculation, Diversion and Direct Medical Administration"* by A.R. Brown in 1869.[13] Interest rumbled on and the influential "*father of modern medicine*" Sir William Osler, in his *Principles and Practice of Medicine*, (first edition in 1892),[14] recommended acupuncture as a treatment for the back pain. In truth however, these were dilletante attempts at acupuncture.

This changed, when a French physician, George Soulie de Morant, became the first Westerner in the 20th century to advance understanding, by taking the subject seriously enough to apply due scholarship to acumoxa and Chinese medical theory. Soulie de Morant had rare fluency in Mandarin, which led to his appointment as Consul for the French Foreign Ministry in China.

Fascinated by all aspects of Chinese culture, Soulie de Morant also moved in China's high intellectual circles and is said to have studied with several famous acupuncturists. He acquired classics such as the *Zhen Jiu Da Cheng* (《针灸大成》*The Great Compendium of Acupuncture and Moxibustion*) that he used as a basis for his own writings. Returning to France in 1917, de Morant inspired a generation of French physician-acupuncturists and in 1972 his writings on acupuncture were compiled into *L'Acuponture Chinoise*.[15] Perhaps questionable in some aspects today, Soulie de Morant offered a more comprehensive understanding of acupuncture than had been available before.

Chinese herbal medicine was largely ignored in the Western world, confined mostly to the semi-insular Chinese communities in the US, Europe and Australia. Serious scholarly interest from occidental practitioners has only developed in the last few decades. In the UK of the early 1980s there were only a dozen or so Chinese herbal medicine practitioners, but since then this aspect of the profession has grown exponentially. China's liberalizations, communication technologies and the increase in global migration have also greatly contributed enormously to progress.

A pivotal moment for acupuncture, when it began to transition from exotic rarity to standard care, happened on July 26th, 1971 when an article by James Reston in the *New York Times*, described acupuncture anesthesia.[16] In 1971, Henry Kissinger's secret diplomatic trip to China organizing Nixon's subsequent State visit, allowed several US reporters a rare glimpse of daily life in Beijing. Reston's article was published merely ten days after Richard Nixon's announcement of the planned meeting with Chairman Mao. Given the timing, and the excitement about the re-establishment of Sino-American relationship, the article did not go unnoticed.[17]

Reston's story, became an urban legend even in China, it catalyzed a burst of popularization of acupuncture in the Western world, and led to some United States funding for acupuncture research. Pioneers such as *Jack Worsley, Dick Van Buren, Joe Goodman, John Shen, Wu Wei-ping, Giovanni Maciocia, Nguyen Van Nghi, Albert Chamfrault* were inspired to develop the profession. Some of these early scholars could directly access the tradition, and they taught acupuncture with reasonable fidelity. Others however, presented rather mutated versions of the classical theory, ingrained with their own personal ideas, beliefs and imagination.

Nevertheless, even in the early 1990s acupuncture and Chinese medicine, despite its growing evidence base, continued to be disparaged by the media and the medical establishment as a hippy-dippy, alternative new-age play medicine. Then a mini revolution took place in the mid and late 1990s, when laws in the US were formed to regulate the learning and practice of TCM, and acupuncture schools started opening en-masse around the United States and Europe. Several European universities even run joint courses together with major Chinese universities such as Beijing University of Chinese Medicine (北京中医药大学) and Shanghai University of Traditional Chinese Medicine (上海中医药大学).

Consequently, over the next decade, acupuncture and Chinese medicine established themselves as legitimate medical practices, more widely available in mainstream healthcare settings. China's openness in the early 2000s also allowed Westerners to pursue the study of Chinese language, and to enroll in major TCM universities, studying alongside the local students. This facilitated a greater transmission of accurate understanding of the tradition and its current interpretations.

In this special issue we attempt to present a picture of the acculturalization of Chinese medicine into mainstream healthcare. Our contributors reflect on areas such as medical education, translation and the practice of medicine over the last fifty years. We sought contributions from pioneers, who understood the field since its modern inception from the Reston era, through the 1990s, to today.

Unfortunately, this has happened just a little too late, as many early scholars had already passed away. We were, however, able to speak to some of those who met them. Through the eyes of their students, we managed to obtain an idea of their teaching and their didactic approaches.

It was at times a challenge to get people to agree to speak about that period. It appears that the Western acupuncture world is shy to leave a historical record of its not-so-distant past.

Thankfully we were very fortunate to speak with some major contributors to the field, including Professor Ted Kaptchuk, Peter Deadman, Felicity Moir, Peter Eckman, Nigel Wiseman, Mel Koppelman, William Morris, John McDonald and Edward Neal.

Through their own words, we witness a generation of visionaries who at the beginning of their journey struggled to obtain correct information and direct transmission of knowledge, and who undertook challenging journeys to China in the late 1970s and 1980s. We also see some of the same scholars overcoming academic, linguistic and transmission hardships and ultimately compiling clinical manuals that have now defined the field of acupuncture and TCM in the Western world. Such seminal works are still used for educating a new generation of practitioners, shaping the profession, and helping create new knowledge.

We also take a historical look on the professionalization of TCM, the struggles of setting up an educational infrastructure and governance for Chinese medicine. While we also partake of ideas, teachings, inspirations and pearls of knowledge from decades of experience.

We are grateful to the *Chinese Medicine and Culture* who allowed us to explore this part of Chinese medicine history, and give us the chance to present it in a somewhat systematic manner.

We would like to extend our sincerest thanks to all the scholars who shared with us their journey, and allowed us to understand how Chinese medicine ultimately integrated into so many areas of medical practice in the West.

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Ethical approval

This study does not contain any studies with human or animal subjects performed by any of the authors.

Author contributions

Ioannis Solos and Charles Buck drafted and reviewed the article.

Conflict of interest

The authors declare no financial or other conflicts of interest.

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Interview

CHINESE 中医药文化(英文版)
MEDICINE AND CULTURE

OPEN

A Conversation with Professor Ted Kaptchuk, a Key Architect of Modern TCM in the West

Ioannis Solos[1,✉], Charles Buck[2], Ted Kaptchuk[3]

Abstract

The interview was conducted on November 20th, 2022 by Ioannis Solos and Charles Buck. Ted Kaptchuk (泰开阳) is a Professor of Medicine and a Professor of Global Health & Social Medicine at Harvard Medical School. In 1975, he graduated from the Macau Institute of Chinese Medicine, Macau, China. After returning to the West, Ted taught Chinese medicine throughout the States, Europe, Latin America, and Australia. Ted's book, *The Web that Has No Weaver: Understanding Chinese Medicine* is a groundbreaking explanation of East Asian medicine that continues to shape the discourse of the Chinese medicine profession in the West and has been translated into 13 languages. In 1990, Ted was recruited in Harvard Medical School to help research Chinese medicine. After encountering high placebo responses in multiple acupuncture clinical trials, Ted decided to switch his career to primarily studying placebo. He has published over 300 peer-reviewed articles. He has been awarded the Lifetime Achievement Award from the Society of Acupuncture Research (2015), the Lifetime Achievement Award from the Society for Interdisciplinary Placebo Studies (2021), and the William Silen Lifetime Achievement Award in Mentoring from Harvard Medical School (2022).

Participants:

TK: Ted Kaptchuk
IS: Ioannis Solos
CB: Charles Buck

The Interview:

CB: Ted, when we first met almost four decades ago, I remember encountering a very inquiring mind. I'm interested to know what it was that captured your imagination in your teens and early years?

TK: My parents were Holocaust survivors, so that colored my childhood and actually everything in my life. Growing up, most of my parents' friends were also Yiddish-speaking traumatized victims who were trying to reconstruct their lives. I was surrounded by these people and also all their family members who were murdered. I lived with the dead. When I was young, I read biographies and everything I could find, because I only knew narratives of destruction and pain. I wanted to see what other people were like. From the beginning, I never waived my commitment to fight racism and focus on the relief of unnecessary suffering. Later, in college, I was involved in the anti-Vietnam War protests and the Civil Rights Movement, and that was the focus of my entire college career. Then I became a national officer for an organization called *"Students for a Democratic Society"* and I saw myself doing that for the rest of my life. But then, when my friends started becoming terrorists, I said, *"Ted, there's something wrong here."* As a result, I dropped out like many others at that time, and I moved to a commune in Northern California, keeping goats and that kind of thing. It was then when I realized that I had to pursue a different path, and that I couldn't live in a hippie commune for the rest of my life (Fig. 1).

I heard about Chinese medicine while I was hiding from the FBI in 1970. This happened very soon after I heard about the *Greenwich Village townhouse explosion* of March 6th, 1970. My best friend, Ted Gold, and several other weathermen were killed while constructing bombs. I was in Northern California at the time, but I was told that the FBI had issued a subpoena for me to testify to a grand jury in New York City investigating the event. I was also advised that it be best if I didn't participate. Given the circumstances, I needed to find some place to hide, and I talked to my friends in the *San Francisco Red Guards* who were the equivalent to the *Black Panther Party* for Asians. I told them of my predicament, and asked if I could stay at their commune. At the time it was known that only Asians could enter. And so, I lived there for about three months.

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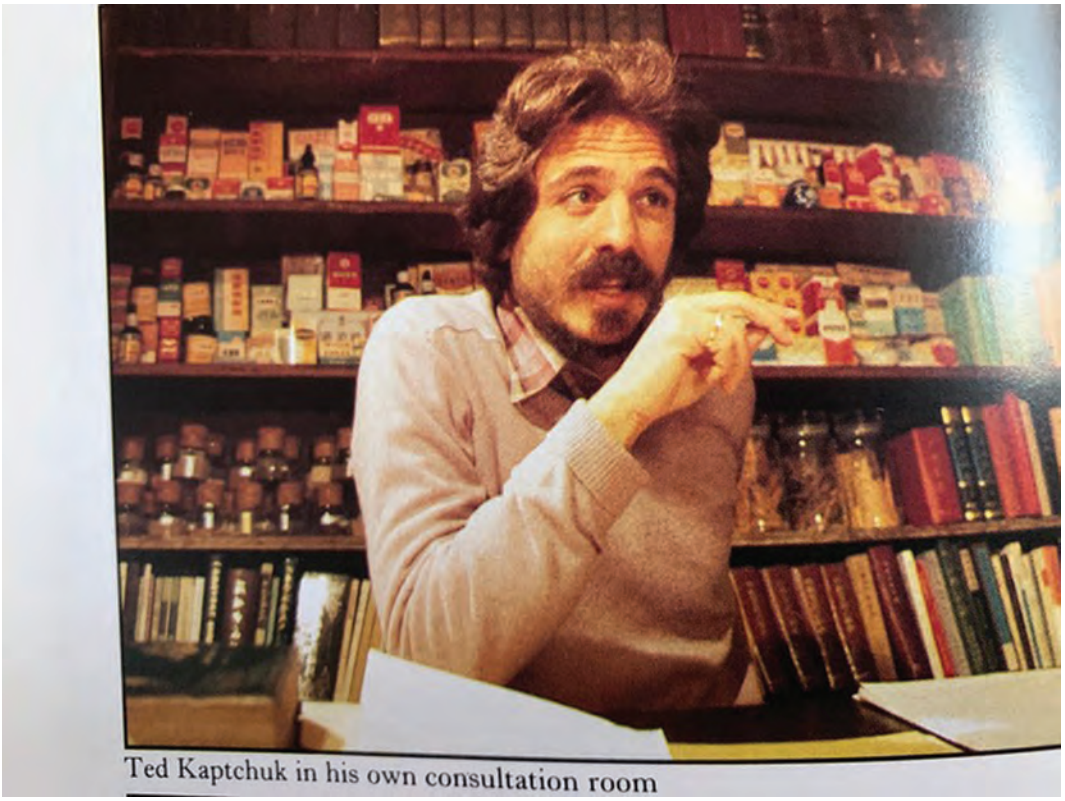

Figure 1 Professor Ted Kaptchuk in his own consulation room (source from: the authors).

At the commune, I started reading the *Beijing Review* (《北京评论》) magazine which had interesting articles on acupuncture and Chinese herbal medicine. On the top of the pages, it used Chairman Mao's slogan *Chinese medicine is a great treasure*. Then, after the grand jury was over in New York, I decided to pursue Chinese medicine. This became my passion for a long time. I was introduced to old-fashioned Chinese doctors, and soon I found one who would take me as an apprentice. He turned out to be an amazing doctor and healer. However, when he started speaking about Chinese medicine, I was lost. I couldn't understand what he was describing, because he spoke about wind and dampness—and that terminology was out of my league at that time. Eventually I decided that I needed to go and study in China.

IS: What was his name?

TK: His name was Hong Yuan-bain (洪源班). He came from Wuxi (无锡), near Shanghai and he had studied with Cheng Dan'an (承淡安, 1899-1957) whose name I did not know then, but who also lived in Wuxi. Sadly, he was an alcoholic, and this made it very hard to study with him because he would start drinking at two o'clock in the afternoon. But I really loved him, so I ran his practice for him and tried to keep him sober until three or four. When I realized I couldn't understand Dr. Hong, I decided to go to China. I first studied in Taiwan, China for a while and then I went to study in Macau for a much longer time. I studied night and day. When I finished studying in Chinese medicine formally—well, I never really finished—I returned to Dr. Hong's clinic in California. This is because I thought that he was the best Chinese doctor I ever studied with. Unfortunately, by the time I returned he had already passed away. Dr. Hong gave me a sensibility that lasted through my entire career.

Dr. Hong also was a Kung Fu teacher. He was also visionary, and could tell patients intimate details of their medical and even personal history, minutes after meeting them. He would diagnose people just by his first impression. But he was also a great performer and might be considered a shaman. For this reason, I also assumed that he was lying to me when he claimed that on Tuesday nights, he was unavailable for teaching/treating because he taught Kung Fu to the San Francisco police. But one day, another student and I needed to see him about something. And as it happens it was a Tuesday night. When we arrived at his house, it was full of policemen learning martial arts. They described him as an amazing teacher, and told us how he once knocked down several of them because they were being racist. They also said that as part of his probation, he had to teach them Kung Fu. In any case, I eventually gave up learning from Dr. Hong and moved to China.

I wanted to study in the People's Republic of China but that was impossible at that time. I had friends in the *Black Panther Party* who had links with China and asked them to facilitate my study there. I asked the first *Black Party delegation* to China in 1970 to take a letter

and give it to the Central Committee of the Chinese Communist Party, asking for permission for me to study in Beijing or Shanghai. Eventually I received a response saying that it was not possible with an American passport. I tried to use my other political connections but that didn't work either. Therefore, I first went to Taiwan, China and studied there for a year, and then enrolled in a newly founded institute in Macao (Fig. 2). It was a patriotic school. Every classroom had a picture of Chairman Mao, and all textbooks were from the Chinese mainland. All the teachers—all of whom were born overseas—had studied in China in the 1960s and had moved to Macau, so that their parents and families could visit them from Indonesia. It was run under the umbrella of the *Federation of Returned Overseas Chinese* (归国华侨联合会) in Macau that was affiliated with *All-China Federation of Returned Overseas Chinese* (中华全国归国华侨联合会) in Beijing. The school was the best I could find, and I hoped my intense concentration and effort made up for its many weaknesses. Classes were in Mandarin. The patients spoke Mandarin, Cantonese, and other dialects. Macau was very much a backwater then.

CB: What did your family and friends think when you took this diversion? Did they think you've gone crazy? It was a strange thing to do at that time.

TK: My parents were really happy I had not become a terrorist. My leftwing friends thought I was being politically correct, and my hippie friends thought it was *"far out"*. But for the most part, this was a singular decision. I had a singular desire to learn Chinese medicine.

IS: Can we go back a step? Do you remember any of the teachers?

TK: I first went to study with Wu Wei-ping (吴惠平), who was somewhat famous. I could tell he was a fraud after a month. He offered me a diploma after a week. Please forgive me if I say that he was dishonest by my standards. Afterwards, I asked around and found two wonderful teachers who were aghast at what happened with Wu Wei-ping. They both took me into their worlds. Regina Ling (凌岭先) studied with her family from the age of five years old. She knew all the classical poems about herbs and acupuncture by the age of eight years, and she was observing from the age of ten years. She was a rare woman practitioner, very dignified, and looked much younger than her age. She had all kinds of techniques that I never saw later. My other teacher in Taiwan, China was a really interesting old physician named Chen Yiqing (陈一清). He was a very old guy who originally trained in Chinese medicine as an apprentice with his family. In the 1920s he became one of the earliest students of the newly founded Shanghai Chinese Medicine School. Later, he studied Western ophthalmology in Japan. It was a really nice experience because he worked with both herbs and acupuncture, and his son would translate for me. My Chinese was still weak.

My Chinese Taiwan experiences, made me realize the immense diversity of medicine in China. In order to obtain a systematic education, I felt I needed to go to Chinese mainland. I also entertained the idea of going to the Chinese medical school in Kaohsiung, Taiwan, China, but I personally wanted to use mainland textbooks which were not available there. Then I looked in

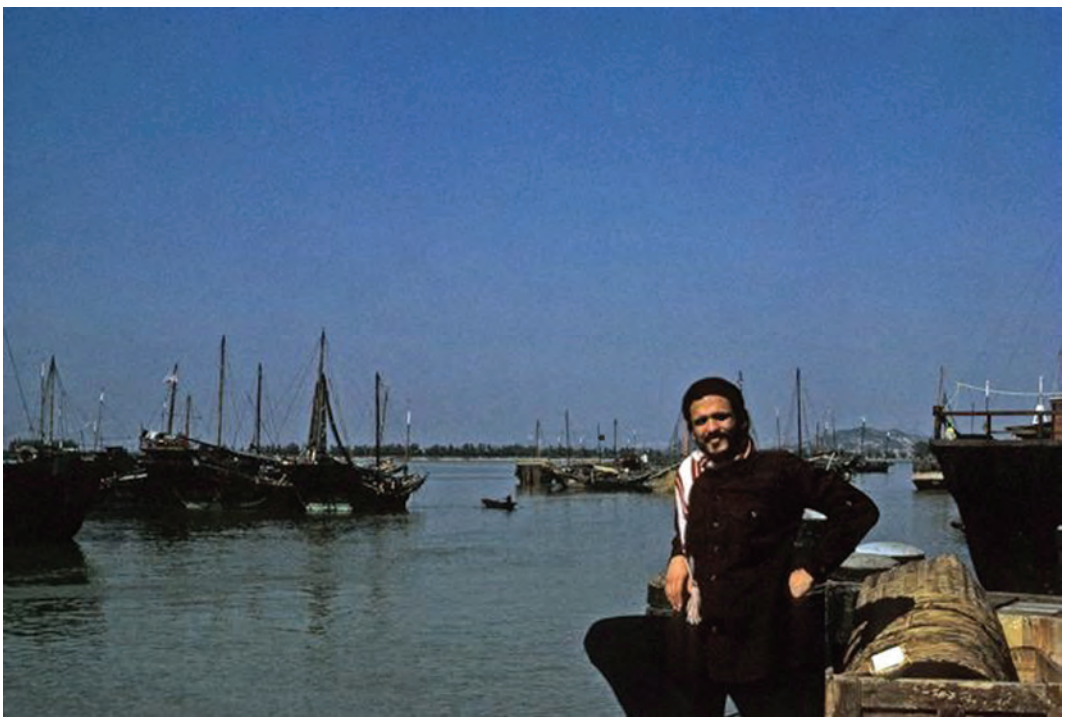

Figure 2 Professor Ted Kaptchuk in Macau, 1973 (source from: Ted Kaptchuk).

Hong Kong and later Macau, and I eventually discovered the school operated by overseas Chinese from Indonesia, who had studied Chinese medicine in the 1960s, in Chinese mainland. When these people *"returned"* to China from Indonesia, their parents couldn't visit them because if you were Indonesian and went to China, you could never return to Indonesia. So, the teachers ultimately got permission to settle in Macau and opened the *Macau Institute of Chinese Medicine* under the local auspices of the *Federation of Returned Overseas Chinese* in Macao which was affiliated with the central All-China Federation in Beijing. When I applied to the school, I told them that my father was a member of the proletariat class, so I got 50% off the tuition fee, which was equivalent to $150 a year. The textbooks were those used in China at that time. That was okay for me, because I was now able to read. I worked hard to learn more than they taught me, studying day and night. When I started school, I was considered weird because my Chinese language skills were terrible. Still, I convinced them to let me take the first year twice. I'd learn the language the first year and then learn the medicine the second year. Also, my teachers and classmates were suspicious about my background. Why was I not allowed to study in the mainland? Was I a CIA agent? I ate vegetarian food and studied in nearby Buddhist temples. Was he a religious person? I had long hair. Was I a hippie? I could quote Chairman Mao. Was I a communist? However, by the end of the first year I was speaking and reading Chinese pretty well, and I caught up with my classmates, and earned everyone's trust and respect. My teachers in Macau were young, and unlike my teachers in Taiwan, China and California, they had learned in the systematic way that was being developed in the mainland. I appreciated their efforts, especially Drs. Yu Jinniang (余金娘) and Xie Zhangcai (谢长财).

IS: Can you say more about Chinese Taiwan's Wu Wei-ping? He has been cited as an influence by many in the West.

TK: People came from the West to hang around his clinic for a brief time, and they all left with a certificate—he was so awful. Forgive me, but I have to be frank!

IS: Please be frank!

TK: In California, I owned a book by Wu Wei-ping in English, and I said to Dr. Hong that this person may be worth contacting. So, he wrote a letter in Chinese, saying that I had been studying with him, and asking if he would take me as a student. Wu wrote back, inviting me to come. When I arrived, he asked me how many weeks I could stay. I said, "*What do you mean? I came here to study Chinese medicine*." Then Wu said, *"I can give you a diploma after you sponsor dinner! You don't need to study!"* To which I replied, *"No, no! I came here to actually study!"*

He never really taught me a single thing, he only let me pull out needles. I saw medical professionals and lay people coming, never studying anything, and leaving with a piece of paper. The shorter the stay, the more expensive the diploma. At the time this was possible, because there was no government regulation. After witnessing all that, I left as soon as I could.

IS: Did Wu Wei-ping speak English?

TK: No. I needed a translator then. I had hoped to get away with English, but quickly I realized that I seriously needed to learn Chinese. I wanted to go to a real school and it wasn't easy to find one in Hong Kong and Macau. At the time Macau was not known as a place for scholarship or medicine. My school passed as a real school only by the skin of its teeth. But it did have a real curriculum—a similar curriculum to what they used in Chinese mainland, and also possessed reasonable clinical facilities.

IS: Any recollections of your experiences in Macau? It was a very different place at that time.

TK: It was just a small fishing village with one or two small casinos! But it was an important place for me, and I loved it. I seriously considered staying in Macau and working as a doctor there after I graduated.

CB: I remember you had a Chinese godmother there.

TK: Yes, I was adopted into a Chinese family in Macau, and gained a godmother. I knew as soon as I got adopted that this was probably one of the reasons I came to China. To be with her was as important to me as being in China and learning Chinese medicine. She was a devoted Buddhist and I learned a lot about religiosity, piety, devotion, and how the invisible becomes visible. I spent lots of time with her and the few relatives she had. Without trying, I even learned to speak her village dialect of Cantonese, besides the standard Cantonese used in Macau (Fig. 3).

CB: When I studied with you, you mentioned that your Macau godmother got in touch when she was about to die, so you could learn the rituals for the dead.

TK: My godmother and godfather had no children. So, I was critical of the ancestor rituals at the funeral and afterwards. I organized the burial for my godfather while in Macau, and later, I returned to bury my godmother. My godfather was paralyzed and bedridden. He could only move his jaw and ate rice congee, but could not speak or get up. One of my teachers told my godmother—his patient—that I could treat my godfather with acupuncture, if she would rent me a room. My school would not let me stay in their dormitory (as mentioned already, at the beginning they were very suspicious of me). When I buried my godfather in 1973, I arranged everything, and I learned how to negotiate with the mortuary and the temple officials. I hired paid mourners which turned out to have been unnecessary, as all my English students and my medical school classmates came *en masse* to the funeral. I paid attention to the rituals my godmother performed for him. I felt deeply part of this slice of the old Chinese world. When my godmother got sicker, she asked me to return to China to receive more instructions on how to arrange

Figure 3 Professor Ted Kaptchuk and his godmother in Macau, 1972 (source from: Ted Kaptchuk).

the worship of ancestors including the order of prayers, bowing, offering, and incense. Although she was a vegetarian, she wanted the offering to be meat (beef, chicken, and pork) as this was her Chinese village ritual which was not only Buddhist. We negotiated and I was able to make her comfortable that I would only use fruit in the States. I buried her in 1982 two weeks before the Lunar New Year, in Macau. I continue to perform the Chinese ritual every year which turns out to be on the same full moon of the minor Jewish holiday of *Tu Bishvat* or the *"New Year of the Trees"* which also requires an extensive display of fruit. The coincidence makes the anniversary of the mother's death and the holiday very special.

IS: I have had a similar experience in Beijing, but I never hired mourners. In the Chinese mainland, many of these traditions are not always observed anymore.

TK: Yes, I'll ask you about this offline. In Macau, rituals were observed! The mortuary wanted to know how many mourners we wanted. They suggested I hire 15. I said, *"OK!"* At the time I was also teaching English, and told them that all of my students would probably also come. My godmother was so honored as we had over 100 people at his funeral. Her own funeral was smaller. I hadn't been living in Macao for a while, so didn't have students. Still, it was a moving experience.

CB: I believe that your godmother was a devout Buddhist as well.

TK: Very much so! You have an amazing memory, Charlie! You've remembered those stories from my teaching. My godmother was a deeply devotional Buddhist—she lived it. It was like Maxine Hong Kingston's book on her experiences of growing up in a Cantonese environment where there are lots of ghosts, spirits, and divinities around. My classmates would visit and they would say, *"Ted, she's like a museum, she talks like they did hundreds of years ago*." To my godmother, the world and her home were full of spirits that she would easily communicate with. I didn't pay close attention because it was really my godmother's thing, but I did learn a lot about piety, religious service, ritual, kindness, and humility from her. I learned that religion is an embodied experience, not a set of propositions that one endorses. You live it; you don't believe it. Also, while in Macau I was very close to Heng Jing (恒靜, aka Steve Klarer), a man from the Bronx who had been a Buddhist monk for 13 years in a monastery in Hong Kong. I invited him to my home in Macau to allow for my mother to formally become a Buddhist taking *"refuge in the Buddha"* ceremony. Her husband would never let her do that because the monasteries in Hong Kong and Macau were usually places to steal money from old widowed ladies. They often would take in old ladies, take their money and make them servants. My Buddhist friend said that he would give the ceremony for taking *"refuge in the Buddha"* and other stuff. But yes, she was living in the world of spirits and this made me realize how palpable can a religious life be. The other thing I discovered is that she sometimes used magical and religious

healing besides Chinese medicine and Western medicine, which was something that I had totally ignored. Later, when I came back to the States and studied anthropology, I realized that I was looking at Chinese medicine very narrowly, focusing just on literate medicine. But there is a folk medicine that's all over the place.

CB: When you came back to the United States, what was your experience of practicing in a very different culture?

TK: I wanted to ask Ioannis about this; what was it like when you practiced in China and then came to the US? In my experience, patients would come and say things that had no relationship to anything I learned in China. In China they would say, "*I urinate a lot, I feel cold, and I have back pain*." It was like they had read the TCM textbooks. In the US they said things like *"I'm feeling like I will die! I want to break up with my boyfriend. I can't stand him but I love him and I can't leave him. Can you help me please?"* and I didn't know where to begin with that. It took me a long time to get to understand my patients, and they taught me an enormous amount. They forced me to re-read Chinese medical books, looking for anything that I could remotely tie to what I was seeing. I found tons of things in classical texts that are considered irrelevant to contemporary clinicians, that seemed relevant to my patients in the West who were searching for help with psychological, moral and existential problems. I always taught TCM but I added ideas and practices from older texts. Every now and then, I broke away from the TCM framework, and in the second edition of *The Web that Has No Weaver*, I included concepts such as the *Hun* (魂) and the *Po* (魄), ideas that currently the Chinese have started looking into a little bit more. But not much. I've seen some new textbooks that actually have sections on the *Hun* and the *Po*. Starting my clinic was a big experience for me. I didn't charge money because I was earning enough from teaching Chinese medicine. However, the Korean doctors down the block, heard about my free clinic, were threatened and called the health department. They claimed that my place was substandard. Fortunately, someone from the health department alerted me to the fact, and we ended up painting the whole place overnight! But, yes, I had to learn interacting with American patients. Did you also have that experience, Ioannis?

IS: Oh, yes! I had to learn how to speak to American patients. And that's a completely different experience to China. For example, they come to you wanting to tell you more about their personal life and emotional problems. They often view an acupuncturist as a therapist, rather than a medical doctor. An intake that would take three minutes in China can be a very long process in the States. I had to learn how to stop them in a nice way, otherwise, they would carry on saying things forever, and I'd never move on to other patients!

TK: I had more time than you because I had teaching income. You're earning from teaching too, aren't you? I could sit through it and I'd stop it after maybe half an hour or even an hour. I learned to start correlating what I had learned in China to what they were saying and then I started reading more texts. Then, around 1989, after reading lots of books, I decided that I would practice and teach an expanded version of TCM.

I started writing *The Web that Has No Weaver* around 1980. After I finished the first draft, I thought *"Ted why don't you put footnotes in—don't you like footnotes?!"* In the *Talmud* it says, *"Those who show the source of their knowledge, bring the redemption closer."* I thought it wouldn't be that hard to do the footnotes, so I looked at all the footnotes and bibliography in modern Chinese medical books, to check for the original source material. I had acquired a library of maybe 5,000 volumes and I was confident that I could access the source text. That was the point when I realized that sometimes the source article had said something different from what the modern TCM text interpreted! A scholastic tradition with reverence for canonical texts, allows a person to take any sentence out of a canonical text, and make it say whatever you want it to say. That's how you improve on the medicine. Progress is based on new interpretations that contradict old interpretations. That's scholastic thinking. Interpretation is the source of creativity in such traditions. I was following such an old scholastic methodology when I tried to expand my teaching beyond what I learned in China. I looked for new ideas that might even be radical, but I remained conservative because I rooted them in classical texts and acknowledged the source of what I was doing. I was radical in formulating new interpretations but very conservative in findings texts to say what I wanted to say. That is what it means to be part of a scholastic tradition of interpretation that is uninterrupted through the millennia.

For example, a major issue arose when translating for *The Web that Has No Weaver*. I wanted to cite a historical source on the ideas of *Ba Gang Bian Zheng* (八纲辨证 Pattern differentiation by the eight principles) or the *Bian Zheng Lun Zhi* (辨证论治 Treatment based on pattern differentiation) but couldn't footnote it because I couldn't find a classical reference. I'm good at footnoting—I never ever just copied something from another book without investigating the source—I always checked. So, where did the *Bian Zheng Lun Zhi* that was taught as the *"essence of Chinese medicine"* come from? I couldn't find the source of the phrase or this exact methodology. It took me years after its publication to figure out that the historical sources were absent because I was living in a period when the top Chinese doctors were attempting to make TCM compatible and able to co-exist with biomedicine. They were fashioning a revision of Chinese medicine while still trying to be rooted in the past. They wanted to develop a linear and logical medicine that could be an object of examination and modern licensure. They needed to bypass the contradictions and complexity of the historical tradition.

Bian Zheng Lun Zhi was a bridge created in the post-liberation period. This historical transition was made in the 1950s and continued well into the 1960s and 1970s, whilst I was studying Chinese medicine. I realized that all my textbooks contained a modernist and systematic approach to the training of TCM doctors in a formal academic environment who could not undertake a long-term apprenticeship. I was participating in the transmission of a *new* version of Chinese medicine which, at the time, I had believed was the only version. *Bian Zheng* (辨证 Pattern differentiation) is certainly a major interpretation of Chinese medicine, and is extremely important and useful. I think it's really brilliant, but I couldn't just transmit that. I realized then that I had to take a step back and so when I wrote the second edition of *The Web that Has No Weaver*, I put in some of what I learned from a long period of immersion in classical texts and reflection.

At that time, I was already shifting my career, and I wasn't sure if I should continue teaching. I was in intellectual turmoil. But I never lost my commitment to East Asian medicine. One way I pursued this, was through some Chinese doctor friends from Chinese mainland whom I helped out with obtaining a US Green Card (permanent residency). So, I asked them, *"If I give you classical Chinese texts and a red pencil, will you underline everything you see that's superstitious, psychological, religious or it doesn't make any sense to you?"* Three doctors did this for a long time. I mostly gave them *Ben Cao* (本草 materia medica) texts and some other books and they came back with an incredible number of materials about ghosts, emotions, virtues, and other things, that we never hear about in school or read in modern texts.

These Chinese friends found great things. For example, a beautiful discussion about *Xiang Fu* (香附 Rhizoma Cyperi) describes how it treats *cold anger*. I had no idea that cold anger existed in the tradition, but I did see it in my patients. I had just never encountered this understanding in my studies in China. I said to myself *"Hold it! Things have been left out that are important to me as a clinician in the West that may be less relevant in China. After all, cold anger might be culturally appropriate in China and not a problem…while in the West, it is felt as a very dangerous situation. Weird."* The red marks in the text brought to light all kinds of amazing things like this. While most of my Chinese medicine teaching, I knew that my education was a preparation to become a disseminator for the official and legitimate medicine of the People's Republic of China, at some point was comfortably expanded as long as I could find citations. I must say: China's medicine would not have survived without TCM, and TCM is a really practical way of learning the medicine without beginning an apprenticeship starting at the age of five. You don't need to memorize songs. Have I drifted from the question?

IS: The question was about your recollections of when you first returned from Macau.

TK: I was in intellectual turmoil at that time. I loved teaching Chinese medicine and this was my main occupation until the late to mid-1990s probably.

CB: It would be interesting to hear about the transition you made from being a teacher and a practitioner of Chinese medicine, towards established academia. Did you take a Ph.D.?

TK: I didn't do a Ph.D., no. I didn't take any other degree; my Chinese medicine degree is my only advanced degree. Never had time. How I got a position at Harvard and then became a professor is almost impossible to understand! I was having a hard time teaching Chinese medicine because I was having intellectual turmoil and I didn't want to be a guru. Today there are lots of people who can push back and say *"That's a little bit wrong!"* and *"You could say it this way."* and *"Ted, aren't you going a little in the wrong place?"* Today you'd be polite to me, right? And we'd be polite to each other but if I was wrong, you'd say I'm wrong. But in those days, no one was saying I was wrong. Maybe it was there and I didn't hear. I was worried about teaching a historically constructed medicine that is very complicated, something that is going to need many people to reconstruct and make sense in the West. In those early days, I didn't know how to embrace the contradictions between classical texts. I didn't realize that all scholastic medicines have multiple layers of interpretation. Both of you have been involved in the reconstruction of Chinese medicine from the historical tradition, in the sense of *"we're Westerners, how do we re-examine it for ourselves?"* Few people were doing that in the 1980s, some but not many. Giovanni Maciocia is certainly one.

So, I decided that I couldn't teach. I was uncomfortable about teaching Chinese medicine because I had to restrain myself from saying things that were problematic or different from what my teachers in China might say. Also, I wanted to be very careful about teaching materials I was reading from the classical texts that did not fit into the current TCM synthesis. You took my herb course in the early-mid 1980s Charlie, you must remember how I was putting in some intense psycho-spiritual stuff in there. I would run with the things my Chinese doctor friends had underlined, but I was worried about this. Also, I felt unable to teach on Saturdays, because I was also beginning to observe the *Jewish Sabbath*. In the midst of my angst, Harvard invited me to become a researcher. Few at Harvard knew anything about that stuff; I was needed. I thought I'd learn new things and be a reptile in a mammal universe.

This happened because there was funding for alternative medicine, and I got this great job. David Eisenberg asked me to find out everything I could about *"alternative medicine"*, and develop a course on alternative medicine for medical students. So, I went on to read every medical journal article on the topic, in all

disciplines, from basic and clinical science, to philosophy and history. I learned to understand the research approach of all kinds of disciplines and journals. Then I started looking at acupuncture research, and I came across an article from 1979, a randomized controlled trial (RCT) comparing acupuncture to sham acupuncture for dental pain. Sham acupuncture was reported as being 100% effective in reducing the pain. Part of my job was to design studies to examine if acupuncture is more than placebo. I looked at other acupuncture placebo-controlled studies, and they were outrageous. Placebo responses were super high, almost as high as you'd see in sham surgery. I thought that placebo effects were too big to show any difference between genuine acupuncture and sham acupuncture. I felt that doing a RCT before we understood placebo effects was going to be a death march. So, I decided to study placebo and for the last 30 years at Harvard almost all of my work was on placebo. Sometimes I helped with acupuncture research. Preparing to research placebo, I read all of the placebo literature twice over, no exaggeration, and I also began to publish relevant articles in top-tier journals like *Lancet* and *JAMA*. At the beginning, my publications were thought pieces.

I gradually realized what academia is about: you publish papers, you get money for research, you publish the data on that research, and then do it all over again and again. I said I could do that! I became a researcher.

Anyway, I finally put my first NIH application for a large randomized controlled trial to examine whether the outcome of being treated with placebo pills is different from being treated by a placebo device (sham acupuncture). This was not an acupuncture study but it was very relevant to acupuncture. It involved a cohort of 260 people, with repetitive strain injury of the arm—with a range of diagnoses involving the tendons, soft tissues and the nerves of the arm—including tendinitis, carpal tunnel, De Quervain tenosynovitis, and lateral epicondylitis. We compared a placebo pill to the Streitberger sham acupuncture needle. This got funded for $2.5 million in direct cost. It was incredible! My chief called me in and said, *"Ted you must give back that grant money right away."* I replied *"Why?"*, and he said, *"Ted, you don't know how to do any of that trial stuff. I was just being nice to let you apply."* I quickly pivoted and said, *"Oh I'm so sorry but I already gave away $75 thousand on a subcontract and don't have the money."* I spoke a lie because I knew I could do it. And so, I got this huge grant and just like my chief said, I really didn't know how to do most of the things I put in that proposal. But I learned and had enough money to recruit great collaborators.

Luckily, Harvard has a surplus of intelligent people so I approached a statistician and said, *"Hey, I have this money, maybe you can take part for one day a week and do the stats."* Then I got this trials methodology scholar and said, *"Listen, I got this money can you do this part?"* I also asked Rosa Schnyer, a great acupuncturist, to supervise the acupuncture. So, I divvied up the grant. I recruited all the patients myself. I got the data demonstrating that sham acupuncture was superior to placebo pills for pain, and published it in *BMJ*. Different placebo treatments have different placebo effects. This study gave me the feasibility data for my next grants and papers. I repeated the cycle many times. Then Harvard kept asking *"Do you want to get promoted?"* but I said no, which irritated everybody. And I kept telling them that: *"I don't want promotion—I've got a Harvard library card what else do I need in life?"* But they argued that they had to promote me to be fair because I kept publishing and had so much funding. My chief eventually began to frequently acknowledge his pride in my accomplishments.

I believe that I brought in about $50 million for research at Harvard over my career, and that meant that either Harvard or my hospital (Beth Israel Deaconess Medical Center) received an additional $43 million in overhead cost for the light bulbs, the secretaries, email accounts, phones, etc. This led to lots of appreciation coming my way. So, I built a team, and then at some point they decided to put me up for full professor. They convened a Blue-Ribbon Commission investigation to my credentials, because maybe I didn't meet the criteria for a professorship at Harvard. They had 12 people examining every documentation I had from China. They even sent an anthropologist to Taiwan, China and Macau to investigate the veracity of my documents. They visited every address. They did a full investigation because I apprenticed in Taiwan, China and then went to a *"patriotic"* school that wasn't registered with the Macau government. My school functioned under the auspices of the local *Returned Overseas Chinese* in Macau, and was not recognized by the local Portuguese colonial government. I was promoted and began to be very successful in academia. Now people would approach me all the time. I knew how to work grant applications. I worked as an advisor for the NIH and FDA. I started to accept some wonderful and amazing postdoc fellows, who knew much more than me, and for example, I would say something like this: *"We don't know anything about the genetics of placebo, let's look into that. If you are a good geneticist and you're interested in saying yes, come on just join in. We'll get money to support your career!"* Many of my fantastic post-doctoral fellows are now professors all over the world. My career was dependent on my post-doctoral fellows and colleagues. I have been a lucky person.

So that's what my career at Harvard was. It was a kind of placebo career but it was fun.

I also heard that when they gave me professorship, the President of Harvard University said that *"Make sure this never happens again!"* I've always been very public about being an acupuncturist. At some point, I stopped using placebo acupuncture in my research because some

of my colleagues in the acupuncture world like Rosa Schnyer would say, *"Ted, stop doing it, you're making it look like acupuncture is a placebo."* Instead, I realized that I could pivot to investigating placebo effects in mainstream medicine (Fig. 4).

CB: When you look at the world of Chinese medicine today, how do you feel about the way things are?

TK: I'm really impressed. The situation in the States may be better than elsewhere, I don't know. There are 15 to 20 good accredited schools that produce well-trained acupuncturists and Chinese herbalists. The education is really good most of the time. I'm really impressed. Acupuncture is available in most major hospitals in the US, and that's amazing. The level of education is getting higher. Younger people like you Ioannis, and you Charlie, are publishing things that are not just their fantasies, like in those early days. There is great scholarship around. Nonetheless, I think that the profession needs a lot more work to become a more solid body. I am also really impressed, especially by a lot of scholarships coming out. I haven't kept up with the practitioner/clinical literature but I regularly read academic publications like Volker Scheid's *Chinese Medicine in Contemporary China*, Kim Taylor's *Chinese Medicine in Early Communist China, 1945-1963*, Eric Karchmer's *Prescriptions for Virtuosity: The Post-Colonial Struggle for Chinese Medicine*, Sean Hsiang-Lin Lei's *Neither Donkey nor Horse,* and Bridie Andrew's *The Making of Modern Chinese Medicine, 1850-1960* and scholarly translations such as those of Sabine Wilms. These have helped me tremendously to understand what I went through in China. I don't keep up with the Chinese clinical literature and I don't have much time to read classical Chinese medical texts at this time. I am too busy running my placebo lab, but for pleasure and relaxation, I'll do some reading in Chinese medicine.

I also spend a lot of time trying to get acupuncture in the medical system. I often receive e-mails from clinical directors wanting to know if they should have acupuncture in their hospital. Usually, they ask me if acupuncture works and I say, "*Are you asking if it is more than a placebo or do you mean if it actually helps people?" "Both!"* they say. I reply that, "*The evidence is not clear yet, whether it's more than placebo, but whether acupuncture actually helps people, this is undoubtedly true.*" Or that *"The research evidence suggests that it is better than the usual biomedical care for a lot of illnesses."* In this way, I feel I'm being helpful to the profession.

IS: I don't know if you know, but in Arizona we have just succeeded in getting the law to define acupuncture as a system of medicine—which is great. I was involved in drafting the language for the Senate Bill 1080, and this hopefully will open the gate for more clinical research to be conducted, and for acupuncture education to enter regular universities.

TK: That's fantastic. It sounds like acupuncture is being viewed in a different way than just the new *Hocus Pocus*. I don't want to be excessively critical of the *New Age* movement, but I don't like spirituality that claims to be about healing. Healing is healing, but spirituality is generally about the dimensions beyond time and space, unless you're a shaman. And shamans need lots

Figure 4 Dean George Daley of Harvard Medical School gave Professor Ted Kaptchuk Harvard's highest teaching award on November 7th, 2023 (source from: Ted Kaptchuk).

of practice. That's my opinion, and Chinese medicine is not a *New Age* thing. Learning Chinese medicine is hard work. Also saying qi is about life energy or life force is really *New Age* talk. Qi is in the herbs, rocks, mountains and the sky. It's about the transformation capacity of all things. *New Age* makes Chinese medicine fuzzy in the wrong places. Intuition is important in Chinese medicine, but becomes accurate only after years of practice.

CB: Intuition is the system we use for jumping to conclusions.

TK: Yes, I agree, but I also think intuition is very important. All my research comes out of intuition. Generating hypotheses is about what you see out there, that other people are not seeing. That can lead to discovery, innovation and new revelations. Scientists use intuition but they ask for data that can be represented in a statistical manner.

CB: I've been writing a chapter on this for a book, I think it comes down to the difference between good intuition and bad intuition.

TK: What's the book about?

CB: I've been working on this book for over a decade or more. It asks *What is Mastery in Chinese medicine*? Or, for that matter in medical practice more widely. Obviously, it's not me pretending to be a master and teaching people, that's not what I'm about. Instead, it takes the subject of medical mastery as an object of inquiry, asking how was mastery defined historically. It's about masterful cognition of Warring States sages, it's also about the study of mastery in modern medicine—overcoming cognitive biases and that sort of thing.

TK: Great I love it! That's a real lacuna in the literature. Can't wait to read.

TK: Returning to the *Bian Zheng Lun Zhi* question, in my opinion, this is a post-colonialism issue. It's about how those who get colonized reinterpret their world in ways that are compatible with the Western, mostly Christian imperialistic world, even after they are no longer colonies. When I wrote the first edition of *The Web that Has No Weaver*, as I mentioned earlier, I could not find the historical first statements of *Bian Zheng* as the *"essence of Chinese medicine"*. You could cite old texts but it was not *Bian Zheng*. It took me many years to figure out that *Bian Zheng* was re-interpretation, a brilliant re-visioning to clarify Chinese medicine's *"essence"* for a renewed life in the mid-twentieth century. *Bian Zheng* was a theory that worked in the environment of academic medical schools. In the days of apprenticeship, it was not around. When I was in China, I was living this transformation.

Let me explain what I mean by post-colonialism. When the British took control of Bengal in the late 1790s they did a demographic survey to find out whom they had conquered. They went to the villages asking: *What's your name*? *Where were you born? What foods do you grow?* But when they asked about religion, they found there was no word for religion in Bengali or in any of the Indian languages. The British asked, *"Do you go to that Temple down there?", "Of course, I go there every day!", "What do you call that?", "I worship this deity, this is my Dharma!"* But there was no actual word for *religion* that they could define. Like *Bian Zheng*, *"Hinduism"* was a word created during the British Raj to tame the complexity of India. What we call Hinduism today was very much created by the West with the active participation of Indians who were trained in Christian schools like Vivekananda, Gandhi, Tilak, Ghose, and Aurobindo. For traditional cultures to survive and thrive in modern they had to reduce the complexity they all embodied. Religion had to conform to linear definitions.

The same thing happened when in the early 1800s Westerners started to examine Buddhism in China. There was no word for Buddhism as such so they invented it *Fo Jiao* (佛教). When I asked my Hong Kong Buddhist scholar friends about this, they said that the word *"Jiao"* (教) that was used prior to around 1820 meant *sect*, the idea that Buddhism was a single unitary thing, and religions did not exist.

So, the term Buddhism was brought into being by scholars at Oxford and Cambridge who saw a series of texts and labeled the core of Buddhism. They used the word Buddhism before the Chinese had it. The Chinese took this new word and they now saw it as *"religion"*, as a set of beliefs, doctrines and a set of sacred texts as opposed to a set of practices, rituals, and scriptures according to which you lived. A dharma. The Western Christian (mostly Protestant) idea of religion being something you had to believe in or have faith in, or a set of propositions that you endorse, did not exist. Your texts had to be universal. Not so messy. In this way they created the idea of religion which, I think, comes out of modern versions of Christianity. In modernity, thoughts have to be logical, linear, non-contradictory and susceptible for being tested in examinations.

Reading Jewish texts when I was trying to learn about Chinese medicine and culture, I realized that there was also no word for religion in Biblical Hebrew. The closest term in the Bible is *Awe of Heaven*. The word religion, with doctrines, making Judaism a set of beliefs also began around 1820. Here, Jewish people needed to reconstruct their religion to be more like German pietism, like German Protestantism. Then I realized that the Jewish texts had similarities to the Chinese texts. I can read the Talmud much better because I understand Chinese texts. I realized that reading pre-modern Chinese medical texts works like this, *"You take a sentence and you make it mean what you think it means*!*"* That's what the Talmud is. Chinese medicine *"scholasticism"*, as all scholasticism (Christian, Muslim, Indian, Buddhist, Confucianism) share a similar conceptual space. That is what all traditions that are based on canonical texts are: the revered texts have to be interpreted, reinterpreted, debated and explained. Post-colonialism eliminated this process. It makes everything neat. Ultimately, scholars

needed to reveal this interpretative process so we can get a better understanding of how traditions adapt to modernity.

So, I just wanted to point out that the whole question of post-colonialism, which has been a really important question for Bridie Andrews, Sean Lei and the other critics of modern TCM, that perspective was really vital in multiple parts of my life. And so, I feel really blessed to we have learned to triangulate this. I think we're lucky that we have the TCM *Bian Zheng Lun Zhi* as a bridge to early Chinese versions of the medicine. Otherwise, Chinese medicine would be in chaos and could not survive in cultures that give examinations and licenses. You could see this post-colonialism in China from the Republican period onward. That has been an important undercurrent that I rarely discussed in my teaching of Chinese medicine.

CB: Ted, how would you characterize acupuncture training in the 1970s and the 1980s in the US?

TK: Those were the pioneer days. In the 1970s and 1980s it was a passion. It felt like we were rescuing the world, that we were doing something that no one had done. We felt we were pioneers in a huge medical translation from one culture to another. It was a kind of non-violent revolution. The education may have been weak and there were very few textbooks, but the passion may have made up for it. Many of those pioneers became teachers and many are reaching retirement. The exciting thing is that East Asian medicine has finally developed a deep root in the West. It is here to stay.

IS: We also have a question about another aspect of that time, namely all the craziness that existed, about people in the West making up stuff about Chinese medicine.

The question is, besides the French pioneers, a lot of the discussion about Western TCM usually includes the founding acupuncture gurus, such as John Shen (沈鶴峰) and James Tin Yau So (苏天佑) in the US, or Jack Worsley and Van Buren in the UK. Did you meet any of these people? Do you have any anecdotes about them you would like to share with us?

TK: I met John Shen when I came back to the States. His medical supervisor—you needed one in those days—was a classmate of mine from college. I'm sorry to say that I wouldn't have sent my mother to him! He played games with me, and he was lying to my face. He immediately tried to play the guru game. The M.D. supervisor said when I observed Dr. Shen, Shen used acupuncture points he had never used before. I was sure he was trying to impress me with *"mystical"* or *"secret"* knowledge. I had met people like him in Taiwan, China and Hong Kong. He was allegedly the youngest son of a very wealthy Shanghai family. He apparently learned herbal medicine in Shanghai but studied acupuncture when he moved to America.

I tried to meet with Jack Worsley several times when I was teaching in the UK but it was difficult, because he kept cancelling our appointments. Putting it positively, I would say that he was a shaman and a charismatic healer. He didn't want to talk to me, because he was always too busy. I have patience but after the sixth time he canceled I said, *"Maybe I can just watch you work?"* What I saw, was a shaman at work. But I also felt that he had no ethical standards. He was saying things that were power trips over patients. He would say to a patient: *"You are so lucky you came to see me today; I will cure you of a lethal illness."* But was he a healer? Yes! I also believe that he and his many students have played a major role in the development of Chinese medicine in the West. He helped a sense of sensitivity, careful attention to emotions, and acupuncture that was sensitive to psychodynamic processes. Many of his students became paradigms of developing acupuncture that is sensitive to the *"whole"* person.

CB: I think Worsley and some others at that time, were afraid of being exposed. His students were told that they should not read any books on acupuncture or on TCM. Your book *The Web that Has No Weaver* was banned from their college. Like Van Buren, he seemed afraid that people might prick his guru bubble.

TK: Worsley and Van Buren were obviously into power, enhancing their guru status, and creating dependence, but I connected to Worsley at some level, and as I watched him work, he was able to do things shamans do with patients. After watching his treatment, I told him I was impressed at what I saw he could show me in 10 minutes of his time between patients. I praised his work profusely; I could tell he was very anxious to be with me. I remember he said he always treated the deepest problem a person had which was psychological. With hesitation, I said sometimes I only treat the superficial problems, like a twisted ankle or a sprained back with Ah Shi points. He responded that that was counterproductive. I said I would think about his idea. And he went off to treat another patient. I watched some more and I was genuinely impressed.

CB: Studying with Van Buren in 1981, I heard that a delegation of TCM doctors from China had visited the UK, and had asked to visit an acupuncture college. They went to Worsley's college and saw the Five Element style he taught. The doctors were very polite and said how this was different from the style taught in China. But they had apparently been unable to contain their mirth when they came to his office and read Wu Wei-ping's calligraphy certificate, which granted him *"a license to sell fish"*. I saw that Van Buren also had one of those calligraphy certificates on his clinic wall, so I asked the Chinese student in my cohort to tell me what his certificate said, but he was too polite and refused to give me a translation. *"OK,"* I said, *"but does it say anything about fish?"* Eventually he nodded a *"yes"*.

TK: I also heard of this story, but I never saw the certificate. So, I can't verify or deny its validity. But Worsley certainly had real power. Many of the people who studied with him are really amazing in the way they attend

to their patients. Overall, I think Worsley made a major contribution to the profession. These early people were desperate to learn and to teach, and they shook up the soil but it's hard to sift out the good things and bad things. They were all mixed up.

Did you study with any of the old school pioneers Ioannis?

IS: No, my teachers were all from China, so I was fully schooled in modern TCM. We didn't learn any of the European styles but I did meet many Five Elements (五行) practitioners later. You could see that there was a big difference of opinion in the way they did things. It was different, but I never had any negative thoughts about the way they worked. They do interesting work and I think they give an important counter-balance to TCM which we still do need.

CB: I attended quite a few of Dr. Shen's lectures when he came to Britain, but struggled to understand what he said. He had his own terminology. He would say things like *"This patient has qi-wild!"* which meant nothing to me. And he didn't give the Chinese characters which would have helped. Eventually I worked out that *qi-wild* was *Qi Luan* (气乱) and so, later on, I gradually was able to make sense of what he was trying to teach. He seemed to me like someone skilled in cold reading. His diagnostic approach was like cold reading, like a stage mind-reader.

TK: I could see you seeing him as a mind-reader. He always acted with great gravitas, seriousness and importance. Maybe he was doing cold reading, intuitive reading. As I mentioned earlier, when I visited him in the Boston area, he was doing a performance with acupuncture needles to impress me. He had no ability to meet me as another practitioner or even another person. Felt bad for him. The doctor who sponsored Dr. Shen in the US was a good friend of mine, and of course, Leon Hammer did a lot to make Dr. Shen's work more available.

CB: I'm wondering who you admired most in your early days in Chinese medicine. Long ago you mentioned somebody that you held in high regard in the US.

TK: Yes, that was a Buddhist monk born in the Bronx. When I met him in Hong Kong, he had 13 years of being a monk and lived in a monastery on Lantau Island. Besides being fluent in Tang dynasty Chinese language, he was trained in acupuncture. I might have mentioned earlier that he also had good skills in the Sanskrit language. He really changed my life to the point where I realized that I had to do something different. He lived in Boston for a long time after returning to the States. At one point he called me on the phone and said: *"Ted, I have to come over to your house right away."* And then, when he came, he started reading these things and I was like *"Crazy! This is all about patients ghosts and the color of their eyes, and how to treat these patients"*. And it was a text by Sun Simiao (孙思邈). Sun Simiao also talked about herbs for different levels of *samadhi*, and he listened to celestial voices. Of course, he cited ancient sources, but his interpretation of early Chinese texts was unique and challenging. He said things about herbs and formulas that I would never talk about, in order to preserve my rational veneer. I read so much of his stuff, but I mostly never taught it because I didn't know what Westerners would do with it. In my experience, my Asian colleagues praise Sun Simiao but prefer to ignore him. Sun Simiao had a big impact on me, and it broke the doors around the very rational framework of modernity that I had learned with TCM.

I want to say very clearly that Chinese medicine could not have survived without TCM. I think TCM is the only way we have to approach Chinese medicine in modernity. My teachers in Taiwan, China knew how to practice Chinese medicine by the age often by apprenticeship with their families. When they were six years old, they could chant the entire formulary in the lovely Qing dynasty *Tang Tou Ge Jue* (《汤头歌诀》*Versified Prescriptions*) or recite Chen Xiuyuan's (陈修园) *Yi Xue San Zi Jing* (《医学三字经》*Three-Character Classic of Medicine*) and other similar texts. They had an embodied sense of the medicine; they didn't need a framework. Later on, my old teachers would have read more, studied more and apprenticed with other teachers. That's what Chinese medicine was until the Chinese medical books were published in the 1950s and the 1960s when Chinese medicine needed to be integrated into a nation committed to being modern. Not knowing, I watched as TCM developed and refined itself. I used the 1956 new textbooks for teaching TCM but could see it evolving in subsequent official teaching material.

IS: I know those books. I looked into them as part of my master's degree in TCM diagnosis. The diagnosis volume merely covers the four diagnostic methods. You get TCM observation including the tongue, palpation including the pulse, auscultation, interrogation, and so on. It's quite odd, but they didn't include syndrome differentiation because that would be part of internal medicine. Then, in the second edition they started adding syndrome differentiation. Before that they didn't do this.

TK: I used some of those texts when I was working in China (Fig. 5). At the time, the newer textbooks represented a clear synthesis, so I preferred them. The texts I used the most, the ones I easily understood, were written in 1970, 1971, and 1972. Their text was very simple and really clear. They were written so that you didn't have to know anything about Chinese medicine to understand them. The people who put those books together were very famous practitioners, they were really great, the elite of the elite. Also, in China, I started buying every single book I found on Chinese medicine, mostly classical texts, and brought them back home. I've already donated all of them to the Harvard Library, which will

Figure 5 Photo of Professor Ted Kaptchuk's lecture at China Academy of Chinese Medical Sciences in Beijing, 2015 (source from: the authors).

maintain as an intact collection and keep open to the public.

Qin Bowei (秦伯未) was my favorite author. I remember that he proposed 18 categories of medicines and other ways of systematizing the tradition in around 1953. It was rejected. They had to compromise by making it simpler and simpler than they actually believed it needed to be. I want to say very clearly that without this work of making everything clear, Chinese medicine would be in a total chaos, and not have survived into modernity. In a peculiar way, I think we may need Western scholars to go into this pre-modern chaos to see what we find.

Today, an important thing in Chinese medicine is the WHO's ICD-11 (International Classification of Diseases) project. That work is unbelievable. I was pleased to see Charlie involved in that initiative. TCM is part of the international standard of disease classification.

Yet, there were also some issues, China was invited to the meetings and they also invited Korea, Japan, Malaysia and Indonesia. China had a delegation of a hundred people but the Koreans and the Japanese each had just three professors in attendance who said that each country should have one vote. In the end, the final version that Charlie and I were involved in, included only Chinese people. There were no Koreans or Japanese—it wasn't inclusive enough or fair for other interpretations of the tradition. Still, for Chinese medicine, the ICD-11 is a significant achievement.

IS: Ted, in the 1980s you gave many lectures in the UK, Holland, Germany, Australia and other places, and your work strongly influenced many of the early pioneers such as Peter Deadman, Giovanni Maciocia, Charlie Buck and many others. What can you tell us about these lectures? Is there any record of them?

TK: In the UK, Giovanni mostly organized the lectures. So, I just came and taught. What did I think about them? I loved them because I learned so much!

IS: What did you teach? Have you kept a record?

TK: When I first taught in the UK, around 1982, I was teaching an introduction to Chinese medicine. Essentially just the materials from the forthcoming *The Web that Has No Weaver*. Later, I started teaching Chinese herbs, and this matched an herbal formula to a diagnosis. Towards the end of the two-year series, we would have patients coming in and the whole class would diagnose them. Not sure if you remember this Charlie, but everyone could quiz the patient, and then everyone would write down the diagnosis and formula they would prescribe. People would reach all kinds of different diagnoses. My personal diagnosis usually coincided with the majority, but there were also other diagnoses. There was always at least one diagnosis in the room that I felt was better than mine. And I really enjoyed watching multiple ideas emerge at the same time. It gave me a sense of the intuitive processes involved, and that was also very important for me.

Then, of course, there were also people that were making up things, and didn't see the actual patient. It was like they had missed the patient totally. Maybe they were saying things that no one else could see, who knows, but I accepted that too. The herb class was about herbs and not diagnosis. Mostly I was teaching the basic material from *The Web that Has No Weaver* in its formative stage. Later, for the herb courses I used, Dan Bensky's *Ben Cao* translation, alongside my own reading of various texts from China on the treatment of disease. Towards the end of my herb teaching, I incorporated information garnered from pre-modern texts.

IS: We spoke with Peter Deadman a few months ago, and he mentioned that the materials from your lectures in the early 1980s started circulating and attracting the attention of practitioners who had trained with Van Buren or Worsley.

TK: Yes, when I first started teaching these materials it was at the New England School of Acupuncture, in Boston. Copies of the notes from there reached the UK quickly. Everyone wanted more knowledge. Giovanni and others really liked the notes. Giovanni's partner at the time, Man Xing, helped him bring me over to the UK to teach TCM. Then, some people who took the course in the UK, who came from countries such as Holland, Germany, Italy, Greece and Australia invited me to teach in their countries after that. Everyone was deeply passionate about this medicine. This was not learning a medical skill; this was a passion to make the world a better place. People did not seem to worry if they would make a living from Chinese medicine. They were just

going to transform the world. People really wanted to learn, and I was so lucky to be in a position to help out.

TK: Charlie, how are the professional licensing procedures in the UK?

CB: The schools and universities offering TCM degrees in the UK are accredited to a good level, and we have good formal self-regulation processes in place. We wanted to be well-placed for state regulation. However, three decades of lobbying the government for statutory regulation have been resisted, and so poor training and weak regulation exist alongside the serious players which is unhelpful. Also, a megalithic state health service dominates things. The NHS, protects its own interests which also impedes the advance of the serious acupuncture and TCM professions. We are held back more than those countries that have insurance-led healthcare which creates more of a free market. I would say that the standard of our professional practitioners is generally very good.

TK: Yeah, we don't have much resistance to acupuncture anymore in the States.

CB: Is retirement on the horizon for you now?

TK: Yes, I'm pulling back. I'm doing one last big placebo project, which is not related to acupuncture or Chinese medicine, and after that I'll pull back more. I already stopped accepting any new post-doctoral fellows and I stopped writing my own grants. But I am still helping out the people that I've trained and lending a hand to grant applications when colleagues think I would be helpful. I probably will help on some acupuncture research projects. I just have this one project to complete, and then I'm going back to hopefully more work on my memoirs, studying Jewish texts and maybe reading Chinese medicine for pleasure. Right now, I'm still very active.

IS: How would you summarize the last 50 years of TCM in the West? What do you think went right what went wrong?

TK: I think East Asian medicine has just had an incredible and unbelievable ride in the last 50 years. When I left for China in 1970, Chinese medicine was non-existent except for Chinatowns. When I returned in 1976, lots of pioneers were already established. Then it just started taking off with Westerners. Now, we have developed a professional infrastructure of institutions and of clinical practice. Acupuncture has become part of standard healthcare, in the States at least. Many insurance pay for acupuncture. It has become institutionalized into hospitals, and has a really burgeoning intellectual community of practitioners. It would be nice if the academic world could give our schools more support in terms of research and writing. But there's not much money in for the Chinese medicine education establishment, beyond training practitioners. I think we've had a really great start and I think we'll keep growing. The main thing is that we help patients and reduce unnecessary suffering.

IS: Many scholars have followed in your footsteps, first people like Dan Bensky, Bob Flaws, Giovanni Maciocia, Charles Chace and many more. And now we have a bright younger generation such as Arnold Versluys, Eran Even, Sabine Wilms, Lorraine Wilcox, and so many others. People who have elevated TCM scholarship to a high standard. Yet still, most of our scholars operate outside the established academia. How would you describe their impact on medicine and in the established academia?

TK: Academics only ever consider seriously the ideas of other academics. If you're not an academic, your ideas are not meant to be studied and explained. Needham, Porkert, and Unshuld were academics. People paid attention to them, at least some did. Young Turks like Hsu, Volker, Lei, and Bridie are being read in the Faculty of Arts and Sciences because they publish in academic presses.

I hope that, as our profession gains more influence, scholars like Versluys, Even, Wilms, and Wilcox will also be studied in academia. This may be a long time off. In the meantime, our own schools and colleges need to begin to support the emerging scholarship as foundational to our profession. Schools need to support scholarships. If I hadn't switched to placebo studies, I would never have reached the top tier of academia. I think we have to continue to publish for the sake of a deeper understanding of China. Ultimately, it is an issue of power. Asian medicine has some power in China, but less in Korea, Japan and Vietnam. In the West we have even less power. If we continue to grow as we have in the last 50 years, we'll gain much influence and recognition. And our scholars will gain more space, influence and recognition in academia. I hope so. We are trying to change the world; we should temper our expectations but always aspire to exceed them.

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Interview

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An Interview with Peter Deadman—Acupuncture Pioneer and Founder of *The Journal of Chinese Medicine*

Ioannis Solos[1,✉], Charles Buck[2], Peter Deadman[3,4]

Abstract

This interview was conducted on August 21st, 2022 by Charles Buck and Ioannis Solos. Peter Deadman has worked in the field of health promotion for 50 years. He co-founded Infinity Foods (an organic and natural foods workers co-op) in 1971, followed by the Brighton Natural Health Centre—a charity dedicated to teaching ways to improve personal, community and planetary health and wellbeing. He qualified as an acupuncturist in 1978 and in Chinese herbal medicine in 1990. He founded *The Journal of Chinese Medicine* (UK) in 1979 (Fig. 1), and co-authored *A Manual of Acupuncture* (published in 1998). He is the author of *Live Well Live Long: Teachings from the Chinese Nourishment of Life Tradition*. He has taught Chinese medicine and health promotion internationally for decades and is a dedicated practitioner and teacher of *Qi Gong* (气功).

Participants:

PD: Peter Deadman
IS: Ioannis Solos
CB: Charles Buck

The interview:

IS: In the 1970s you ran a successful natural food business. Today, it would seem like a natural transition from such a business to a holistic medical system like acupuncture, but at that time acupuncture seemed strange to most people. What influenced you to learn this medicine?

PD: Actually, it was a natural progression for me. I was attracted to the philosophy behind macrobiotics, a Japanese dietary system developed by George Oshawa (櫻泽如一). It springs from the Japanese traditions so it was already rooted in Japanese philosophy and yin-yang (阴阳) theory. Albeit a slightly odd interpretation of yin-yang theory. I took it quite seriously and attended seminars and workshops where I was introduced to shiatsu. We were given pictures of the channels and we'd palpate acupoints which was part of the macrobiotic system. That just led naturally into acupuncture, so when I got tired of the food business and wondered what to do next, acupuncture seemed the thing that was calling me.

IS: This was the 1970s, in the years after that famous article in the *New York Times* when people started looking at acupuncture. It wasn't exactly mainstream and very few people understood what it entailed.

PD: Yes, but I wasn't interested in the mainstream—I mean when we opened our shop selling brown rice, miso and seaweeds we only had two or three customers a day. You could say I was an early adopter.

CB: Peter, you've played a key part in the westward transmission of Chinese acupuncture over the last 50 years. How would you describe those early days of acupuncture in the West, for example, in terms of scholarship, and in terms of depth of knowledge of the teachers and practitioners of that time. We're talking about the late 1970s.

PD: When I started at acupuncture school in 1975 it was extremely challenging. There were barely five books on acupuncture in English. One was the Beijing Foreign Languages Press book of acupuncture points, but that contained no theory. Inevitably, most of the people who were teaching then knew very little about Chinese medicine; they were more influenced by their background in things they knew such as naturopathy, osteopathy, homeopathy and psychotherapy. So, they created their own hybrid version of what acupuncture was. It was quite difficult to be a serious student, to really make sense of Chinese medicine theory. Luckily, it was possible to learn the acupuncture points well which was one good thing that

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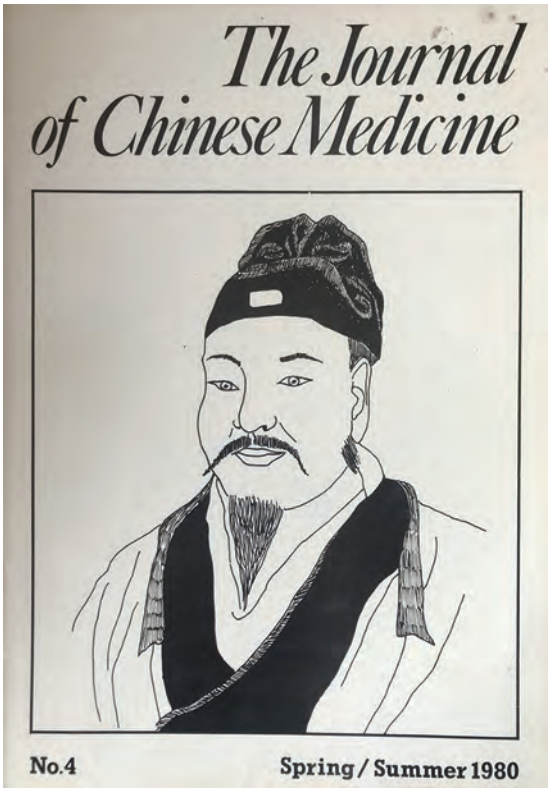

Figure 1 Front cover of *The Journal of Chinese Medicine*, published in 1980 (source from: the authors).

came out of it. It was challenging and it was not really for quite a few years before China opened up in the very late 1970s or very early 1980s, that it became possible to begin studying at a higher level.

CB: Your initial study was under J.D. Van Buren, the osteopath and nurse who founded a UK acupuncture college in the 1970s that emphasized *Zi Wu Liu Zhu* (子午流注 Midnight-noon and Ebb-flow Doctrine), *Liu Jing* (六经 the Six Classics) and *Yi Jing* (《易经》*The Book of Changes*) ideas. At that time, he was seen as a leading figure. What did he teach and where did he get his teachings from? Who else was involved in the transmission of acupuncture in the UK at that time?

PD: Well, Van Buren's thing was what we called "stems and branches". I've no idea where he got this material from. I did meet an International College of Oriental Medicine (ICOM) student who tried to trace the thread, having been told that the source of Van Buren's teachings on this came from Korea. She visited the family he claimed to have studied under but they said they had never heard of him, so I really don't know where his stems and branches teachings came from.

I don't want to be rude about the dead but I had little respect for him. He behaved badly, he used to recklessly steal anything he could get his hands on and claim college copyright on it. He made theory up as he went along—it was embarrassing. I remember being in the teaching clinic when a patient returned (where treatment was usually every six weeks) and Van Buren asked, "*How did you feel after the treatment?*" The patient said she felt quite tired after the treatment. Seeing that Taixi (KD3) had been needled, Van Buren pronounced *never to treat KD3 if the patient is tired*. That mythology was written down and hundreds of students accepted that as fact for many years, and probably still do. So, it was a chaotic way of teaching, in my opinion he was not a great example.

Somehow, though, Van Buren attracted people of merit and worth. So, Giovanni Maciocia, Julian Scott, and many others who contributed to the understanding of traditional Chinese medicine (TCM) acupuncture, studied with him. Maybe the confusion that he created around his undigested understanding of Chinese medicines purred people to study more deeply in the years that followed—that's what happened to me. In my mind he was an example of everything I didn't want to be, and ironically that was quite an inspiration for me!

IS: I believe that Van Buren was an osteopath and a naturopath, also that he did an internship with Dr. Wu Wei-ping (吴惠平) (a TCM doctor who tutored Westerners in brief internships at his clinic in Taiwan, China) for a few days, and also went to Korea for another few days, but essentially, he was just visiting, but I don't think that he ever learned in East Asia.

PD: I know you also want to ask about J. R. Worsley [founder of a UK acupuncture college in the 1970s that taught a novel *Wu Xing* (五行 the Five Elements) style of acupuncture] who was the same. They had completed little formal study in acupuncture and Chinese medicine but they developed systems and interpretations of their own. You can't criticize people for the lack of opportunity to study, that would be unfair, but they had absolutely no humility. There was no suggestion that they were anything other than great experts and their students were encouraged to treat them as great masters.

CB: Were there any other people teaching at that time, in the 1970s?

PD: I can only say none that I knew of, no.

IS: So, basically, if you didn't learn from Van Buren you had to go to Worsley and that's it?

PD: The story was that three people studied with Wu Wei-ping: Van Buren, Worsley and a doctor called Joe Goodman (a key architect in organizing self-regulation for the UK profession). This is not gospel; Peter Eckman would probably know better. All three studied with him and they came back to the UK with a plan of setting up a college. But they fell out with each other and they went and set up three separate schools. Joe Goodman's school was simplified for those with medical qualifications.

CB: There was somebody called Sidney Rose-Neil as well.

PD: Yes, he was part of Joe Goodman's acupuncture school.

CB: So, did you ever meet Jack Worsley?

PD: I went for treatment once, because I was having some health problems, also I was curious to see how he

worked. That was it, I didn't go back. I feel very critical of Worsley's teachings too.

IS: You can be critical in this interview; this is a historical interview so you can say exactly what you think.

PD: Okay, Worsley was a charismatic man who elaborated a simplistic Five Element theory into an all-encompassing system, one that appeared to answer every question. It seemed very mystical, philosophical, spiritual and so people loved it, but it had very little connection—as far as I can see, with any Chinese medical tradition. Charlie Buck knows more about this than me, obviously. Five Element ideas were in the tradition but I don't think they were applied in that way and his theory of *causative factor* again, I don't know, but to me it sounded very much like homeopathy's idea of *miasm*.

So, in 1981 I went to China on a trip organized by Giovanni Maciocia, and when we came back, four of us (Giovanni, Julian Scott, Vivienne Brown and myself) started writing what we called a postgraduate course, to teach China's TCM to practitioners who'd graduated from Worsley or Van Buren's schools. Nearly everybody who came was from Worsley's school and knew absolutely nothing about Chinese medicine. They had never looked at a tongue in their life. Traditional diagnosis wasn't taught at that time and his students were forbidden from reading anything that was not written by Worsley or his Five Element acolytes. This was shocking to me.

CB: There's a curious thing that's been happening in the last few years, where actually there's been an interest in Chinese mainland in some of the Five Element styles, some of the Five Element teachings.

PD: Yes, Nora Franklin, a Worsley graduate is doing this, I think.

CB: Yes, she's one of the main ones. It is really curious that a mutated form of the tradition is being exported to Chinese mainland! There are hundreds of thousands of TCM doctors in China, and in percentage terms it may not be many that are following that route, but I wonder how you would look upon this development. Is this just a sideshow, a curiosity?

PD: It's difficult to say. Probably one thing that Chinese medicine in China could learn from is the very patient-centered approach that was embodied in the Five Element system.

Irrespective of what acupuncture theory you adopt, if in the first consultation you take one and a half hours with a doctor attending, listening, and being curious about every single aspect of your life, from the precise state of your bowels to your relationship with your mother, that in itself is powerful. It is very attractive, very compelling and probably a powerful placebo.

CB: So, before we move on from the training side, I'm just wondering what other routes existed for a British person to study acupuncture and Chinese medicine in the mid-1970s?

PD: There were schools in America that sounded quite attractive but I was based in the UK, so I wasn't going to move to America. China was closed, and there was no way of getting there to study.

CB: France?

PD: There was a French tradition of acupuncture that was strongly influenced by its colonial presence in Vietnam. There were French authors such as Albert Chamfrault (a prominent French doctor publishing translations of acupuncture texts in the 1960s). I read a little French so I did use his book. Also, I know Giovanni Maciocia was influenced by that tradition. But I didn't really feel that that was a promising route to follow.

IS: Do you think that teachers like Wu Wei-ping and the Korean teacher that Westerners contacted actually respected the students? Did they really teach those who came to visit?

PD: I have no idea.

IS: Because I heard that they used to give out certificates to people.

PD: The story is that you just paid him some money and you got a certificate. When you read Van Buren's biography or Worsley's on Wikipedia it sounds like they were designated as masters of acupuncture by Wu Weiping, but I imagine they just paid a few hundred dollars.

For their faults, and their faults were many—I find it hard to forgive Van Buren because of my own very distressing personal experiences—but they were pioneers; they did play a part.

IS: Do you have any anecdotes about training (with them)? Anything from that period that's maybe amusing or interesting or …

PD: At the beginning of the third year, I was in a lecture with Van Buren and I just got up and walked out, I was despairing of the course and I was going to quit.

But luckily Giovanni was also teaching us and he had some lecture notes from Ted Kaptchuk who had been teaching TCM in the US after studying in Macau. This was the first time I encountered a version of Chinese medicine that made sense.

I started practicing in the college clinic as soon as I qualified. So, I was in the college clinic, very inexperienced and trying to practice what Van Buren was teaching. There was a patient who had been coming to him for years with rheumatoid arthritis and she had not experienced any benefit whatsoever. Nothing! But because the whole ethos of the school, and particularly the people who ran the appointment system, was that getting to see Van Buren was such a privilege, such a rare opportunity, even if it meant coming every six weeks, people just kept coming. Van Buren passed her on to me. At our first appointment she said she didn't think she should come anymore, and she felt she'd been rejected by Van Buren and anyway acupuncture had never worked.

I said "*Hold on!*" and went to see Van Buren. I said she wanted to quit and asked what should I do. And he said, "*…um well, let's see. Her birthday is such and such, so stems and branches ….do Naohui (SJ13)*"—based on some complicated metaphysical system. I went back and

thought *"I'm not going to do that"*. Instead, I did the most basic of channel-based treatment, local and distal points, according to the affected areas. She came back and she said that this was the first time she had experienced any benefit from acupuncture. So that was a seminal moment for me.

CB: You also had a practice in Brighton at that time. So how did that go? Was your clinic a success?

PD: Julian Scott had qualified a year or two before me and was working in Brighton too. I was still involved in the health food shop so I practiced in a room connected to the shop. I had quite a few patients and I did my best. I was practicing what you might call—that horrid word—TCM acupuncture (laughter). So, I muddled along. Then in 1981 I went to China for four months, with this trip led by Giovanni which was just far more complete, this was one of the two most significant Chinese medicine trainings in my life.

CB: How did that influence your style; how did it change things?

PD: The first few days in the clinic in China, the wonderful doctor I worked with was clearly surprised that I had a reasonably good grasp of theory. Each time he said that his patient had heart yin deficiency or something like that, he expected me to ask what the hell is that? But I was able to have an intelligent dialogue with him. That surprised him. But then, when we had the chance to needle patients, he just couldn't believe we were so hopeless. We knew nothing about needling. So, one of the first things I learned is how to use the needle as a tool. Needling is not an afterthought, it's not as though you do all this intellectual work and come to a conclusion and then, like some UK practitioners do even now, once the intellectual work is done, the needle gets popped in and that's it—nothing more.

And I began to see how ridiculous that is. Acupuncture is a powerful intervention and the doctors in Nanjing were doing it in a very powerful way. I saw the most wonderful results. Fantastic, astonishing results, every day. So, that really influenced me. Although it was only four months of intensive training, spending several hours in the clinic and several hours in lectures every day, it gave me a lot of confidence.

When I got back my local newspaper reported on my trip, it was extremely unusual to go to China to study acupuncture at that time. This big spread in the paper meant I was getting patients for at least two or three years after that. Within weeks I was treating 70 patients a week, and I had a three-bed clinic, which is how the hospital in China operated. This led to the four of us teaching and led to Giovanni and myself inviting doctors from China in 1984 to come to London. That was the first time any Chinese doctors from China had come to teach in the UK. We called them the Nanjing Seminars and *The Journal of Chinese Medicine (JCM)* published a transcript booklet of the lectures (Fig. 2).

CB: I was there, these were very senior doctors.

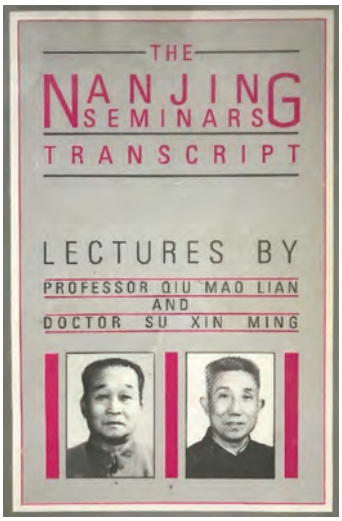

Figure 2 The Nanjing Seminars transcripted by Professor Qiu Maoliang and Dr. Su Xinming (source from: the authors).

PD: Absolutely, one was Professor Qiu Maoliang (邱茂良). He was towards the top of the tree, and as you know, in China that doesn't *always* mean that they know a lot about medicine. He certainly did and he was very passionate about treating tuberculosis of the lung with moxibustion—snake moxibustion down the back. The other was Dr. Su Xinming (苏新民), who was Giovanni's mentor in China, and they formed a very close relationship after our study trip to Nanjing. That was quite unique. The following year we had some other doctors coming over to teach. Travel was difficult and we did not have such experts living in the UK at that time.

IS: That sounds amazing! Yes, in the 1980s traveling from China to the UK was not an easy feat. Even getting the visa was not easy.

PD: Oh, we had a nightmare. Two days before they came, they still had no visas. We had to go both to my Member of Parliament (MP) and to Giovanni's MP to put pressure on them to fix things. Thank goodness it worked.

IS: Westerners were just interested in acupuncture, especially back in the mid to late 1970s and early 1980s. Chinese herbal medicine has been missing for a long time. How did this change, especially in the UK?

PD: It's obviously changed since then—but it hasn't changed that much. The number of people in the UK who study and practice Chinese herbal medicine is quite small for a number of reasons. Number one is that herbal medicine is difficult and challenging, more challenging than acupuncture. Also, people here have been concerned for a long time that the future of Chinese herbal medicine in the UK is uncertain, for example in relation to restrictions on the herbs that are allowed to be prescribed. There are already controls on quite a number of substances that are not permitted in the UK. There was also a lot of media publicity on two things. One media story was that unscrupulous Chinese doctors were adding

steroids to their skin creams. Secondly, there was publicity about the supposed kidney failure and death from prescribing *Guang Fang Ji* (广防己 Radix Aristolochiae Fangchi), an accusation that has been disputed. These incidents led to negative publicity and consequent lowered intake on training courses. I think Chinese herbal medicine is stronger in Switzerland, Austria, Germany, Australia, New Zealand and America. I have mixed feelings about people training in both acupuncture and herbs, because as both of you also know, when I was in China it was very clear to me that there were acupuncture specialists and there were herbal doctors and these were two completely different strands of medicine.

The herbalists maybe knew a little acupuncture and the acupuncture practitioners knew maybe a little herbal medicine, but their psychology was different. Julian Scott pointed out that in Western medicine you get clear personality types; you get the surgeons who are very practical and are not great intellectuals, also not terribly interested in asking you anything apart from which leg to cut off. They just like to get stuck in with their surgery. Then there is the ideal family doctor or the consultant, who knows the patient, talks, asks, and so on. Julian Scott's view was that acupuncturists are more like surgeons. They've got these tools and they want to know where it hurts and they don't want to know too much information. Tell acupuncturists that you've got pain in the middle of your epigastrium and they're already wanting to stick a needle in *Zhongwan (CV12*)! They might carry on talking to you but there's an urge to just do their stuff. Whereas the herbalists are often more intellectual and anyway need much more diagnostic information—because you need a really good mind to practice Chinese herbal medicine. So, I think one result of the modern education system, certainly in America where people almost by default learn acupuncture and herbs together, is not necessarily a good thing, because obviously the risk is that they don't really master either one of them. If you can ever master either of these!

CB: In the last say 45-50 years we've seen quite a few changes in the profession, in the UK and in Europe as well. I'm wondering about your perspective on the things that have happened since those early days. Summarizing the last 40-45 years, how would you say things have changed?

PD: Well, first I'd say it's an explosion of Chinese medicine. If we take books as an example, I mentioned before there were just four or five books. How many thousands of books are there now? When I was studying, we were desperate for information. That was very hard to get which was a great hindrance but it did create a hunger for learning. Maybe today students feel a bit overwhelmed. They shouldn't, because they still don't have to learn anything as much as biomedical doctors, but they might still feel overwhelmed by the number of articles, the internet, books, methods, teachers and so on. I think that's great. It's quite a big question, isn't it?

CB: I'm wondering, also, about the professional side of things, the way that the profession has organized itself over that time, and how education has changed as well.

PD: Yeah, I'm not a great person to talk to about the professional organization. I was involved very much in establishing the British Acupuncture Council, but that was long ago and the last time I got involved in any politics.

I think education is head and shoulders above what it was. I don't practice anymore but I think if I went back to practice, I'd feel under-skilled today. I would not be up to the level of people who are studying now, particularly Chinese herbal medicine.

By the way, I'd like to fit in a few words about Dr. John Shen (沈鹤峰).

IS and CB: Yes, please do!

PD: Ioannis, do you know who he was?

IS: Yes, of course!

PD: Did you go to the seminars, Charlie?

CB: I did, yes! I recorded them and studied what he taught.

PD: Oh, you recorded them! Brilliant! Well, he came over from New York a few times around the mid-1980s.

CB: That's right, 1985 to 1986.

PD: He had an enormous influence on me and probably on everybody who came to his lectures. I didn't really learn any treatments or techniques from him, he wasn't about that. What I learned from him, and that I valued so highly, was that when he first qualified, he didn't have many patients so he would sit with them and constantly ask questions. The key word in his mind was *why*? Why has this person reached this point in their life? And why does he have this problem?

John Shen was a genius, in a way that I could never emulate, in his ability to pin down the most extraordinary causes. Behind this was this question, *why*? So, when confronted with the patient, you don't just go, "Well, this person has qi and blood stagnation", "Oh this person has deficiency" or "They have damp heat" and that leads on to a treatment, which I think is probably how it's often taught.

If you identify the pattern as liver qi stagnation (肝气郁) and then simply give a formula, it's a shallow treatment. It doesn't ask the meaningful question of what's going on with this patient and why. And that is one of the great treasures of Chinese medicine: the causes of disease. It's so important because it's so obvious, isn't it? That, first of all, if you can identify a cause of disease or causes, they may still be ongoing at the moment, so your treatment is going to have a limited effect or no effect unless the causes are addressed.

I remember a patient with epigastric pain in those busy years after I came back from China. She had been through the whole medical process, endoscopy, tests, everything—but it didn't help. In a rush, I needled Zusanli (ST36) and felt confident because it seemed a very simple case. Next week she reported feeling better just for a day,

which is normal. She came back again and again had been better for a day. This happened a few times before I finally gave myself a smack on the wrist, sat down and talked to her in more detail. I soon discovered that she was a single mother with four children under seven, and in the evening, she sat down and ate with her children. It was a scene of absolute chaos, with kids dropping food on the floor, knocking things over, shouting and arguing, fighting and demanding water. There was no way she could have a healthy digestive system.

I said to her, *"You've got to feed your children first, even if you end up eating late, which is not ideal. Eat when it's peaceful."* Within two or three weeks the problem went away.

Dr. Shen taught us to always ask these questions, and to look for causes even if it's in the past and can't be changed, such as a constitutional pre-birth issue or a problem from childhood. We're creatures of meaning, and it is important to give context and meaning to what's going on for the patient—although sometimes it is simply the random finger of God, isn't it? However even then, if you can give context, it can be quite healing to a patient.

People have often heard things from friends and family: *"Why are you always so upset?" "Why do you get so angry?" "Why do you eat your food so fast?" "Why don't you ever walk anywhere?"* Things go in one ear and straight out of the other. But one role that we can perform is to hold a mirror up so that people can see things properly for the first time. I feel that is at least 50 percent of the job of the doctor, any doctor, and I learned that from Dr. Shen.

CB: I think it would be useful, Peter, to just say a few words about Dr. Shen's background, for the readership. Because he died some years ago, and there will be many who don't know who he was, or his background. Could say a few words about that?

PD: I heard he was the third or fourth son from a wealthy family in Shanghai. One son was told to go into business and one had been told to do something else and Dr. Shen was told to become a doctor. He said, *"I went to the library and I looked at the books on Western medicine and the books on Chinese medicine, and there were ten times more books on Western medicine, so I decided to study Chinese medicine."* He also said that *"Chinese medicine is easy to study but hard to practice, and Western medicine is hard to study but easy to practice."*

CB: And that was in the 1930s, I think.

PD: Yes, maybe even earlier, the 1920s or 1930s. He then left Chinese mainland to go to Taiwan, China. I guess because of the historical circumstances. He practiced in Taiwan, China for a time and said he treated up to 200 patients a day as an herbalist. That's where he developed his rapid diagnostic skills, accumulating a vast amount of data about human beings. He had a very astute, very smart, Sherlock Holmes kind of mind. He practiced facial diagnosis, which personally I'm skeptical about, but it seemed to work for him, and then he just wrote the prescription. At some point, he moved to New York and he even appeared in a fictional form in one of Woody Allen's films.

He had a great student, Leon Hammer, who wrote a challenging book on Dr. Shen's method of pulse diagnosis. A very unique method. That was the other thing he excelled at; his pulse-taking was beyond most people's capabilities.

So, he came to London three times and maybe influenced our whole generation.

PD asks CB: So, you were influenced in the way that I was by him?

CB: Oh, very much. A lot of what he said I couldn't understand at the time. He would say this patient has *"qi-wild"*. That, if you had a significant trauma as a child this could trigger a long-term imbalance he referred to as *"qi-wild"*. I didn't have a clue what Dr Shen was talking about, I'd never heard those words. Later, I investigated and found out that the character was *Luan* (乱) as in chaos and so I began to understand what he meant. *Qi Luan* (气乱) was a step beyond *Qi Ni* (气逆)—rebellious qi. So, with his pre-TCM style, Dr. Shen was instrumental in catalyzing my studies, seeking to understand the classical thinking behind what he was talking about.

PD: I mean he had his own lingo, didn't he? He didn't really use Chinese medical terms. He'd say things like *"nerves tight!"*

CB: Yes, that's right! The difficulty was just that he had his own idiosyncratic translations of standard terms from the tradition.

IS: In 1979 you founded the journal of *JCM* that continues to thrive today. Would you like to say something about that?

PD: Yes, as I said, there was a desperate lack of written information on Chinese medicine. In the years I spent in the health food business, I'd got used to the idea of making things happen, we had to do everything ourselves. We never had any money, so whatever problem we encountered, we had to learn how to do it. So, it seemed to me that the answer to this lack of the most basic information was to start a journal, which functioned as a kind of textbook.

In the first issues, we had articles like *"What is wind?"*, explaining things such as how wind can be internal or external, or *"What are the functions of the spleen?"* Students didn't have access to this very basic information. In the first few years it primarily offered the kind of things that you get in a textbook. As the years went by it changed and developed, it drew articles from probably every prominent teacher in the Western world as well as many Chinese authors.

There was pressure to make the journal allied to one of the competing UK organizations. Having studied at Van Buren's ICOM there was pressure for *JCM* to be a mouthpiece of ICOM. But to me the journal had to be independent of the infighting between the different

organizations, I believed it should stand above all that. I can't say much more about it other than that in the early days it was typed on a typewriter, and that it was produced before computers, with the titles created using Letraset!

PD to CB: I don't know if you remember Letraset?

CB: I do, yeah (laughs). It was a crude way of creating graphical text using wax letters rubbed onto paper. Painstaking and hard to get straight.

PD: For many years it only had a couple of hundred of subscribers so it was a labor of love. It never made any money until I decided to add a more commercial arm to it—a website and a shop. It was initially selling books and eventually equipment and so on so that's what kept things afloat.

IS: We all subscribed when I was a student in the 1990s at Middlesex University.

PD to IS: That was a good education?

IS: It was a great education, yes. Shortly after graduation I went to China and left the UK. But at the time there was Middlesex, Westminster and quite a few other UK universities hosting TCM courses. These have almost all since closed, and the Northern College of Acupuncture is still there, but very few other places survived. What do you think happened?

PD: My guess is that it was two things. One is economic. People realized that studying acupuncture and Chinese medicine was quite expensive and they began to doubt whether they were going to make a living. Most acupuncturists don't. The British Acupuncture Council did a survey a few years back showing that 60 or 70 percent of graduates either had stopped practicing or were practicing part-time. Either they had partners who earned money or they had other jobs. So, I think, the initial enthusiasm of *"let's all study acupuncture!"*, died down. It may also connect to the 2008 recession. Also, Charlie might be better informed on this, but vociferous skeptics like Edzard Ernst (an Austrian physical medicine professor, a prominent critic of non-biomedical treatments) pressured the universities to drop courses, claiming they were anti-science mumbo-jumbo.

There may be other factors. University involvement may have been a poisoned chalice, the hoops you had to jump through for degree validation meant that students were forced to learn irrelevant material. It may not be essential, for instance, for acupuncturists to learn anatomy to the level required as a physiotherapist, unless you want to go into sports medicine or a musculoskeletal specialty. It is also unhelpful for the standards of entry to study Chinese medicine to be too low.

If you want to be a doctor, you have to be pretty smart. But you don't have to be so smart to get into most acupuncture colleges. The bottom line is they need a certain number of students every year to stay afloat, and that's a very big factor in how wide open the entry requirements are. So, you don't necessarily get the best and the brightest coming into the profession.

A lot of acupuncturists are ignorant about what they really ought to know about conventional medicine.

As I discovered during the COVID pandemic, many acupuncturists have contempt for conventional medicine, an arrogant contempt, given the standard that they're at themselves. The belief that COVID-19 can be cured by acupuncture, or by eating organic food, or the disassociation from the history of medicine and the history of epidemics, the challenge that epidemics have put upon human beings ever since recorded history. Or the view that biomedical treatment is only driven by profit or a desire to control people. These opinions are widespread throughout the profession and it makes me despair. We see also an ignorance of Chinese medicine. I would make Charlie's book absolutely compulsory reading. When you go to acupuncture school and they say what books you must have, I'm glad they say *A Manual of Acupuncture*, that benefits me, personally. But your book, Charlie, on *The Journal of Chinese Medicine*, should be absolutely up there. Because otherwise, people don't have a clue what it is they're studying.

CB: Your position has allowed you to travel widely around the world, and see the state of Chinese medicine and acupuncture in countries like Australia, South America, North America, Canada and across Europe. So far, we've talked about things in the UK. I'm wondering if you have anything to say about the way the wider Western world has adopted TCM. Do you think it's the same as in the UK or how do things differ?

PD: I can't really say for sure. I've traveled a lot and I think the United States and Australia are different from the UK. They benefited from early Chinese immigration. Yes, there was anti-Chinese racism in America in the early 20th century but most cities had Chinese doctors practicing and in Australia some of the first immigrants were Chinese doctors bringing medical help to remote communities.

So, this medicine was more normalized and standards and opportunities in Australia and America have been better than in the UK. We did have Chinese immigration into the UK but somehow it didn't have the same effect. As mentioned, I've always been impressed by Switzerland, Germany and Austria; in order to be able to practice in Germany you have to go through challenging exams to get qualified.

One of the big questions is, *"Is acupuncture medicine?"* or is it something completely different? Channel-based acupuncture has caught on and people rave about Tung acupuncture or Richard Tan. This channel-based approach is not quite medicine in the fullest sense of the word. Its techniques are only a narrow part of what Chinese medicine is. It doesn't really have so much depth.

Many people come out of Chinese medicine education insecure, unconfident, and without the benefits of proper internships. Practitioners need internships, you need to work alongside doctors for a long time to build knowledge and confidence. Instead, you're thrown out at the

end of acupuncture school, not waving but drowning. So, when somebody comes along saying *"There's this really simple method, you can learn it in a weekend, and the results are fantastic"*, it's very tempting. That's happening a lot.

CB: You co-wrote what became the standard English language manual for acupuncture points, *Manual of Acupuncture*. Can you tell us a little bit about how this book came into being, and why you think it has become so influential?

PD: I was approached by Churchill-Livingstone, who were then the main publishers of Chinese medicine in the West, who asked if I was interested in writing a book of acupuncture points. I chatted with Julian Scott, saying there are so many of them, why do we need another one? He said the fact that there are so many of them, proves that there's a great market for them!

I realized I couldn't do this on my own. I invited my close friend Mazin Al-Khafaji to co-write the book. Mazin had studied in China, he had a good grasp of Chinese and a studious mind, and we decided to write the book, not with Churchill-Livingston but under the auspices of the journal. At the time there were no acupuncture points books that had any kind of historical basis. They just had point location, maybe underlying anatomy, and indications. At the most, they had functions such as *this point transforms damp*, *this point moves stagnant qi*, and so on, but much of what was published was not rooted in the tradition.

I was influenced by something I learned studying Buddhism in India, which was that the Indian texts were translated by scholars into Tibetan, and then a different bunch of scholars translated them back to see how much had changed. I was inspired by this kind of respect for source material.

And, I just loved the stories, the fact that you could read what somebody wrote in the 7th or the 12th century about an acupuncture point. We thought it would be a one-year task, but it took eight years! We were not working full-time on it, although I personally worked full time on it in the year prior to publication.

I could not have done it without Mazin, who had to teach himself classical Chinese to read some of the texts. I was lucky, too, to have a very smart "two-brain" colleague, Dr. Kevin Baker, now sadly deceased. Kevin was the first person in Britain admitted to both the Royal College of Surgeons and the Royal College of Physicians, and then completed a full-time three-year study of acupuncture. He was a great anatomist, so the point locations and anatomy matched the level that Mazin and I achieved with the textual aspects. We carried that ethos forward into the design; spending hundreds of hours on the illustrations and then consulting with typographers for the fonts, layout and spacing.

We were trying to produce a great book that was also a work of art and it's been repaid a thousand-fold in terms of reward. Not just financial reward, because students love the book, they really love it because it's good, and it makes sense of Chinese medicine to them. If you learned that book you might think you understand everything now, but of course that's not the case as you discover when you go into practice. But in terms of learning the theory, it's very satisfying because it all hangs together in a good way.

Few notice the little things; they don't realize how much time we spend doing things like making sure the description of a point location has the illustration on the same page. You don't have to turn back and forth over the page. Nobody notices things like that but it creates a feeling of comfort. So yeah, I'm so pleased that we did it and after a few years it went into a digital format on a CD and now an app and a website.

IS: Even in China, books like yours are difficult to find. I lived in China for 17 years, and I tried to find books similar to the *Manual of Acupuncture* but there was nothing of that caliber. In the 1990s and early 2000s, there were quite a few textbooks, Giovanni Maciocia was writing his textbooks for Chinese internal medicine and then various mega textbooks appeared, including your *Manual of Acupuncture*. Then, from the mid-2000s onwards, although we have seen books on almost anything TCM-related, it seems that they don't really contribute to education. So far, there is nothing better than your acupuncture text and few books come close to Giovanni's seminal texts.

PD: Well, that's true and it's the same in herbal medicine. The two Dan Bensky books, *Materia Medica* and *Formulas and Strategies* and the one by John and Tina Chen set the benchmark. Once such books are published there's not a lot more to say. How many *Ben Cao* books do you need? The territory has been taken. All the core subjects have been covered. I was part of a team that edited and published a book three years ago, on gynecology and infertility, based on the work of Wu Yuning (吴玉宁) in Beijing. This fantastic doctor, an absolutely wonderful 75-year-old, who's had a lifetime career, one leg in Western medicine gynecology and infertility and an equally strong leg in Chinese medicine. A whole team worked on it. We've spent five years producing this book, and it's made no impact at all—for reasons I don't understand. It's an absolutely fantastic book, maybe it's too good. The standard is too high because it's fundamentally an herbal medicine book and the number of people in the field of gynecology and infertility in herbal medicine at a really high standard is quite small.

So, there is still space to publish, specialist books rather than general books, but maybe only for a small audience.

IS: People in China say that they're proud that acupuncture and Chinese medicine originated there, and they view it as one of their cultural treasures, but this attitude often promotes rivalry or disrespect for people practicing in the West. Now China seeks to internationalize acupuncture but only as long as most practitioners, teachers and leadership stay Chinese! Preparing for this

interview I asked some practitioners in China if they knew your work, surprisingly few, if any, were aware of your contributions towards the advancement of Chinese medicine in the West. What are your thoughts on this. Is this some type of chauvinism? Should one ethnic group monopolize this medicine? What do you think about that?

PD: The bottom line is that human knowledge belongs to all of us, wherever it comes from. As long as you approach the knowledge of another culture with respect, a real desire to learn, and a certain level of humility, I think it's fair enough. I'm not bothered about the whole cultural appropriation thing, unless it's rude. China spent centuries believing they were the center of the world before suffering a catastrophic loss of confidence in the 19th century, so it's not surprising that now they're flexing their muscles and wanting to occupy that central position again. It's quite understandable. Yes, there is a lot of chauvinism, it's quite scary, isn't it? But what the Chinese say should or shouldn't happen is not going to affect the way we practice or our approach. So, let them try I would say. Having said that, when China accepts foreign students into their schools and hospitals, perhaps they're right sometimes to feel contemptuous about the standard of people who come their way.

PD to IS: Were you respected?

IS: In many ways yes. After the other doctors know your level or after you start working in a hospital and people realize that you know exactly what you're doing and that you can do all the things that the Chinese doctors do, then eventually you earn their respect.

PD: Then I think it's fair enough to say they expect people to earn their respect. I'm not a sinologist, I don't read Chinese but lots of people say that to really understand Chinese medicine, you have to be really deeply embedded in Chinese culture. I don't know if that's true or not. There may be some truth in that.

IS: Well, in the late 1970s, 1980s even in the 1990s maybe there was some truth in that. But these days everything gets translated. We have good textbooks. I doubt if half of the Chinese doctors read the classics anyway. So, there is that.

PD: But if they go on about cultural appropriation you can ask them why they're wearing a suit or you could ask them a million similar questions.

CB: In many people's minds Chinese medicine and acupuncture have become very much allied to the movements for complementary and alternative medicine. These words are used to label what Chinese medicine offers. I'm wondering whether you feel that this is a positive thing, whether it serves to impede or to promote Chinese medicine and acupuncture in the West. What are your views on the way that we're labeled?

PD: Oh dear. First of all, it's not complementary or integrative and I wish it was. Complementary and integrative would mean that we would be working alongside conventional medicine with mutual respect. Which is what I'd love. And it's one of the main criticisms I made of these practitioners who were so contemptuous of Western medicine during the epidemic.

How on earth can we expect Western medics to respect us if we don't respect them? We have an awful lot to offer, so much to offer. I get genuinely sad and upset that so many people suffer unnecessarily, because they don't have access to what Chinese medicine can offer.

Just take gynecology for example. Chatting to a doctor friend he said that for period problems basically all we have is the pill and that's a cause of suffering for so many women. You can take any branch of medicine and say the same thing. So, it's not integrated and it's not complementary in the sense that it ought to be.

But the *alternative* medicine label means that instead of having a very positive reputation you get negative perceptions because we are shifted into the same classification as Bach flowers, ear candles and all that other stuff.

CB: Dermatology was an area where in the early 1990s in the UK, Chinese herbal medicine enjoyed an explosion of interest from patients and the medical world. Biomedicine offers little more than antimicrobials and steroid creams despite the sophistication of dermatology science. And yet TCM was knocked off the board as a result of toxicology stories and with steroids in Chinese creams. *Pi Yan Ping* (皮炎平), adermatology inflammation cream, was the main offender but this steroid medicine never claimed to have any herbs in it! It was a Chinese over-the-counter steroid cream mistakenly imported that was simply picked up as a story used to denigrate the profession.

Do you believe there is a willful opposition to the progress of Chinese medicine and acupuncture?

PD: Yeah, because it's internal medicine it's a much more direct challenge to commercial interests. Taking herbal medicine is too close to Western medicine. Acupuncture is a bit less of a challenge.

CB: I'd like to ask about your long-standing interest in *Qi Gong* (气功) and in *Yang Sheng* (养生). You've published a book on this and that you've been practicing *Qi Gong* since the early 1990s. Can you say something about this part of your life's work?

PD: I only seriously picked it up in 1992. My first interest in diet was macrobiotics, which was utterly rejected by conventional medicine at the time. The idea that the dietary choices you made had any influence on health was considered preposterous—deficiency diseases excepted. The view was that as long as you got protein, fat, carbohydrate and vitamins that was it. We understood early on that diet was a tool that people could use for themselves to improve their health, and maybe alleviate some disorders, maintain health and prevent the development of chronic diseases. We should say *prevention* rather than treatment and it was this aspect that was my original enthusiasm. Dr. Shen enabled me to see how the causes of disease connected with people's lifestyles. I reached a point where I didn't want to practice

anymore, and I became more interested in *Yang Sheng*. However, not the more obscure end. *Yang Sheng* is a complex subject and some of it is arcane and mysterious, but much is just common sense. I feel it's the most important part of Chinese medicine. You know, we all need to go to doctors or surgeons and nobody will spend their life without needing a dentist. We all need to turn to each other for help and that's a wonderful thing and thank goodness there are incredibly skilled people, like you two, that people can go to and be helped.

But the highest form of medicine is clearly stated in the first two chapters of the *Su Wen* (《素问》*Basic Questions*). It asks why some become decrepit at age fifty and claims it's because they don't live right. And waiting until disease has developed before intervening is too late, like digging a well when you're already thirsty. It's clear that this is a core part of our medicine. That's what really interests me. We are very aware of enormous threats such as climate change, environmental breakdown and the collapse of life in the seas.

But one crisis that is not mentioned is the health crisis. If you look at the statistics for chronic non-infectious diseases—cancer, cardiovascular disease, diabetes, obesity, strokes, and dementia—they're all on an inexorable upward path, everywhere in the world, because of modern lifestyles. It's estimated most of these diseases will double within the next two or three decades.

Like Western medicine we can help to various degrees; we mitigate, we maintain, and we prolong life. But the cure is very hard. And in terms of biomedicine, those maintenance treatments are very expensive. So, there's no medical authority in the world that will be able to afford to treat these diseases in the future. In the United States, the bill for dementia already runs into billions of dollars and this is only half of what it's going to be in a couple of decades.

So, it's obvious that if you take the big view in medicine, prevention is *the* most important part, and that's what I'm interested in. That's why I researched and published a book about *Yang Sheng*, I wanted to look at the wisdom of the Chinese on how to prevent, how to eat, how to use our body, how to manage our emotions, how to sleep—all those things for which there's such deep and rich wisdom in the Chinese tradition. Personally, for me, prevention is the most important part of the tradition. Unless we're blessed with a really powerful constitution, we all have to do something daily that builds our health and well-being. The rate at which we decline, the degree to which we decline and how much it affects our well-being is in our own hands.

Qi Gong has made such a difference to my life and every day it strengthens me, it nourishes me, it centers me, it roots me, stabilizes me and it builds my resilience to all those things.

IS: So, our last question. What do you believe is the number one issue that the TCM world faces at the present moment?

PD: Well, I don't know what number one is, but number two is the cost of Chinese herbal medicine. This is going to be a major problem, particularly with climate change and shipping and such things. I think the ability to give full Chinese-style doses is going to become out of reach for most patients in the UK.

Maybe the main problem is that *we* know that TCM is real medicine and, if it's studied properly, it deserves status as a form of medicine. However not everybody in the profession understands that, and some of them are very far from relating to it as medicine. They prefer to relate to it as a kind of casual mystical plaything with a lot of magical thinking or wishful thinking.

But it is medicine and our challenge is to keep saying that, and to keep demonstrating it. We need confidence and courage, and not back off, like our professional organizations have sometimes done for fear of criticism. The first time I heard about long COVID, I thought, what an opportunity for Chinese herbal medicine. Long COVID is a big thing now, it has a real impact on the British economy because there are at least a hundred thousand people that have been taken out of the workforce. So what better medicine is there than Chinese herbal medicine for this? It's not easy to treat, but with its profound understanding of those kinds of diseases, it has so much to offer. I would say our professional organizations were very slow of the mark in stating this—when they should have been saying *"Hey, listen to us"*.

It's things like that that make it an almost impossible uphill struggle to get this medicine to the place that it deserves, to the benefit of humanity.

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Interview

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William Morris, Establishing the Foundation for the Advancement of TCM in the US

Ioannis Solos[1,✉], Charles Buck[2], William Morris[3]

Abstract

The interview was conducted on March 2nd, 2023 by Ioannis Solos and Charles Buck. William Morris has sustained practice since 1980. He has served on the California, Texas and Massachusetts Professional Associations, as well as the National Association. He has tendered 20 years of service to the field through academic medicine, earning a master's degree in medical education to assist in developing Chinese medical doctoral programs and institutional review boards. He earned an OM.D. in 1988, a DAOM in 2002, and a Ph.D. focused on pulse diagnosis as clinical epistemology in 2009. He has published five books, including *TCM Case Studies Dermatology*, *Li Shi-zhen Pulse Studies: An Illustrated Guide*, *Neoclassical Pulse Diagnosis, Cycles in Medical Astrology*, and *Transformation: Treating Trauma with Acupuncture and Herbs.*

Participants:

WM: William Morris
IS: Ioannis Solos
CB: Charles Buck

The interview:

CB: Greetings and welcome Dr. Morris to our discussion (Fig. 1). First, I would like to ask what drew you to Chinese medicine. How did you come to get embroiled in this profession?

WM: Around 1977, at 22, I was exposed to *Tui Na* practitioners and spiritual healing. I then met Ron Teagarden and studied the Daoist *Three Treasures* style of herbalism as he had learned it from his teacher, Master Park. I was supporting myself, doing acupressure, and prescribing herbs based on the Daoist tonic-style herbalism in the tradition of Master Park. Beginning in 1980, I would prescribe herbs such as *Huang Qi* (黄芪 Radix Astragali), *Ling Zhi* (灵芝 Ganoderma), *Tian Men Dong* (天门冬 Radix Asparagi) or *He Shou Wu* (何首乌 Radix Polygoni Multiflori Praeparata cum Succo Glycines Sotae), and other medicinals from the class of superior agents that nourish the three treasures. A 90-day regimen was typical as I used the materials to change the person's life and not fix a particular problem. The work differed from the remedial models that I encountered in acupuncture school. That experience led to my first job managing a Chinese and Western herbal dispensary at Cedars Sinai Medical Centre in 1981. That cemented my passion for herbal medicine, but also, homeopathy.

After pre-med studies at Santa Monica College, I entered Emperor's College and was in their first graduating class. Founder Bong Dal Kim taught me what he called "*Shen reading*", where I would take the pulse and close my eyes, and then at some point, an awakening would take place, and I would gaze into the patient's eyes. The first thoughts that came to mind were those upon which I would base further clinical inquiry. It led to me pursuing further education, earning an OM.D., upgrading to a master's degree, and, years later, a DAOM and a Ph.D..

IS: So that's how you got started? That's actually a fascinating beginning!

WM: Those pieces formed the foundation of my entry to the field, driven by a welling sense of destiny relative to healing.

CB: With the 1980s and 1990s came increased professionalization of TCM in the US. Looking first at education, how would you describe how the educational system for Chinese medicine developed in the US?

WM: The advent of Chinese medicine in the US possessed two primary vectors, one on each of the eastern and western seaboard. Benjamin Franklin's grandson, Dr. Franklin Baché, practiced acupuncture in the early 1800s in Philadelphia, also publishing on acupuncture cases. Then there was the grandfather of medical education in the US, Dr. William Osler, in the early 1900s. He was at Johns Hopkins University and recommended acupuncture for lumbago. University of California at Los

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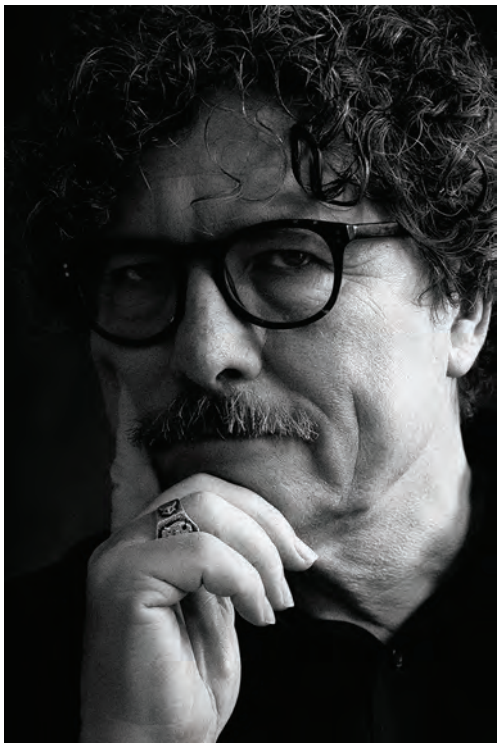

Figure 1 Photo of Dr. William Morris (source from: William Morris).

Angeles (UCLA) and University of Southern California (USC) also tried to get acupuncture programs rolling. When I was presenting at an Innovations in Medical Astrology conference at USC, I asked some faculty members why they did not continue pursuing acupuncture programs. Their response was, *"We couldn't get it to work"*, and it highlights the need for education within the traditions of experts and senior practitioners.

In the 1970s, Dr. Homer Chang created the Sino-American Rehabilitation Association in Philadelphia. This educational institution became the SAMRA University and relocated to Los Angeles, making it the first acupuncture school in the US. The New England School of Acupuncture and Dr. So followed closely behind, and were the first to be state-recognized.

The California Acupuncture Board approached practitioners teaching and building schools to discover a reasonable length for a training program. It was in the late 1970s. Those practitioners guessed, throwing out the number of 1,200 hours.

Best practices in educational development require a *needs assessment* and *identification of competencies* necessary to achieve an entrustable set of skills to serve the public. Also, thought and consensus about the qualifications for faculty needed to deliver those competencies. Nothing we perceive to be a professional curriculum development process took place.

On the conventional medical front, Joe Helms had been working with the WHO seeking a 200-hours entry requirement for physicians to practice acupuncture. That was driven not by a comprehensive set of competencies but by the length of his CEU program. It has since progressed.

Soon, the Council of Colleges of Acupuncture and Oriental Medicine formed the American Association of Acupuncture and Oriental Medicine (AAAOM), the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM), and the National Certification Commission of Acupuncture and Oriental Medicine (NCCAOM).

I am using the term here as *Oriental medicine* because that was what those organizations used, and it was created in search of a term inclusive of all far Eastern nations practicing acupuncture and herbal medicine. Specifically, the Koreans, Japanese, and Vietnamese practitioners and schools wanted a term that was not Sino-centric but was inclusive of the developments in these other cultures.

There was tremendous conflict among schools about what the educational standards should be. The intellectual thought leaders on the East Coast felt that there should not be a doctoral program and believed that receiving doctoral-level education in the Chinese medicine community would lead to increased Med-legal risks; those fears were never realized.

In any regard, during the early 1980s, the formation of the ACAOM began to look at standards for degrees, and those degrees were composed of master's degrees because of the viewpoints of college leaders. That was not a perspective shared by the Chinese community or other East Asian communities involved in acupuncture development. So, we had the East Coast, primarily acupuncture influenced and led by people with European philosophical backgrounds. The Chinese were more present on the West Coast, which led to the West Coast profession's emphasis on herbal medicine.

IS: What's the entry-level now in terms of hours?

WM: That terrain is uneven due to variations in state requirements, national certification modules, and the proliferation of degree titles in the field with differing hour requirements.

IS: For medical doctors, I checked it the other week for some reason, and they have a 300-hour requirement, but 100 hours out of those 300 have to be clinical.

WM: So now it's up to 300 hours in some jurisdictions. Good. It varies from state to state relative to code. Most states have a universal scope of practice for physicians, meaning no training is required. However, some states, such as Hawaii, require complete national certification-style requirements for medical doctors.

Helm's training for medical doctors was primarily a French Vietnamese style of acupuncture taught by Van Nghi and his student Tran Viet Dzung. These ideas filtered into the Canadian College in Toronto and Mark Seem's School. That style became the primary format for medical docs learning acupuncture and the basis of Dr. Helms' book.

IS: Can you give us an overview of the different styles of acupuncture taught in the US colleges then and now?

WM: Most of the earlier teaching was TCM since the schools often hired faculty from China. This terrain was peppered with hand manuscripts from Van Nghi, based on a French Vietnamese version of the *Huang Di Nei Jing* (《黄帝内经》*The Yellow Emperor's Inner Classic*). Also, Van Buren authored some of the manuscripts in distribution at the time.

Dr. James Tin Yao So (苏天佑) was at the New England Acupuncture School, influencing the first wave of acupuncturists in the US. His needling style was intense. Everyone I encountered who studied with him had very successful practices. Japanese styles later complimented his style of acupuncture under the influence of Kiiko Matsumoto and Stephen Birch.

The Los Angeles Basin started with the California Acupuncture School, which was very European-influenced. SAMRA soon arrived there, where I earned my OM.D. in 1998. Emperor's College started up in 1983 with an herbal focus. I was in their first graduating class, and there were threads of Daoism, obeisances to Zhang Zhongjing (张仲景), and attention to biomedical skills in concert with Chinese medicine. I also learned about European-based five-element acupuncture and *Yi Jing*-based (《易经》*The Book of the Change*) thought.

While there were cultural nuances, the certification and licensing boards relied primarily on material from Chinese mainland. The East Coast had more influence from European acupuncture schools such as Van Buren, Worsley, Chamfrault, and Van Nghi. Others came in through Mark Seem's school at Tristate.

Los Angeles was a hotbed of development. Under the leadership of Dr. Ray Rubio, the American Board of Oriental Reproductive Medicine (ABORM) was developed. While boards were created for orthopedic specialties, the ABORM was an exemplar in design and appropriate arms-length distance between faculty and examiners.

The Traditional Acupuncture Institute followed Worsley, for whom the roots were more difficult to trace, as seen in the book *In the Footsteps of the Yellow Emperor*. More Daoist interpretations were also occurring amongst practitioners who studied with Jeffrey Yuen. It included people like Lonny Jarrett, who still integrates or uses integral thought as a cohesive weave with traditional acupuncture styles in the Five Element tradition.

IS: Lonny does a great job. I liked his latest book. It isn't easy to imagine that he started from Worsley's Five Element style and then transitioned to something completely different. He integrated various aspects of healing and thought and philosophy into his framework. It's like his own style of practice right now, which is not TCM or Five Elements.

WM: Indeed! Lonny is a long-time friend. We were neighbors and played music together. We traveled to Dr. Hammer's place in upstate New York to study, missed the turn, and almost hit the Canadian border. Lonny is a highly syncretic thinker weaving the teachings of Worsley, Daoism, Ted Kaptchuk, Leon Hammer, and Integral Theory. He is heading up the Integral Chinese Medicine Collective, where I participate with Lorie Eve Dechar, Heiner Fruehauf, Randine Lewis, Alexander Love, Brandt Stickley, and Vansanthi Vanniasingham. Fascinating!

CB: In the US, TCM benefitted early on from the involvement of experienced Chinese practitioners. Dr. Ting Yao So, for example, I would be interested to know his contribution or other contributions. I would like to know which you felt were most influential. Which were the most influential, and what were their contributions?

WM: I was in the trenches of school and practice in Los Angeles. So, most of my observations were located there and then in Massachusetts during the 1990s. It was not until 1998, after 18 years of practice, that I entered academic medicine; this gave me experience with practitioners in differing parts of the country.

The Japanese community at the time was served well by Miki Shima and Dr. Kobyashi Sensei, who both profoundly impacted me. For that matter, Kiiko Matsumoto did as well. The discipline of palpation confirmation of patient changes became a qualitative research method I proposed in my dissertation, *Recursive Systems Analysis* (*RSA*).

I had a great experience with guidance from Wang Jinling (王金玲) in my early clinical years. He was a Western medical doctor who converted to Chinese medicine during the 1970s. He learned to survive that prison experience by laughing. Dr. Wang would start laughing when we were in the clinic with people with life-threatening conditions. And pretty soon, everyone in the whole room was laughing. It was infectious, and that was a big piece of his thing. I learned the value of humor in clinical interactions from him.

He would also do minor surgical procedures in our clinic space, which was a great experience. He led us again to this idea of pattern discrimination, combining it with a research-based selection of singles or specific agents for a condition. That was a style that stuck with me through all the years.

Another vital practitioner in the Los Angeles basin was a woman named Jiang Fujiang, a physician to the leader of Taiwan, China who was in the hospital with congestive heart failure, and she saved him using a *Zhen Wu Tang*-based (真武汤 True Warrior Decoction) formula. She also won awards for her research using *Gui Pi Tang* (归脾汤 Spleen-Restoring Decoction) to treat thrombocytopenic purpura. She said, "*Chinese herbal medicine is easy. You are either eliminating evil or benefiting the righteous*." I worked with her on cases in my clinic for years. It was my third year in school, and I learned formula writing at a much deeper level from her. In 2000 she brought her friend Dr. Yang Maiqing from China to Los Angeles. He cultivated an understanding of the *Shang Han Lun* (《伤寒论》*Treatise on Cold Damage*)

from a biomedical perspective and greatly impacted my experience and application of Zhang Zhongjing's work.

From that Western physiological point of view, *Shang Han Lun's* divisions became so straightforward, which was terrific. It differed significantly from applications of *Shang Han Lun* in any of the waves of Liu Lihong's (刘力红) students in the form of Heiner Fruehauf or Arnold Versluys. It also differed from the teachings of Dr. Huang Huang (黄煌), which seemed to me to be a synthesis of Japanese Kanpo constitutional thought with the core methods of *Shang Han Lun*, or Young Wei-Chieh's (杨维杰) emphasis on the *Yi Jing* and *Jing Fang* (《经方》 *Classical Formulas*) as the basis of *Shang Han Lun*.

I was very fortunate to work as a Clinic Dean in Los Angeles. I hired Gu Naiqiang (顾乃强) as a faculty member. His father was a famous dermatologist and architect at Shanghai TCM University (上海中医学院). I had the opportunity to attend every class Dr. Gu taught, and I hired him to teach in the DAOM program at Emperor's College. I would drive him home after clinic, which provided me with five years of tutelage in TCM dermatology, which led to my collaboration with Huang Ying (黄莺) of the Chengdu TCM Faculty on the book *TCM Case Studies: Dermatology*. It demonstrates the flourishing of TCM specialties in the US.

There was a difference between schools in smaller towns and major cities such as Los Angeles, New York, and Seattle. If we are talking about smaller communities where a school might crop up, such as in Kansas or Ohio, the human resources of talent were small and made it difficult. So small towns differed from what was happening in New York, Los Angeles, and San Francisco, where huge Chinese communities and senior practitioners are happy to work in the schools.

But in Los Angeles, Bong Dal Kim, founder of Emperor's College, managed to attract some of the greats of contemporary practice, Yang Tiande (杨天德), the son of one of the architects of the Beijing TCM University. By age 19, he had memorized the *Shang Han Lun*. I saw him reading a book in the clinic and asked, *"Dr. Yang, what are you reading?"* He said, *"Ye Tianshi's* (叶天士) *Cases."* Ye's work heavily influenced his dosing strategies. He would adjust herbal doses in a formula by fractions of a gram. I asked, *"What are you thinking about when you do such a small dose change?"* He said, *"Oh, it's very simple; I just think about what it tastes like."* And that was a memorable moment with Yang Tiande. He translated Ye Tianshi's eight extraordinary vessel herb formulary,which I have used in my practice ever since.

Although Dr. Yang Tiande was highly schooled in *Shang Han Lun* and had all these other perspectives on practice, he was very much an earth-school type of practitioner. He used a special pulse diagnostic method emphasizing the left and right middle positions. Everything was just the qualities present, especially the balance of slippery and bowstring between the two middle positions and the differences in amplitude, force, and volume between the two positions, and he would construct whole acupuncture and herbal treatments based on those findings. Also, his needling style was simple, with only big points—just the big ones. But he got better results than anyone I saw in that place.

We were getting 300 to 500 patients a week through that clinic. Some excellent senior providers were there, but Yang Tiande skated above the rest. Dr. John H. F Shen was flying even above that. He was in a different world.

IS: Yeah. I have an interesting comment. When I was a student, and we had prescribed something stinky like *Di Long* (地龙 Pheretima) or bitter like *Huang Lian* (黄连 Rhizoma Coptidis) or something very spicy like *Sheng Jiang* (生姜 Rhizoma Zingiberis Recens), we sometimes feared to name a large dosage, even if the patient needed it, to make it more appetizing. After looking at my prescription, one of my teachers once said, "*Are you cooking for this patient or giving them medicine?*" So, a couple of times after receiving such comments, I stopped. Years later, I discovered that many people I know, also received similar comments at the Beijing TCM University about cooking and prescribing. And prescribing is not the same as cooking.

WM: Yes, I agree, and Yang Tiande was getting results. He did not adjust to make the formula taste good. Instead, he used his awareness of flavor to enhance formula design and therapeutic impact. Of course, you have Ye Tianshi, famous for using minimal doses.

IS: We need Ye Tianshi's books translated into English. I look into his case studies all the time. In China, they say that's the main book you must study before entering the clinic. But we tend to have different training in the US and the UK. I was trained initially in the UK. We didn't have any of that, so we went in cold with just TCM, which wasn't the same.

WM: Yes, that brings me back to the concept of case-based teaching and the emergence of newer models of case thinking relative to clinical practice. This stunning multi-millennia record of case-based thought in Chinese medicine suddenly becomes an evidence-based platform. It's coming up in the Western biomedicine world as the primary teaching method for clinicians. It's something (Fig. 2).

IS: Charlie, I remember you critiqued the standardized formulas for COVID-19, which combined a long list of almost random medicinals from the *Shang Han Lun*. A combination that barely really made sense.

CB: Yeah, that's what happens when committees make life easy for you! Committees of very important people sit around, and nobody dares argue with anybody in case they upset someone. So, they just put everything in that gets suggested. I think the standard COVID formula included about 22 or 24 herbs. Just a lot of herbs from the *Shang Han Lun,* all laid end to end. And they put it in a bag with little formula syntax or structure—"*Herbs*

Figure 2 Photo of Dr. William Morris (source from: William Morris).

are there but there is no formula." Far better to have a skilled person craft a formula for a specific person at a particular moment in time.

WM: Yes, on that! I don't use standardized formulas, yet I am fond of *Chai Ge Jie Ji Tang* (柴葛解肌汤 Bupleurum and Pueraria Muscle-Resolving Decoction) in managing COVID-19 and consider *Dan Shen* (丹参 Radix et Rhizoma Salviae Miltiorrhizae) a critical agent in the trenches given the correct presentation. They have served me well, and especially since *Chai Ge Jie Ji Tang* treats all three yang divisions.

This conversation reminds me of Dr. Joseph Yang (杨常青), who was on the Chinese government's committees to establish Zang-Fu standards. He also had a Ph.D. in molecular psychiatry from Kobe University. I co-wrote articles with him in the early 2000s on *Shen* in *Acupuncture Today*. He is very much a senior practitioner in the LA Basin. His comment on the Zang-Fu standards was, "*There is a disease location, process, and severity.*" Those three features are a common factor or *isomorphism* across all forms of medical thought. And that is location, process, and severity. That's the essence of the whole practice.

We have had epistemological errors during the practice and teaching of Chinese medicine in the West, whereby exterior diseases are classified as interior diseases. The location of the pathology should be present in the diagnosis of the disease.

CB: Yeah. In my teaching, I referred to that clinical thought process as "*Site, Cause, Condition*". Where is it happening? How has it come about? and What, specifically, is going wrong?

IS: Will, you were involved in the maturation of regulation and accreditation of TCM in the US. Could you tell us something about the way this happened? Also, what was your role in this work?

WM: I went from private practice to a role as Dean of Academics. But I sustained teaching and private practice while providing leadership in academic medicine. Emperor's College president David Lee Ph.D., encouraged me to participate in the professional association, so I participated in the AAAOM leadership.

At the core of all this was the commitment to being a practitioner because it was only from that place I could serve any of those other roles with integrity. From this perspective, I participated in the Council of Colleges meetings on developing master's and doctoral standards. I also participated in the Accreditation Commission for Acupuncture and Oriental Medicine's task force to establish doctoral and master's degree standards. These were consensus projects and therefore doomed to the tyranny of consensus as products of collectivism.

In typical higher education, you have a Ph.D., which is a research degree. Then there are professional doctorates at the end of two or three years of post-grad study for medicine, dentistry, or law. What happened in the DAOM was a hodgepodge between a professional, a clinical doctorate, and a Ph.D.

Well, that wasn't the case for us because there were people in the field who felt we shouldn't *be* doctors and were in strong positions of power as leaders in the Council of Colleges. But I also served the Council as a Dean while serving on the board of the AAAOM. Sometimes this was a conflict of interest, and I would recuse myself from the dialogue.

I and many others testified before legislative bodies and acupuncture boards in Ohio, California, Massachusetts and Texas. It was usually about how laws were to be interpreted in the profession's governance, but also how those laws were to be interpreted relative to the requirements for education.

But my primary interest was in bringing medical education technology into the Chinese medical school such that we would have a common language, creating higher levels of integrative capacity between ourselves and disciplines of other medical practices. Also, to explore what is arguably a collection of best practices in education. Because what became the discipline of medical education in the West was a transdisciplinary effort between Ph.D. educators and M.D.s., during the 1950s. Soon, there were "double doctors", composed of physicians with doctorates in medicine and education. This became the basis for how medical education took place in the West, and it's progressing at a high rate, and we do well to continue to trail that cognitive domain and linguistic structures because it's becoming very refined. But raising the educational realm in US TCM education was one of my goals.

Having earned a master's in medical education, I was prepared to develop doctoral programs. The accreditation commission recognized this and finally approved Emperor's College to produce and conduct doctoral programs tied to this. There was also the need for Institutional Review Boards (IRBs)—my process of earning the master's degree at USC required an IRB oversight at my home institution—and put me in the position of having to put together an Institutional Review Board. Some of my classmates at USC were involved in running the IRB for the Children's Hospital Los Angeles, and as a result, I became a consultant to that IRB. But I also had support from the leadership for developing an IRB at Emperor's College. While transitioning from my role at Emperor's College, I went to SAMRA University and assisted them with developing their doctoral program and Institutional Review Board. And then, upon arriving at AOMA in Austin Texas, I proceeded to do the same to build their doctoral program and IRB process. I believed that this way when the graduates were doing doctoral projects, they would be able to have appropriate ethics oversight for the conduct of their research processes. And also, at the same time, be able to develop the competencies required relative to research concerning human-subjects administration.

When I ended up at AOMA, I spotted a person in the environment there who was an academic leader and was willing to go do that same program at USC because it was insufficient for me and my role as president to be able to influence at the academic level. The deans have the strongest traction with the faculty for developing the ability to construct educational outcomes, or what is now called entrustable professional activities. And that process was enhanced by having another person who used professional educational language in the environment. Because as a new president to a school, I was an outsider bringing technical professional language in education, particularly medical education, to a TCM environment. What was fantastic was that I then went to Chengdu, and I discovered that they, too, were sending academic leaders into master's degree programs focused on medical education. In this way, we came to see what was starting to happen over there. Still, the education process remains problematic due to insufficient professionally trained educators in TCM. As a small example, many think an excellent lecturer is a good teacher, which is different. It requires the ability to create a good learning experience, one that is learner-centered and not speaker-centered.

CB: Well, I'm curious how you persuaded the legislature to take Acu-TCM seriously. What opposition did you face? In the UK, we've certainly had some very stiff opposition to the progress of Chinese medicine. Maybe a dozen universities offered degree programs in Chinese medicine and acupuncture, including university-accredited master's degrees. These were systematically pushed out one by one. They were closed down as a result of pressure from outside. We've also had time-wasting dealings with the government, with them stringing us along for decades but ultimately with no intention to give us any statutory recognition.

WM: In the UK you're dealing with a single national government, without a multi-tiered state, city, or nation like the US. The state level in the US is where acupuncture laws are introduced into the code. We could get virtually no traction at the national level. Although, we did intervene successfully through the Department of Health and Human Services when the FDA was exercising frivolous embargoes on importing various Chinese herbs into the US.

One of the goals of the AAAOM was to get recognition from Medicare. Most of our membership desired this, and I believed—notwithstanding the problems of Medicare—that it presented egalitarian access. That effort is multide cade and continues today.

In the West, ours is a medicine of the privileged folk, and it's becoming more so as herbs become more expensive to deliver. The way that it happened in California was strictly economic leverage. The Chinese community purchased more tacos for the legislators than other communities, and they learned how things work in politics. And that's how it went down in California. It helps that we also have various Asian community members in the legislature there—particularly in San Francisco, where there is a very economically strong Chinese community.

It happened the same way in Oregon, but Oregon had more of a socially egalitarian stance behind it. Also, once a code was passed in California, it became more accessible in other states to make these gestures. In the legislature, there were some incredible laws. Arkansas's law essentially allowed acupuncturists to do nutritional drips and injection therapies—a wide range of strategies that weren't necessarily TCM but demonstrated an expansive scope. That ground has since been lost in Arkansas.

Part of it had to do with sophistication, with how well the acupuncturists in a jurisdiction behaved concerning the construction of language for a law. It came to the fore in New Mexico. The acupuncturists befriended significant legislators and, in particular, the governor. They had a social life with the government. Being a small state and a state with low economic power, the addition of acupuncturists essentially became a solution for the state that was in the interest of its citizens.

IS: About the opposition. What opposition did the profession have?

WM: Opposition came from any medical profession that sought a piece of the pie. Chiropractors, naturopaths, and medical doctors were some of the obvious ones. Insurance companies also opposed it if they thought it was going to increase their cost of doing business.

But it was also from within the field, between professional associations and with some of the colleges. In the early 2000s, the Council of Colleges of Acupuncture and Oriental Medicine had a problem with the California

State Professional Association's efforts to make a 4,000-hour entry requirement to practice acupuncture and Chinese medicine. The Council hired a lobbyist to influence a legislative action engaging the *Little Hoover Commission*, which succeeded in blocking the legislative initiative on the Professional Association's part. Essentially the colleges prevented the profession from achieving what would have instantly created a doctorate as the entry-level.

The *Little Hoover Commission* was involved in examining problems such as health conditions in prisons and other general social matters; they were not happy about this requirement for them to investigate the field of Chinese medicine. It was a multi-year process, and I served on many committees, providing voice and testimony.

When a profession engages in protectionism over scope turf, it is called *social closure*. Even the Naturopaths managed to exercise social closure against acupuncturists in New Hampshire when they got acupuncture included as a procedural scope in their practice act and managed to close acupuncturists out.

There are different forms of closure used to monopolize the workforce. Examples include "*exclusion, demarcation, and inclusion*". Exclusion exercises hierarchical dominance over other providers by shutting out opportunities to provide service. It is done by creating specific skill sets and certifications that protect access to the market. Another form of closure called demarcation takes place through certified specialization within a field. Oncology is an example of medicine. Exclusion suppresses vertically, while demarcation does so horizontally. Inclusion happens when a closed-out worker class gets access. The privileged workers can easily dismiss it as usurpation. Such is the case for TCM with other professions performing dry needling.

Acupuncturists excluded M.D.s in Hawaii and South Carolina by requiring them to get full training to practice acupuncture. There are many different ways that different interest groups can close another collective interest out, and everyone's subject to this tendency. In New Hampshire, the Naturopaths managed to stop acupuncturists from doing acupuncture, so they were the only ones doing acupuncture.

When the Naturopaths came to me as secretary of the AAAOM, they wanted to get a practice title act in California for doctors of Naturopathy. I said, *well, why should we even begin to support you? Look at what you did to us in New Hampshire; please provide a written guarantee that you will not do this*. She said, *we couldn't do that*. I said, *we need some agreement if you want me to testify before the legislature supporting your title act*. But still, they are competitors in the medical services marketplace, as are physicians, medical doctors, and chiropractors. Fortunately, they kept their word, and there has been no attempts by the Naturopathic profession to close out practitioners of Chinese medicine from using the tools of their trade.

There's always competition going on. We spent a lot of time before the legislature in Texas dealing with chiropractors wanting to do acupuncture. They had no needs analysis, competencies assessment, or any professionally developed competency basis for the practice inclusion. They tried to do it by bypassing their practice act and tapping the acupuncture code definition of acupuncture.

IS: I believe the proper term is *"scope creep"*.

WM: Yes, *scope creep* is an act of transgression against social closure. And every profession engages it that has been closed out from practicing relevant skills. It brings us around to the concept of scope versus standards of practice. Scope of practice describes procedures a profession can execute by law. That contrasts with standards of practice, which are patterns of behavior within a profession that are not legislated.

We do it as acupuncturists. We can perform injection therapy in Colorado, Florida, South Carolina, and New Mexico. Injection therapies are a standard of practice in China, but it's considered scope creep in the US—the same for TCM providers ordering imaging or lab work.

IS: Do you know FDA is closing down all homeopathy now?

WM: Yes, they are trying, and one of the solutions is to include it in scope language for acupuncturists. This protects the practice, and the FDA can only attempt to control interstate distribution networks. The solution is a mature, professional, academic, and scholarly approach to medicine. That's where this profession's identity and ways and means are protected.

IS: There's a problem, though, because, as we said at the beginning, we can only get some of the community to agree to come together for our progress. It's a mess. The hospital I practice has its ideas about what TCM should be. The Lisa Lin School in Texas had its idea about what TCM should be, which was disturbing for me. Other schools, like Tai-Sophia, had their ideas about what medicine should be. None of us can get together and say, "*Okay, we're going to define standards. We're going to be teaching this and this and this and this"* to develop a united front against all opposition. So, this has been problematic in the US and the UK, the EU, and Australia.

WM: There needs to be more regularity of approaches. Yet, simultaneously, *"professional judgment"* refers to the ability to use the preferred epistemologies or thought tools that one deems most suitable to the situation. We must protect the knowledge and traditions of a heterogeneous profession while presenting a unified identity. Complicating the matter, the founder of the Traditional Acupuncture Institute, Bob Duggan, perhaps influenced by his Catholic roots and Ivan Illich, engendered a community of practitioners opposed to standards.

In the 1990s, schools on the East Coast shifted from teaching only acupuncture to including herbal

medicine. Those conditions allowed me to develop and conduct two-year herb programs for the Florida and Massachusetts Acupuncture Associations. And 100% of the graduates from my programs passed the national herbal examinations.

IS: We all understand; we've all been there. Charlie, you taught for a long time as well.

CB: Yes, that's right. I taught acupuncture at The Northern College in New York around 1991 and headed the Chinese herb course in 1994. I didn't have to be especially brilliant—there was almost nobody else in a position to teach Chinese herbs in the UK then—they had no choice but to have me! So, I set up the first college based Chinese herb training in the UK and taught much of the syllabus for two decades. When the universities started providing master's degrees and needed external examiners, they were stuck because they couldn't recognize anybody as an external examiner. So, I worked as an external examiner on these courses. As you suggest, Will, a labor of love. Somehow, I managed to keep my clinical practice going simultaneously.

IS: Will, you were elected as president of the AAAOM in 2005. We would like to know what was achieved under your leadership.

WM: My leadership at first focused primarily on creating a single national professional association. Having two associations *"representing the profession"* with differing perspectives was ineffective.

The number one agenda item identified by members of the association and our affiliate national associations was to merge the two separate national associations into one body. We developed a participatory model of leadership whereby the members had input through feedback technology that allowed for inquiry as to what was wanted by the profession. One of the first consolidation acts was a collaborative project on a common ethics statement between the Alliance and the AAAOM. This was a trust exercise that generated an *esprit decorps*.

In 2007, the Alliance and AAAOM gathered in Dallas, Texas, to explore unifying the two associations. Michael Schroeder of the American Acupuncture Council facilitated the meetings. An agreement was ironed out between the AAAOM and the Alliance whereby the AAAOM absorbed the Alliance's debt. And given our commitment to unification, the AAAOM took on that debt, and a merger was accomplished.

In 2006 the WHO contacted me about AAAOM's participation in developing ICD-11 traditional medicine codes. The US government declined participation, so I sent representatives to the Hong Kong and Geneva meetings. That team consisted primarily of Christine Chang and Jeannie Kang. I continued to serve from the US through 2015, refining the terms into that useable by the conventional physicians in charge of the ICD-11 development. The ICD-11 codes were officially published online on February 11th, 2022.

Under my presidency, the AAAOM also collaborated on the CPT codes for acupuncture procedures. It was a legacy from the previous presidency of Gene Bruno and resulted in the following codes being available to practitioners of our discipline. They are not limited to our profession, but any profession with the term acupuncture in its legislative language can use these acupuncture codes. Gene's communication with the Department of Health and Human Services had them intervene with the AMA to include the participation of the acupuncture profession, and the AAAOM's work on that committee was under my purview.

We also dealt with things like the American Psychiatric Association calling me and saying, *"Listen, we are going to publish that the evidence for using acupuncture to treat addiction is equivocal."* I said, *"What?"* I called up Michael Smith, and he said, *"Yes, because they're looking at controlled trials on the procedure. They're not using studies that include the context related to treatment, which is what the prevention of recidivism requires. What works an ongoing systemic solution, and not just for the acupuncture procedure."*

The AAAOM produced the *American Acupuncturist*, where I served as the editor-in-chief between 2002 and 2007. We also continued the production of annual national conferences where I chaired panels on translational standards two years in a row. They included Miki Shima, Bob Flaws, Nigel Wiseman, and Eric Brand.

We provided testimony at the request of state associations. For instance, when a state association was having problems with the legislature in their environment, we would send in people to testify. It happened in numerous States, including Florida, Ohio, California, and Arkansas. We also assisted states with developing legislative code language. I also traveled to Washington to assist the state association in its strategic planning process.

IS: Tell us more about the background of the triple AAAOM and its developments in the US.

WM: The Council of Colleges housed the Accreditation Commission and the AAAOM at the time, and they controlled both. Well, the professionals in the field wanted to wrest control from the colleges and be an autonomous professional association serving the profession's interests.

David Wells, LAc, DC, brought a voting block from California to the annual meeting in 1993 in New Orleans. It was large enough to create a motion changing the bylaws of the AAAOM to a per-member vote rather than allowing the colleges a controlling vote. Then-president Bob Duggan responded, "*The AAAOM no longer serves the purposes of the Council of Colleges*." Attorney Barbara Mitchell was then assigned to draft bylaws to create the Acupuncture Alliance. At the annual meeting of the AAOM in Chicago in 1994, the Alliance was unfurled with branding as a green meme, an egalitarian grassroots association. It wasn't. It was funded and controlled by the Council of Colleges,

just as the AAAOM had been previously. It was used to generate legislature in various jurisdictions that favored the colleges.

As a platform, the AAAOM promoted doctoral standards for entry to the profession and combined herb-acupuncture training as it gave a stronger foundation for TCM principles at large. I agreed with this view, having taught herbal medicine to acupuncturists on the East Coast. Those with herbal education integrated into their training found that it cost less and provided a better foundation for practice.

The AAAOM continued to participate in developing doctoral standards in collaboration with the Accreditation Commission and the Council of Colleges. Because of the contentious nature of the task force for doctoral standards in 2001, the AAAOM let go of its stance on herbal inclusion for doctoral degree training so that the Council of Colleges and the Alliance would sign off on a mutually agreed upon set of standards.

Leaders of either the Accreditation Commission or the Council of Colleges populated the first round of schools offering doctoral programs. They were Oregon College and Bastyr College, which were the first two schools to offer doctoral programs. The program I designed with Yi Qiao and David Lee at Emperor's College was approved to start by the Accreditation Commission in the second round of schools.

As I stepped out of the leadership of the national association, my sights focused on taking TCM schools as single-purpose institutions and walking them through the accreditation process. At AOMA Graduate School of Integrative Medicine, we did that with the Southern Association of Colleges and Schools, and the school still enjoys that privilege. Thus, AOMA became the first single-purpose Chinese medicine school to achieve regional accreditation.

CB: Could you say a few words about the contribution of the TCM publishing industry in the US? How has that contributed to the progress of Chinese medicine in the US?

WM: Right. We have been lucky to have high-caliber publishers such as Paradigm, Blue Poppy, and Eastland Press. Then you have a lot of individuals who were self-publishing, and then there are also UK publishers such as Churchill-Livingstone and later Singing Dragon.

Printed materials often appeared in the US as Worsley, Van Buren, and French manuscripts. So, in the past, we picked up a lot of Van Buren-esque thoughts or Van Nghi's ideas. Those were the main things that we were getting. Like in the early 1980s, these materials were critical, with so few source texts in translation.

The publishing of Chinese medicine texts took another turn with the People's Medical Publishing House project to print collaborative works between American and Chinese authors around 2010. I participated in two of those works. The first was *Li Shi-zhen Pulse Studies: An Illustrated Guide*, which contained material I had developed during my Ph.D. on epistemology practicing tradition in Chinese pulse diagnosis. The second one was part of the TCM Case Studies: Dermatology case study series. Many other American authors, including Cara Frank and Jake Fratkin, were in that series.

We can argue about styles and quality. The primary difference is whether the translator seeks the originator's intent or the receiver's needs. The latter is my bias. Let it be a literate adventure that is pleasant to read and informative.

But, those first writings were a critical juncture in the development. In the 1980s and 1990s, there wasn't a book that came out that I didn't have in my possession, and it was possible then.

CB: Same with me. I bought every text in English when it appeared and read most of them! In the beginning, they were rare and hard to get. I got a few Chinese medicine texts from California's Dr. Hong Yen Hsu (许鸿源). After about 2010, it became impossible to read everything published in English. Further, many books were repeating each other.

WM: I think I got to school a little later than you, Charlie. In 1990 I visited Hong Yen Hsu's laboratory and library in Taiwan, China during a factory visit to the Sheng Chang (胜昌) and Sun Ten (顺天) manufacturers. I had all of his books on pharmacology, Kanpo, and such. They were treasures to me (Fig. 3).

Turning to the manufactory, I was impressed with Sheng Chang then—they had such excellent quality control. They had this 90-year-old chemist/practitioner out on the market doing an organoleptic assessment of the quality of the materials. He'd send it back to the lab so the lab tech could do spectral analyses to determine there were no contaminants, the right product, and sufficient active constituents to make the purchase. Then they would do the storage, which was all refrigerated

Figure 3 Photo of Dr. William Morris (source from: William Morris).

then. In Taiwan, China, it is so hot and humid that if you don't, it can destroy herbs.

Only some companies did that, and many just had open-air storage facilities. Then they would test before the boiling, after the extractions, and before distribution. Their level of quality control was very high there. Suppose they made any additions outside their standard Kampo formulary for the hospital provisions of herbal formulas. For example, if a Western herb were combined, it would have to go through an official FDA hearing. Some students and I attended one such hearing, and the FDA approved it. There's this standardization across the formulary manufacturers in Taiwan, China, so the Taiwan provincial government was assured that the same active constituent load is present in any particular amount of medicinal substance.

IS: The business side of this industry worked well if talking about the past. There was a time when all herbs sold abroad went through Hong Kong. And Hong Kong was very much like the British. They were outstanding in testing all the medicinals for pesticides, heavy metals, sulfur, etc., and then they sold these herbs to Taiwan, China and elsewhere. But, by the time herbs got to Taiwan, China, they were already the cream of what China produced. So Taiwanese formulas ended up being a lot more potent and organic, let's say, than what the Chinese people got in China.

WM: And that makes perfect sense. Japan was also privileged with the best quality medicinals coming out of China. The quality control systems I observed from 1990-2001 were exemplary in Taiwan, China. During a 1995 trip, I had a great meal with the chief chemist at Sheng Cheng, and one of his pet projects was herbal hangover formulas, often based on *Ban Xia Hou Po Tang* (半夏厚朴汤 Pinellia and Officinal Magnolia Bark Decoction) as the core structure.

IS: Will, we have one last question. How do you see the future of the US acupuncture and TCM?

WM: Well, I think it's on a precipice here. The future, of course, is at the level of doctoral education. The continuation of technicians doing acupuncture places them squarely into competition with people who are physical therapists, nurses, and so forth, who use it on a technical basis. That kind of integration of medicine into a culture is an appropriation. If somebody takes the time to get involved in the discipline and learn it at its core, this is not cultural appropriation. It is cultural *appreciation*. We'll see this continue.

We will continue to see a reduction in the number of schools. The Accreditation Commission has accredited far too many schools. Part of that reduction in the number of schools results from fewer institutional applicants. There's nothing like the explosion following the legalization or the removal of experimental status from the needles in the late nineties. The number of schools just kept growing and growing. They're starting to reduce, so we've seen many schools close down their programs.

IS: San Francisco. Yeah.

WM: What a loss. American college was the torchbearer in the profession's second wave of herbal focus. But there are many, Tristate included.

IS: Do you think the doctoral degrees obtained in the US will ever be like university Ph.D.s? Say people go to PCOM to do a doctoral degree. It's two years at DAOM, and they graduate with that doctoral degree. Or PIHMA does an extra five modules and a few more clinical hours, and its students can get an entry-level doctoral, i.e., a DACM. I mean, what kind of intellectual work can or will these graduates ever be able to produce?

WM: Most professions have three-four years post-baccalaureate to a doctoral title, whether it is Juris, M.D., D.O., N.D., or D.A.. Our field is three-four years to a master's degree following a minimum of two years of undergraduate work.

Those doctoral degrees as add-ons to master degrees have problems at their core. DAOMs are at least seven years of college-level education, including undergraduate work. It places the Chinese medical profession at a disadvantage with those that can accomplish the goal in less time and expense. But, more so, they're degrees searching for a purpose in that there is a goal of a clinical doctorate, but there are research components. That research component serves to make graduates reasonable evidence consumers.

Let people enter as doctorates in clinical service under the moniker of a professional doctorate. Those who want to do scholarly work and make intellectual contributions can do Ph.D.s. They will be the double doctors.

IS: Oh, I see that.

WM: When master's degrees were constructed, they went from certification programs to graduate degrees. They should have gone straight to an entry-level doctorate. Making a master's degree the entry, cut the profession off at the knees. So really, what it should be is a three-four year professional doctorate, as is most doctoral-level education. Now, we have an addition to that, which minimally becomes a five-year professional doctorate, which places undue economic strain on new candidates.

IS: In China, TCM is a five-year bachelor's degree. This is what I did initially at Middlesex and in China. My first degree was a dual bachelor's degree in TCM and Medicine. Then I did a three years Medical Masters on TCM diagnosis. And then, I went on and pursued a three years Medical Ph.D., which is pure research. At the Ph.D. level, you get five modules in one semester that teach you how to do specific research and help you identify your direction. And after that first semester, for two and a half years, you go into the field, and you do whatever clinical/experimental/literature etc., research you want to do. But you're creating knowledge, more or less, and it is a journey of eleven years.

WM: Right. In the US, you've got three to four years to attain a master's degree following undergraduate work of two years. Then the doctorates are usually two to three more years. Most people can't achieve a DAOM in two years. The situation at Pacific is a little different, and they've managed to carve it in a way that meets the marketplace's needs, so they did a fantastic job on a business level. A school doing well on the scholarly front is the National College of Natural Medicine. Heiner Fruehauf created this program, and they're producing some real scholars.

IS: Even after DAOM, I don't see doctors; I only see practitioners who want to call themselves doctors instead of wanting to produce something that will advance the profession.

WM: Agreed. So, there needs to be a solution with the parity of the title here. Most people want to enter practice but want to be something other than a scholar, which I appreciate. I am, first and foremost, a practitioner. In all my efforts throughout my career, I always kept the fundamentals of practice as the basis of informing every other venture in academic medicine or leadership. I come to scholarly work as a practitioner—if it's not in service to patient outcomes, it gets culled from my queue. I'm interested in improving patient outcomes, but those are *my* values. Only some people are going to have those values. Some people are destined to be researchers or scholarly investigators. I was at a bifurcation in my life in 1998, my options were to go to Beijing and study the Chinese language, and I had a couple of other options. I chose to go to Los Angeles, became a dean, and pursued a master's in Medical Education. It led me down the path of educational standards and leadership, as opposed to linguistic studies and translational focus, although I did some translational work then too. I would collaborate with native Chinese-speaking practitioners from Taiwan, China, who used the old characters and had easy access to older materials. My interest is in Han dynasty, but developing Chinese language skills is one of the most efficient ways to gain depth in practice.

IS: Will, finally, we would also like to finish this interview by asking you about John Shen. We know that you have worked with him closely. Please tell us a few things about him. What was he like as a person? And also, any interesting anecdotes for the readers and future researchers.

WM: My practice started in Los Angeles as a licensed provider in 1987 as I added a year to my 2-year certification program for entry to the profession. At the time, I was in a meditation group practicing Agni yoga. In that group were several patients of Dr. John HF Shen's. They would see him when they were in New York, and they would see me in Los Angeles. As a result, I had the opportunity to study his formulas regularly. My observation of his formulas with shared patients continued up until his passing in 2001. He had sophisticated formula constructions that used minimal dosages in many instances. I took this to follow the teachings of Ye Tianshi.

In 1991 I met Leon Hammer, Dr. Shen's most senior student. Dr. Hammer and I began a seven-year mentorship. Leon introduced me to Dr. Shen by phone, and I went to New York City to visit the clinic where Dr. Shen practiced. I met several practitioners hanging around the clinic who said they had studied with Dr. Shen for years and finally understood what he was talking about when they studied with Dr. Hammer. The opposite was also true; after studying with Leon, seeing Dr. Shen in action brought it into reality. Dr. Shen was in his late 80s at that time. His cheeks were soft and glowing pink. When he would see patients with depleted conditions and poor skin, he would pat his cheek and see I'm 87 years old, and look at this; it is from practicing *Qi Gong* (气功).

Leon used to tell a funny story about Dr. Shen. And by the way, Leon followed Dr. Shen for 23 years, and his book *Contemporary Chinese Pulse Diagnosis* is a deep dive into a master practitioner's methods with the pulse. Leon was assisting Dr. Shen with patients in the clinic and would often manage them in their entirety. On more than one occasion, Leon would go to look for Dr. Shen with a question, and he was nowhere to be found in the clinic. Leon would then go out to the local theater that showed B-grade martial arts flicks and find Dr. Shen sitting in the theater watching those movies.

I also visited Dr. Shen's house in Connecticut, where I formed friendships that last to this day with Cara Frank and Andrew Gaeddert. While Dr. Shen would spend a fair amount of time getting a good history with a patient, his pulse was lightning fast, and he intersected it with facial diagnosis to arrive at assessments and treatment strategies. This was radically different from the practice I had learned with Dr. Hammer, whereby we often spent a half hour collecting data and analyzing it or even more. My studies with Dr. Shen certainly tempered my approach to what I had learned from Dr. Hammer, and in an excellent way. I do not believe I could have received what I received from Dr. Shen without having studied with Dr. Hammer, and *vice versa*, which was also true. I honor both men as being the roots of what made my practice successful and gave me a life within the discipline that was rich and rewarding—deepest gratitude.

In the fall of 1998, I began serving as Academic Dean for Emperor's College. During that period, we brought Dr. Shen in to speak on several occasions, and I had the opportunity to have dinner with him then. One of his messages was that Chinese medicine practitioners needed skills beyond that technical competency in the discipline, and we had to be priests, psychologists, and fortune tellers simultaneously.

I was in a unique position working in academic medicine and college leadership, which allowed me to see scores of practitioners guiding learners through

their clinical process. Without question, Dr. Shen was the most effective and got the best outcomes. He had a Robin Hood ethic whereby if I sent affluent people to him with more neurotic-based conditions, he would charge a large sum of money. But when I sent a woman whose son was in a life-threatening disease with no money, he brought both of them in and nursed the young lad to recovery at no expense to the mother or child.

WM: Lastly, I would like to thank you, Ioannis and Charlie, for your interest and time in bringing out some of these stories, which could have quickly faded away from memory. My main interests going forward are those at the root of my practice, sky, humans, and earth.

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Feature Article

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Nigel Wiseman: Modern Texts, Classics, Terminology, and Language-learning Material

Nigel Wiseman[1,✉]

Abstract

In this article, I trace my career from an early interest in language that eventually led me to engage in Chinese medical translation. Born in the United Kingdom in 1954, I gained a Bachelor of Arts degree in German and Spanish from the University of Heriot-Watt, Edinburgh. Subsequent study of Chinese took me to Taiwan, China, where I gained an interest in Chinese medicine and developed a coherent linguistic approach to Chinese medical term translation, which I and various colleagues have systematically applied in the translation and compilation of numerous works spanning modern texts, classics, dictionaries, and language-learning materials. Our translation approach, though conforming to principles universally recognized by translation theorists, has proven to be highly controversial, with opponents in both Western and Chinese circles.

Keywords: Chinese medical translation; Chinese medical terminology

1 Interest in language and culture

Languages have been a love of mine since the age of about 12 when I started to learn French and German in high school and later privately Spanish. I pursued German and Spanish at Heriot-Watt University's newly established translation and interpretation course, which gave me the thrilling opportunity to spend a semester in Leipzig, East Germany, and another in Mexico City.

After graduation, I went back-packing through Turkey, Iran, Afghanistan and Pakistan to India and from there by ship to Malaysia, a trip which inspired me to learn anon-Indo-European language that might enable me to live in a completely different culture. I was drawn to the idea of studying Hindi and Sanskrit to gain access to the culture of India. But after stepping off the ship in Penang, I was enchanted by the bustling world of the local Chinese community, its crowded streets, tiny shops selling all manner of exotic foodstuffs and medicines, and the whirling incense of brightly-colored Daoist temples. I had always been fascinated by China's beautiful logographic script, which for over two millennia has underpinned the linguistic and cultural unity of a vast area of different dialects through time. My short stay in Penang consolidated my idea of learning Chinese.

After returning to Europe, I soon found work in Brussels as a French-English translator in a press agency in Brussels, to where I promptly moved. After my exhilarating Morgenlandfahrt, life as a French-English translator of common-market legislation reportage was somewhat drab, though not quite as depressing as life in the German Democratic Republic. Yet since I only had to work for 5 hours a day, I had plenty of time to begin studying Chinese. Given the dearth of Chinese-learning materials at the time, I set about this by studying *Lao Zi* (《老子》) in Chinese with the help of a Chinese-English dictionary and English translation of the text. I later began study of modern Chinese through the works of John De Francis.

Three years in Brussels was enough. I was eager to go and live in the Chinese world. China was very closed at the time, allowing you only to go there either as a technical expert or as a student, in both cases living in dormitories or communities specially designated for foreigners that afforded minimal contact with ordinary Chinese people. I decided to go to Taiwan, China where it was possible to teach English for a living while studying the language. I arrived in Taibei in the fall of 1981 and immediately took courses at Taiwan Normal University's Mandarin Training Center.

2 Encounter with Chinese medicine

I took to Taiwan, China like a duck to water. I enjoyed learning Chinese and was able to share an apartment with Chinese people as well as other Westerners. The

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social life was great. The environment was stimulating. I was keen to stay, but most long-stay foreigners usually ended up working in trading companies rather than anything involving Chinese culture. After a boring job in Belgium, I did not relish the idea of any nine-to-five job. However, soon after arriving in Taiwan, China, I happened to meet some American acupuncturists, Paul Zmiewsky, Caylor Wadlington, and Andrew Ellis, all trained acupuncturists who had come to Taiwan, China, to learn Chinese and gain some clinical experience. I immediately became interested. We found a Chinese medical doctor, Li Cheng-Yu (李政育) who was willing to teach us and allow us help in his clinic with acupuncture treatments with medicinal processing and dispensing. Dr. Li set us reading a simple Chinese textbook and was keen for us to translate it. Since I had been trained as a professional translator, the idea thrilled me. A team of clinical practitioners and a linguist boded well for a successful outcome.

Comparing a couple of the English-language texts that my American friends had at hand with Chinese texts, I was struck by the huge difference in expression. Many of the nuances of Chinese texts seem to be missing in English. When reading English texts, it was often impossible to guess the Chinese equivalents of specific terms, since there were few "look-alike" expressions. The authors of English texts, whether Chinese or Western, paid no heed to establishing term correspondences between the two languages. This was obviously a consequence of Western authors not knowing much Chinese and Chinese authors assuming that no Westerners would want to be bothered with the technicalities of translation. Furthermore, the English literature revealed the imprint of biomedicalized translation strategies exemplified by Chinese textbooks and Chinese-English dictionaries of Chinese medicine available at the time.

3 Developing a translation strategy

English-language texts lacked a systematically applied methodology that is consciously or instinctively applied in the translation of most other technical languages. The spread of Western theoretical and applied sciences across the world provides numerous precedents for effective translation of terminology. Natural correspondence, loan translation, and direct borrowing are the first choices of translation methods because they provide target-language terms that are inspired by the source-language terms and whose correspondence to the source-language terms is most easily recognizable to the people familiar with both languages, while freer translation approaches, though sometimes necessary, are less easily associable with the source-language terms. The various methods are applied with different frequency depending on the relationship between the source and target languages and the nature of the concepts. Yet any of these specific methods produces terms that are more accurate than free translation and can be immediately seen as equivalents to the source-language terms.

Technical terms in any field are far from being arbitrary neologisms. They are composed of lexical material from the everyday language. Some everyday terms are used as technical terms, such as familiar body parts like "nose", "eyes", "liver", "bladder", or "knee", in biomedicine. Others are everyday terms used in an extended sense such as "menu", "folder", and "file" in computer-software language. Others still are combinations of words or word-roots, sometimes even borrowed from other languages, such as "nephr-" + "-itis" or "lob-" + "o" + "-tomy" in biomedical terminology. Although languages chart the world in slightly different ways, close fits between the lexis of different languages are often to be found. This is the case between Chinese and Western languages, both in the translation of biomedical terms into Chinese and in the translation of Chinese medical terms into Western languages.

A cursory glance at any English-Chinese or Chinese-English dictionary of biomedical terms reveals that the vast majority of Chinese biomedical terms are look-alikes of the English. Basic body parts known to the lay are translated with their lay equivalents (nose 鼻, eyes 眼, liver 肝, bladder 膀胱, knee 膝…). Body parts discovered by anatomists and given made-up names are mostly translated literally, for example, soleus muscle (比目鱼肌), gastrocnemius muscle (腓肠肌), duodenum (十二指肠), rectum (直肠), pelvis (骨盆), malleus (锤骨), incus (砧骨). There are notable exceptions to this practice in the translation of older terms of relatively obscure origin such as carotid vein, which was given the more transparent concept-based translation of "颈内动脉" (internal artery of the neck). Similarly, aorta was translated as "主动脉" (main artery). In very rare cases, a term was borrowed from the source language, for example, 淋巴 (*Lin Ba*), lymph.

It was obvious to me that this approach could and indeed should be applied in the translation of Chinese medical terminology. When after several years and several publications I enrolled at the University of Exeter for a doctoral program, I formalized these principles of translation in a thesis titled *Translation of Chinese Medical Terminology: A Source-oriented Approach*.[1] I called it "source-oriented" translation because a system of translation based on natural correspondence, loan translation, and borrowing produces terms that are more accurate and can be immediately seen as equivalents to the source-language terms, as distinct from "target-oriented" translation, which uses free translation that adopts terms familiar to target-language readers but less accurate and less easily associable with the source-language terms.

During this period of study, I came upon the work of George Lakoff showing how analogy and metaphor shape our perception of our world and its expression in language to a far greater degree than previously recognized.

This led me to realize that the importance of analogy and metaphor in the cognitive basis of Chinese medicine is far greater than most people previously thought. The understanding of organ functions, external evils, and medicinal actions, as well as qi, yin-yang, and the Five Phases is all embedded in a complex web of analogies. Only a source-oriented system of translation could fully preserve all the analogies and metaphors, which defined the development of the Chinese medical model.

What follows is a summary of the source-oriented approach.

Natural correspondence is the use of obvious equivalents for terms used in lay language as well as medicine. Natural equivalents are available for most body parts, substances, and environmental conditions understood to affect health:

肝 liver
心 heart
脾 spleen
肺 lung
肾 kidney
目 eye
舌 tongue
口 mouth
鼻 nose
耳 ear
膝 knee
肉 flesh
尿 urine
血 blood
尿/小便 urine
大便 stool
痰 phlegm
热 heat
寒 cold
风 wind
湿 dampness
肿 swelling
胀 distension
痛 pain

Literal translation applies to words and expressions used medically in extended senses, which constitute the vast majority of terms. It preserves all the metaphors of the Chinese terms, providing insight into the analogical thinking of the original authors. "Literal translation" in my usage is context sensitive. Different senses of terms have to be isolated, so that, for example, *Hua Mai* (滑脉) is rendered as "slippery pulse" but *Hua Tai* (滑苔) is rendered as "slimy tongue fur". Some compound terms are used in different senses, for example, *Qi Qing* (七情), which means the "seven affects" in physiology and the "seven relationships" in the theory of combining medicinals.

血室 blood chamber
命门 life gate
血海 sea of blood
宗筋 ancestral sinew (penis)
三焦 triple burner
精关 essence gate
营卫 provisioning and defense
母子 mother and child
标本 tip and root
小便清长 long voidings of clear urine
五心烦热 vexing heat in the five hearts
骨蒸潮热 steaming bone tidal fever
浮脉 floating pulse
沉脉 stringlike pulse
革脉 drumskin pulse
恶风 aversion to wind
腹痛拒按 abdominal pain that refuses pressure
头风 head wind
历节风 joint-running wind
鹤膝风 crane's-knee wind
梅核气 plum-pit qi
水肿 water swelling
痿 (<萎) wilting
湿热下注 damp-heat pouring downward
肝风内动 liver wind stirring internally
肾气不固 insecurity of kidney qi
肝气犯胃 liver qi invading the stomach
外感寒邪 external contraction of cold evil
热结 heat bind
狐惑 fox-creeper
心肾不交 noninteraction of the heart and kidney
补泻 supplement and drain
辛凉解表 resolving the exterior with coolness and acridity
疏风泄热 coursing wind and discharging heat

Pinyin borrowings can be used for the few virtually untranslatable terms, for example, qi (气), yin (阴), yang (阳), *Gu* (蛊), *Gan* (疳).

Definition-based translation is non-literal translation based on the definition, which is used when literal translation fails: 证 (literally "evidence"), pattern; 穴 (lit. "cave"), (acupuncture) point; 饮 (lit. "drink"), rheum; 鼻渊 deep-source nasal congestion.

To this day, the language of Chinese medicine is largely classical in style. Chinese is a language in which morphemes are monosyllabic and represented by a single character. In classical Chinese, the bulk of morphemes could stand alone as words, although they could combine to form compounds. The task of developing an English terminology of Chinese medicine thus largely entails finding English equivalents for individual characters that work in the maximum number of contexts.

One advantage of loan translation is that it reduces the tendency to require (though not preclude) different translations of one and the same term denoting different referents in different contexts or in different historical periods. Thus, we translate *Xiao Ke* (消渴) as "dispersion-thirst" both to denote the disease name (partly corresponding to diabetes) and to denote the sense applied in the *Shang Han Lun* (《伤寒论》*Treatise on*

Cold Damage) as meaning a severe thirst not relieved by drinking large amounts of fluid.

The only disadvantage of the source-oriented approach is that it produces English terms that are not so self-explanatory as they might otherwise be. For example, "fox-creeper" as the translation of *Hu Huo* (狐惑) requires explanation, whereas a referent-based translation such as "throat and anus syndrome", gives some clue as to the location of the condition. By contrast, "fox-creeper" invites the English reader to inquire about the mythical origins of the term. Despite the unfamiliarity that this approach introduces, it is certainly not unpopular among translators and readers. A notable example is a wide preference for "plum-pit qi" over "globus hystericus" for *Mei He Qi* (梅核气).

Many translators prefer terms that do not require definitions or explanations. A major source of such terms is biomedicine. The distortion that occurs when biomedical terms are used to represent traditional concepts will be discussed further ahead.

4 Books

This translation strategy had to be tested in practice. Cutting a long story short, Andy, Caylor, Paul, and I decided to write a basic textbook based on the Chinese text Dr. Li had made us study, *Zhong Yi Xue Ji Chu* (《中医学基础》*Fundamentals of Chinese Medicine*)[2] by the Shanghai College of TCM (商务印书馆, 1975). A basic text covering all aspects of the subject from physiology and pathology to diagnosis and treatment seemed a good place to start.

Paul was a friend of Paradigm Publications CEO Bob Felt, who agreed to publish the book once it was completed and generously gave us the money for a computer to make the work go more smoothly. Our new computer was fitted with a special card that would allow us to type Chinese as well as English. In those days, hard disks were expensive and unreliable, so we stored our data on floppy discs, which few people these days are old enough to remember.

Since of the four of us I had the best knowledge of Chinese, I did a rough translation on a typewriter, which Paul then smartened up as he inputted it into the computer. He would make a printout as I completed each chapter, and we would discuss the content, the expression, and in particular the terminology. I kept a record of our chosen English equivalents of Chinese terms, and we soon started to put those into a digital database. Whenever we changed our chosen equivalent, we would change it throughout the text of the book and in the database to ensure terminological consistency.

The *Fundamentals of Chinese Medicine*[3] was finally published by Paradigm Publications in 1985, by which time we were well into compiling a basic acupuncture text, *Fundamentals of Chinese Acupuncture*.[4] Caylor and Paul eventually left the team, and we were joined by Ken Boss before we started on a third book, *Grasping the Wind* (Paradigm, 1990).[5]

At the same time, we continued expanding our database and refining our term choices, and published a preliminary version of the terminology in the form of the *Glossary of Chinese Medical Terms and Acupuncture Points* (Paradigm, 1990).[6] In 1990, I accepted the offer of a teaching post at China Medical College (now China Medical University) in Taichung, Taiwan, China which gave me all the advantages of an academic environment and enabled me to spend more time on translation work. There, I revised and expanded the original *Glossary* to produce the *English-Chinese Chinese-English Dictionary of Chinese Medicine* (湖南科学技术出版社, 1995),[7] which with 35,000 terms represents the largest bilingual list of Chinese medical terms ever produced. I collaborated with Feng Ye (冯晔), a Chinese medical doctor at China Medical College, to produce *A Practical Dictionary of Chinese Medicine* (1998),[8] containing full definitions and copious clinical information. To this day, Wiseman and colleagues are the only Westerners to have created a bilingual term list and a dictionary of Chinese medicine, with the sole exception of Tessenow and Unschuld, who have produced a dictionary of *Nei Jing* (《内经》*The Internal Classic*) terms.[9]

5 Reception and debate

Our work prompted a debate on translation issues, which started after the publication of *Fundamentals of Chinese Medicine* in 1985 and heated up considerably in the early 2000s. Our books sold well. In our own estimation, they provided a more accurate portrayal of Chinese medicine and a certain amount of new information not available from other sources, but then, at that time, there weren't many books on Chinese medicine, so that people would buy anything they could lay hands on. However, they came with a translation rationale clearly explained in the introductory matter to the works themselves, in Chinese medical journals, notably the now defunct *Clinical Acupuncture and Oriental Medicine*, and internet chat groups, as well as in the form of published terms list and a full dictionary with definitions. This approach posed a significant challenge to the major Western transmitters of Chinese medicine at the time, such as Ted Kaptchuk, Dan Bensky and colleagues, and Giovanni Maciocia, who had never provided any detail of their translation strategy. They and others with opinions on terminology, including Charles Buck, Karen Cutler, Jake Fratkin, Tony Reid, and Z'ev Rosenberg engaged with me in debate. The challenge also caught the attention of Chinese medical scholars in China.

For me, the debate was about clearly arguing principles with copious supporting examples. For others, it was an opportunity to defend their own term

preferences without much concern for principles. Much of the criticism centered on a few established terms, such as "excess" and "deficiency". The obvious fear was that if source-oriented terms like "vacuity" and "repletion" gained currency, earlier texts would suffer both commercial and reputational costs. As a result, the debate was often emotionally charged. On one occasion, Giovanni Maciocia threatened me with litigation for publicly criticizing his work.

5.1 Flexible and context-sensitive translation

At the American Association of Oriental Medicine (AAOM) Asian Medical Nomenclature Debate held on October 19th, 2006, in Phoenix, Arizona, Bensky and colleagues Jason Blalack, Charles Chace, and Craig Mitchell argued that because Chinese medical terms are polysemous (have multiple meanings) and are used in different senses in different contexts, a "flexible and context-sensitive approach" should be adopted rather than the "rigid one-to-one" approach adopted by Wiseman. They claimed that "A plurality of English terms for a given Chinese word does not necessarily obscure its meaning. On the contrary, it has the potential for promoting a more well-rounded understanding of that word." I countered these assertions in *Translation of Chinese Medical Terms: Bensky and Colleagues' Falsification of the Issues*,[10] showing that the ratio of English equivalents to Chinese terms in Bensky's terms list (not formally published) and Wiseman terminology was almost the same. In a set of 905 terms, the ratio in Bensky's terminology was 1.237, while for Wiseman's terminology it was 1.186, both rounding out to 1.2. No-one provided any evidence to prove that polysemy and variability of meaning was any greater than this. Furthermore, while Wiseman's terms lists provide examples of compounds showing how different equivalents of the same term are used, for example, 滑 slippery (pulse), slimy (tongue fur), efflux (involuntary loss of substances), Bensky's list offered no such guidance.

5.2 Minimizing the importance of terminology

The Bensky group's arguments were weak, and so were Giovanni Maciocia's. In a personal email communication, Maciocia claimed that it does not matter what something is called provided people know what the concepts are. Whether we say "bow-string pulse" or "wiry pulse" is irrelevant provided people can master that pulse quality and identify it in the clinic (ie, understand a concept and make use of it). "As long as authors use a glossary of terms, there is not a problem", "the only universal terminology is the Chinese one", and "whenever there is a doubt about a particular term…. use the Chinese term". Unfortunately, the glossaries of Chinese terms included in his *Foundations of Chinese Medicine* (Churchill Livingstone, 1989)[11] and *Practice of Chinese Medicine* (Churchill Livingstone, 1994)[12] did not include *Xian Mai* (弦脉 bowstring/wiry pulse) and a myriad other important terms, and provided no definitions for any of the terms at all.

Another of Maciocia's arguments was that it is much more useful to students if *Zheng Jia* (症瘕) are referred to as *abdominal masses* rather than as *concretions* and *conglomerations* (my translations). It is indeed useful for students to know that these are abdominal masses, but to institute this term as a translation of *Zheng Jia* is most misleading. The Chinese term is a compound of two characters, each with its own definition. In fact, Chinese literature often speaks of term *Zheng Jia Ji Ju* (症瘕积聚), "concretions, conglomerations, accumulations, and gatherings", which all have their specific definitions. By his blanket translation *abdominal masses*, Maciocia implies that Chinese distinction between *Zheng* (症) and *Jia* (瘕) is not clinically useful. This is tantamount to saying, "you only need to know what I know and what I think is useful".

The arguments of Bensky and Maciocia rested, in my view, on a misunderstanding of what a "term" is. A term, as defined by Merriam-Webster, is "a word or expression that has a precise meaning in some uses or is peculiar to a science, art, profession, or subject". In the modern sciences, a term is a word or expression that represents a clearly definable concept, often explicitly defined in a dictionary, in some fields (such as anatomy) after discussion by specially established committees. Of course, "terminology" with these latter connotations hardly applies to Chinese medicine, which did not create a specialist dictionary until the 20th century [Xie Guan's (谢观) *Zhong Guo Yi Xue Da Ci Dian* (《中国医学大辞典》*Greater Dictionary of Chinese Medicine*) published in 1922[13]], undoubtedly as a result of Western scientific influence. Nevertheless, from the earliest times, it is clear that Chinese medicine had terms in the precise sense that Merriam-Webster and other dictionaries describe. The term *Huang* (黄), for instance, has a technical significance in the Five Phase theory that needs to be preserved by a standard translation. However, in the Chinese language, it covers a wider range of colors than we would normally associate with "yellow", which would be any translator's natural choice. "Yellow" can be used as the translation, but it takes on an especially "technical" significance when it is explained, as it has to be, that it denotes shades of brown. Another example is "qi", which originally meant mist, vapor, or clouds, but came to denote the basic substance of the physical world including the human body, yang forms of which were presumed to be the motor forces of physiological activity.

5.3 Opposition to standardization

Implicit in the arguments of Bensky et al. and Maciocia is the view that standardization of terms is not desirable.

The argument for standardization, recognized in most disciplines, is that when different names are used to refer to the same concept, people will think that different concepts are implied unless the synonymy is made explicit.

This is no minor problem. Sometimes different authors refer to a given concept by different terms (e.g., "excess" *vs*. "repletion"); sometimes one term refers to different concepts in the work of different authors (e.g., "worry" as used by different writers to denote the affects associated with different viscera). If readers can identify the concepts correctly, a difference in terminology matters little. Multiple translations might be acceptable for major concepts, such as "vacuity" and "deficiency" for *Xu* (虚). However, in many instances, readers are likely to be confused or misled. When terms are standardized, students will know that whatever book they read, each term denotes the same concept. If they don't understand the concept, they can go to a dictionary and find the definition. Term standardization makes learning easier and gives students confidence in the solidity of their own knowledge and power of expression, instead of being in a wishy-washy world where the relationship between terms and concepts is unclear.

Bensky et al. and Maciocia never addressed the problem arising when concepts are referred to differently by different authors. For example, "vexation" is used by Eastland for *Ao* (懊), but by Wiseman for *Fan* (烦). "Anxiety" is chosen by Eastland as one of their five different translations for *Jing* (惊), but by Wiseman for *You* (忧). "Worry" is used by Maciocia as his translation of *You* (忧) and by Cheng Xinnong (程莘农) as his translation of *Si* (思).[14] Different translations may help to reveal different aspects of concepts, but they lead to total confusion for students who do not know Chinese and who rely on works using different English terms. Bensky et al. and Maciocia evince a complete lack of concern about the dangers of variable terminology.

A poignant example of the confusion that can arise is the translation of *Xiao Chuan* (哮喘). *Chuan* (喘) is breathing difficulty, while *Xiao* (哮) is an accompanying condition defined by sonorousness. However, Eastland's unpublished list gets this the wrong way round, using "wheezing" for *Chuan* and "panting" for *Xiao*. The error seems to be born out in their usage of the terms in *Chinese Herbal Medicine: Materia Medica*.[15] The *Materia Medica* contains a glossary that includes neither term. So anyone reading between Bensky et al. and Wiseman et al. who (correctly) translate *Chuan* as "panting" and *Xiao* "wheezing" is likely to be highly confused.

While Bensky et al. believe that different translations can help to foster a "well-rounded understanding" of concepts, this only works when readers are aware that different words are used by different authors for the same concept. If they are not aware of this, then they might take words a face value and assume the same word used by different authors means the same thing. The best way to raise readers' awareness is for each author to provide a full list of their terms with Chinese, Pinyin, and definitions. Bensky's list, which was never formally published, included only 1,226 items. It includes a lot of familiar things and excludes things that ideally require explanation. The list includes *Yi Niao* (遗尿 enuresis), but not *Yi Jing* (遗精 seminal emission). It includes *Huo Luan* (霍乱 sudden turmoil disorder), but not *Zha Sai* (疰腮 mumps), *Ma Zhen* (麻疹 measles), *Ru Yan* (乳岩 mammary rock), *Tai Lou* (胎漏 fetal spotting), *Wei* (痿 wilting), or *Bai Zhuo* (白浊 white turbidity). Maciocia's lists contain less than a hundred terms, without definitions. The terms lists of both these writers represented a half-hearted attempt, perhaps intended to give an impression of rigor. Our terms list, published and revised several times, contains 35,000.

Proper term management involves transparency. All target-language terms should be linked to the source language by Chinese characters and Pinyin transcription, and given clear definitions. This can be done in text, in footnotes, and preferably also in easily searchable terms lists. This practice enables other translators to apply the same terminology, so that progress can be made toward standardization. Instead of translating a term by the first thing that comes into their head in different contexts, translators should find an English equivalent that works best in a maximum number of contexts for each.

For translators, term management and standardization mean a great deal of extra work for translators. In my experience, it involves painstaking trial-and-error testing of potential equivalents. Applying an existing term-set, whether developed by oneself or others, entails constantly having to check terms against a terms list. Because Chinese medicine has so many terms, translators need constantly to keep checking terms if they are to use a terminology consistently. Yet for readers, standardization, far from being limiting, is truly liberating because it avoids the constant need to wonder what terms mean.

5.4 Biomedicalization

A major trend in translation is the use of modern biomedical terms to represent traditional Chinese medical concepts. This approach is favored particularly among Chinese translators. However, the use of biomedical terms poses the danger of destroying the integrity of Chinese medical concepts and deprives Western readers of the ability to view the development of Chinese medicine in its historical perspective.

One might have expected that Chinese translators would prefer source-oriented English terms that reflect the concepts accurately. They must be aware that source-oriented translation is the norm in the biomedical field, since it is the only accurate approach to term translation in specialized disciplines. And given that they should have a good knowledge of Chinese medicine,

they should be more sensitive to the meaning of the source-language terms.

The Chinese preference for biomedicalized terms in China is rooted in government policies encouraging the modernization of Chinese medicine and its integration with biomedicine. These policies have been promoted by enlisting M.D.s who have studied Chinese medicine. Such writers are well-versed in medical English and hence tend to choose biomedical and scientific-sounding terms, yet they lack a deeper knowledge of the English language that would better enable them to create terms that reflect the original meanings of the Chinese terms. For non-native speakers of English, the use of an existing familiar term has the advantage of being much easier than devising a new term that fits the concept precisely and that is intelligible and acceptable to target-language recipients. Thus, it is very much more difficult for a native speaker of Chinese to come up with source-oriented translations such as "sudden turmoil". "dispersion-thirst", or "plum-pit qi".

Underlying the modernization and integration with biomedicine efforts of the Chinese government is the possibility envisaged, at least by some, of creating a new form of medicine that could be adopted by the international medical community, so as to put a firm Chinese imprint on the future development of medicine. With this prospect in mind, the intended aim of transmission efforts would be to convince world M.D.s of the value of Chinese medicine. However, modern biomedicine only accepts new theories that evolve from its own principles, so, without the government mandates only possible in China, any integration of Chinese medicine with it would leave little of traditional Chinese medicine. In the West, probably only one third of Chinese medical practitioners are M.D.s, and what they can practice is usually subject to strict limits.

A representative example of China's M.D. translators is Xie Zhufan (谢竹藩), whose approach I critiqued in *Comments on English Translation of Common Terms in Traditional Chinese Medicine*.[16] Professor Xie et al. answered my comments in an article titled *Comments on Nigel Wiseman's A Practical Dictionary of Chinese Medicine: on the use of Western medical terms in English glossary of Chinese medicine* (《评魏酒杰先生的〈实用英文中医辞典〉(续)》--论中医英文词汇中的西医名词) published in *Chinese Journal of Integrated Traditional Chinese and Western Medicine*,[17] in which they said: "The so-called true face of traditional Chinese revealed by such [Wiseman] terms is merely the Chinese custom of word formation and metaphoric rhetoric. In other words, traditional Chinese medicine is not regarded [by Wiseman] as a system of medicine but merely some Oriental folklore." The logical implication of this statement is that if biomedical terms should be used in translation, they could also be used to replace traditional terms in Chinese-language texts. Yet the statement ignores the fact that modernization and integration with biomedicine reflect directives of the central government that have had limited influence over the creation of modern textbooks, which preserve traditional theories and hence retain traditional terms rather than replacing them wherever possible with biomedical terms. Professor Xie's arguments thus reflect his own view of Chinese medicine as unscientific medicine. Such a view is shared neither by all his Chinese colleagues nor by translators who hold to the principle of faithful translation without value judgement. Furthermore, as discussed above, metaphor in Chinese medicine is far more than mere "rhetoric".

Aside from value judgments, biomedical terms from the lay language such as "nose", "stool", "cough", "headache", as well as biomedical terms that do not imply any detailed medical knowledge such as "malaria", "dysentery", "cholera", etc. are perfectly acceptable source-oriented renderings in the Chinese medical context. That said, when a biomedical term whose definition is based on knowledge specific to biomedicine is used to represent a traditional Chinese medical concept, this is target-oriented translation that sacrifices culture-specific information to the goal of effortless comprehension for the target-language reader.

A classic example of this is "acute conjunctivitis" as the translation of the traditional concept of *Feng Huo Yan* (风火眼), which is literally rendered as "wind-fire eye". Needless to say, "acute conjunctivitis" is a term familiar to most people. Nevertheless, even those who propose it translate *Feng* (风) as "wind" and *Huo* (火) as "fire" in the context of external evils, which makes "wind-fire eye" a perfectly meaningful term for people who have studied Chinese medicine. While the translation "wind-fire eye" describes the disease in terms of traditional etiology, the term "acute conjunctivitis" gives a false impression that Chinese doctors were acquainted with the notions of "conjunctiva" and "inflammation" ("-it is") before the introduction of biomedicine. Furthermore, given that *Feng Huo Yan* and "acute conjunctivitis" are defined differently in the respective disciplines, we might expect that the concepts do not correspond exactly, so that a patient diagnosed with *Feng Huo Yan* in Chinese medicine might not be diagnosed as having acute conjunctivitis in biomedicine.

Perhaps a more striking example of distortion created by biomedicalization is the term *Shi Du Dai Xia* (湿毒带下). This can be literally translated as "damp toxin vaginal discharge", which is a meaningful term for people who know what "dampness" and "toxin" connote in Chinese medicine. However, some have proposed it be translated as "cervical cancer", which is not only inaccurate but also misleadingly suggests that Chinese traditionally had the concept of cancer. Furthermore, it would be difficult to envisage how Western non-M.D. practitioners of Chinese medicine would be legally allowed to diagnose patients with the condition.

Table 1, Biomedicalized translations of disease names provides further examples from *The Chinese-English*

Table 1 Biomedicalized translations of disease names

Chinese	CEMD	PDCM
	Target-oriented	Source-oriented
痹	Arthralgia	Impediment
痿	Flaccidity syndrome	Wilting
痰核	Subcutaneous nodule	Phlegm node
喉蛾	Tonsillitis	Throat moth
湿毒带下	Cervical cancer	Damp toxin vaginal discharge
风火眼	Conjunctivitis	Wind-fire eye
脐风	Tetanus neonatorum	Umbilical wind

CEMD: The Chinese-English Medical Dictionary; PDCM: Practical Dictionary of Chinese Medicine.

Medical Dictionary (CEMD)[18] and *Practical Dictionary of Chinese Medicine* (PDCM).[8]

Target-oriented translation causes even greater loss when it destroys the classification framework of diseases. The Chinese terms 痈 (*Yong*) and 疽 (*Ju*) refer to yang- and yin-type abscesses, respectively. This binary framework is destroyed when each kind of abscess is labeled with the biomedical name of the closest corresponding condition identified, as the 2007 *WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region*[19] shows (Table 2).

Biomedicalized translations are not limited to disease names. In such cases, it is often impossible for an English-speaker with a knowledge of Chinese medicine and the Chinese language to guess what the original Chinese terms are when the correspondence between the two languages are not explicitly stated.

Other examples of biomedicalized translation include *Zhi Wei Bing* (治未病, lit. "treating disease before it arises") translated as "preventive medicine", *Mei He Qi* (梅核气, lit. "plum-pit qi") as "globus hystericus", *Bi* (痹, lit. "impediment") as "arthralgia", *Huo Xue* (活血, lit. "quicken/enliven the blood") as "promoting blood circulation", *Li Shui* [利水, lit. "disinhibit (the flow of) water"] as "diuresis".

Biomedicalization became a major bone of contention in the context of the World Health Organization's development of *WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region*, which was published in 2007 and provides English equivalents for Chinese terminology. I was invited to participate in the deliberations, where Xie Zhufan's terminology and my own formed the basis of discussion. Because no compromise could be reached, it was decided that each term should be put to the vote of a panel of twenty experts. The "twenty" experts were mostly from the WHO collaboration centers in Japan, China, South Korea, and Vietnam, involved in scientific research, hardly any of whom had any experience in Chinese medical translation and certainly no Chinese medical publications. Because of the deep divide over the issue of biomedicalization, I proposed that disease names could be given a source-oriented translation as well as a rough biomedical equivalent. The proposal was rejected. The Chinese delegation insisted that there be only one translation for each term.

Table 2 Traditional classification destroyed by biomedicalized translation

Chinese	WHO	PDCM
	Target-oriented	Source-oriented
痈	Abscess	Welling-abscess
乳痈	Acute mastitis	Mammary welling-abscess
有头疽	Carbuncle	Headed flat-abscess
附骨疽	Suppurative osteomyelitis	Bone flat-abscess

PDCM: Practical Dictionary of Chinese Medicine.

6 More books

China's heritage of medical texts is vast, spanning over 2000 years. The translator is spoiled for choice. To create a body of literature in English, teamwork is of the essence. I was lucky to have numerous able people join me on various projects.

One obvious choice was the formative classical literature, little of which had been adequately translated in the past. The work of Zhang Zhongjing (张仲景) stands out as the earliest contribution to the development of a theory-based application of medicinal therapy solidly grounded in clinical experience. Beginning with the *Shang Han Lun*,[20] Craig Mitchell did the translation work of the text under my guidance, while Feng Ye determined the content of the commentaries. Later, Sabine Wilms and I completed the English version of the sister volume, the *Jin Gui Yao Lue* (《金匮要略》 *Essentials from the Golden Cabinet*).[21]

As to modern texts, we were lucky enough to obtain the rights for the works of Jiao Shude (焦树德), well known in China as a modern master of the subject. We considered Jiao's work to be an ideal complement to the English-language textbooks available. Shelley Ochs and Marnae Ergil joined me for *Ten Lectures on the Use of Medicinals from the Personal Experience of Jiāo Shù-Dé* (《焦树德着〈用药心得十讲〉》).[22] Subsequently, *Jiao Shude's Ten Lectures on the Formulas* (《方剂心得十讲》)[23] was translated by Bob Damone, Michael Helme, Lynn Kuchinski, and Craig Mitchell.

Aware that mastery of pattern identification requires a deeper understanding of the mechanisms by which patterns arise, we identified Yan Shilin and Li Zhenghua's *Pathomechanisms of the Five Viscera* (《中药五脏病机学》)[24–28] as helpful in enabling practitioners to hone their diagnostic skills by shifting their focus away from the synchronic array of signs (patterns) toward a diachronic understanding of any particular condition. Sabine Wilms was the main translator for that project.

To help students develop their understanding of medicinal therapy, I joined with Eric Brand to create *A Concise Materia Medica*.[29]

The successful transmission of any complex body of knowledge rests on linguistic access to primary texts of the source language. For this reason, collaboration with Feng Ye and Zhang Yuhuan has produced quite of number of books intended to promote the study of Chinese for the purposes of reading Chinese-language texts.[30–36]

Western students generally have little understanding of Chinese culture and history. Other than Chinese medicine, popular interest in Chinese cultural products has been limited to various styles of *Qi Gong* (气功) and Daoism. Many proponents of Chinese medicine regard Chinese medicine as a product of Daoism, largely on the basis of misconceptions, such as that yin-yang and the Five Phases are products of Daoist thought, even though the emergence of these concepts of natural physiology in fact predated Daoism. To provide more accurate background knowledge, I have worked with Sabine Wilms to produce *Chinese Medicine: The Ideas that Shaped It,*[37] which describes the historical development of Chinese medicine, outlines the theories of modern practice and discusses the influence of Confucianism, Daoism, Buddhism, biomedicine, and Communism, debunking the popular Western idea that Chinese medicine is a "Daoist art". This provides a sister volume to *Chinese Medicine: Theories of Modern Practice,*[38] a basic text that aims to overcome the cultural barriers to learning Chinese medicine, providing much information not available in other primers hitherto published.

Over the years of book creation, I have developed a large set of databases of terms, acupoints, medicinals and formulas, much of which has not been published. At the writing of this paper, *Comprehensive Chinese Materia Medica*[39] (with over 6,000 entries), *A Chinese Medical Reference: Symptoms, Patterns, Diseases, Acupoints, and Formulas*,[40] as well as *Chinese-English Dictionary of Chinese Medical Terms*[41] (an updated list of terms for translators) are in the completion stages. These will all appear in e-book form for affordability and ease of searchability. *A Practical Dictionary of Chinese Medicine*[8] will also shortly be available in e-book form.

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This study does not contain any studies with human or animal subjects performed by the author.

Author contributions

Nigel Wiseman did the research and wrote the paper.

Conflict of interest

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The Making of a Health Profession: How Chinese Medicine Became a Nationally Registered Allied Health Profession in Australia

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Abstract

In 2012, traditional Chinese medicine (TCM) practitioners in Australia became nationally-registered allied health professionals in three categories: acupuncturist, Chinese herbal medicine practitioner, and Chinese herbal medicine dispenser. Australia was the first Western country to introduce national registration for Chinese medicine, followed by Portugal and, recently, New Zealand. The practice of TCM in Australia can be traced back to the beginning of Chinese immigration to Australia during the Victorian Gold Rush which began in the 1850s. The process which led to national registration commenced in the early 1970s with the establishment of the first acupuncture courses. Decades of gradual development of courses from unaccredited part-time diplomas to accredited bachelor degrees, and the development, by the profession, of national consensus on educational standards were essential elements in the process which led to registration. Professional associations, such as the Australian Acupuncture and Chinese Medicine Association Ltd. (AACMA), also developed a framework of professional self-regulation, including Codes of Ethics, Codes of Conduct, ongoing professional development requirements and Infection Control Guidelines, and provided leadership in the development of the profession. After decades of tribalism and division within the TCM profession, the National Academic Standards Committee brought almost all stakeholders together to reach a consensus on the *Australian Guidelines for Traditional Chinese Medicine Education* which were published by AACMA in 2001. Professional associations also collaborated on joint submissions to the government in support of registration, which was introduced first in the state of Victoria in 2000, and subsequently became national in 2012. Despite national registration, some barriers still remain, and professional associations continue to lobby the federal government for inclusion in Medicare, chronic disease management scheme, and Veterans Affairs.

Keywords: Acupuncture; Chinese medicine; Registration; Regulation; Education; Standards; Australia; TCM

1 Introduction

Traditional Chinese medicine (TCM), including acupuncture, was first introduced to Australia by Chinese immigrants who came to Victoria during the gold rush which began in the 1850s.[1] From this time until around 1970, acupuncture and Chinese herbal medicine were practised by members of the Chinese diaspora community, but it was far from being seen as fringe medicine. In fact, many Chinese doctors were held in high regard by their Western medical counterparts and by their communities.[2] Acupuncture was first taught to Australians outside of the local Chinese communities in the early 1970s. Acupuncture Colleges (Australia) (ACA) was established around 1969 in Paddington, Sydney.

Around the same time, courses in medical acupuncture commenced, based on the courses offered by Dr. Felix Mann in England. The Australian Medical Acupuncture Society (AMAS) was established, which restricted membership to registered medical practitioners who had completed their courses. AMAS later changed its name to Australian Medical Acupuncture College (AMAC). This pattern of dual streams of traditional acupuncture and medical acupuncture education and practice in Australia persists to this day.

From the humble beginnings of part-time diplomas offered by private colleges, standards of acupuncture education gradually developed into accredited diplomas, then accredited bachelor's degrees (of both acupuncture and Chinese herbal medicine in both universities and private colleges). master's degrees and doctoral degrees are now offered by some universities.

The development of the consensus on educational standards as well as professional codes of practice played

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a vital role in the registration of Chinese medicine in Australia. However, despite national registration being in place since 2012, the Chinese medicine profession still faces some significant challenges in achieving full integration into Australia's healthcare systems. Table 1 provides a detailed timeline (Table 1).

2 The profession

Australia's state-based system for the regulation of health professions led to multiple small regional professional bodies (associations) being formed. These associations often grew in tandem with the local colleges teaching acupuncture or TCM.

Initially, acupuncture and TCM professional bodies mainly focused on supporting new and emerging practitioners through professional development, such as seminars and workshops, and generating a sense of professional identity among practitioners through codes of ethics, newsletters and social events.

As the number and diversity of practitioners increased, structures and processes for minimum professional and educational standards became necessary. However, practitioners' aspirations to become a registered profession seemed unattainable. Therefore, the leading acupuncture associations focused on workable systems of professional self-regulation, using as many of the available levers as possible.

The provision of member services such as practitioner referrals, discounted continuing professional development, marketing materials, group policies for professional indemnity insurance, recognition as providers by health funds, and leadership were also important roles for the associations. Two of these levers are discussed below.

2.1 Private health insurance

The most significant member service provided by TCM associations has been providing access to private health insurance, initially for acupuncture services and later for Chinese herbal medicine services.

Provider recognition by private health insurers (health funds) was one lever used by associations to support self-regulation, by becoming the gatekeepers for access. This system enabled patients to claim rebates on the cost of recognised health services. Association entry criteria and codes of ethics were the basic criteria for health fund recognition. Over time, these arrangements supported associations to raise their entry-level educational standards and enforce a range of policies and annual conditions that practitioners had to undertake to be recognised as providers by the health funds. These mechanisms included enforceable complaint processes with penalties such as fines, suspension of membership and/or expulsion for the more egregious misconduct. Most of the conditions were based on improving standards of practice and protecting patients, such as continuing professional development, first aid certification, and profession-specific indemnity insurance, to name a few. The health funds, in the interests of their members, worked with the leading bodies in confirming these requirements.

Recognition of acupuncture by the health funds first occurred in South Australia in 1977 as a result of work by the Acupuncture Association of South Australia (AASA). However, the most significant early achievement was the introduction of acupuncture benefits by the largest health fund in New South Wales, HCF (a private health insurance company), also in 1977. This was achieved in collaboration with the Acupuncture Ethics and Standards Organisation (AESO), formed in 1977 to accredit acupuncture practitioners for HCF provider recognition.[3] AESO was closely associated with Acupuncture Colleges Australia (ACA) in Sydney and the Australian Acupuncture College (AAC) in Melbourne.

By the late 1990s, health fund cover for acupuncture had been taken up by almost all health funds, and coverage had extended to include, not only Chinese herbal medicine as a distinct service, but also a range of complementary therapies, including naturopathy, homeopathy, Western herbal medicine and remedial massage. This development was primarily driven by the leading professional associations and health funds responding to the needs of their members. Private health funds do not cover the cost of herbal or natural therapy medicines prescribed by practitioners.

Also in the late 1990s, the Australian government introduced funding for a rebate on health insurance fees to encourage Australians to take out private health cover.[4] While it reduced the cost of private health insurance, the provision of funding enabled government intervention into the types of services that could be funded and the types of practitioners who could provide those subsidised services. In 2011, regulations were introduced that basically codified the existing arrangements between health funds and professional associations as gatekeepers.[5]

In 2015, the Review of the Australian Government Rebate on Private Health Insurance for Natural Therapies found that there was no clear evidence of clinical effectiveness for most natural therapies.[6] As a result, from April 2019 most natural therapies were, for all practical purposes, excluded from health fund cover.[7] Of the natural therapies that were considered acceptable for continued health fund rebates, such as massage therapy and nutrition, coincidentally overlapped with services already provided by registered health professions, such as physiotherapy and osteopathy, or were subsidised by Medicare as an allied health service, such as dietetics. Acupuncture and Chinese herbal medicine, which were by then part of the practice of nationally registered health professions, were excluded from the scope of the 2015 review, and therefore were not

Table 1 **Timeline of key events**

Year	Key events
1850s	First Chinese immigrants came to the Australian goldfields.
1850s–1970	Acupuncture and Chinese herbal medicine were mainly practised (and passed on) by (and within) members of the Chinese diaspora community.
1969/1970	Acupuncture Colleges (Australia), the first institution teaching acupuncture to the broader community was established. Courses in medical acupuncture commenced, focusing on teaching acupuncture to medical doctors.
1970s	Numerous more private colleges teaching traditional acupuncture and TCM to non-doctors were established in most Australian states.
1973	Australian Acupuncture Association Ltd. (AAcA) was formed (now Australian Acupuncture and Chinese Medicine Association Ltd.).
1977	The first private health insurance cover for acupuncture commenced in South Australia. The Acupuncture Ethics and Standards Organisation (AESO) was formed to accredit practitioners for Hospital Contribution Fund (HCF) cover. HCF (NSW, New South Wales) introduced benefits for acupuncture.
1986	Medicare Benefits Review Committee reported on acupuncture. The first acupuncture education program was accredited by a state education authority [Diploma of Applied Science (Acupuncture), ACA].
1990s	Acupuncture cover was taken up by most private health funds. Cover for Chinese herbal medicine services commenced and was included by some health funds.
1991	The first accredited bachelor degree in acupuncture [Bachelor of Applied Science (Acupuncture), ACA] emerged.
1992	The first university-based bachelor degree in acupuncture [Bachelor of Health Sciences (Acupuncture), VUT] emerged.
1993–1995	*National Competency Standard for Acupuncture* was developed; it was published in 1995.
1994	First university degree covering both acupuncture and Chinese herbal medicine [Bachelor of Health Science/Bachelor of Applied Science (Chinese medicine), RMIT University].
1994–1995	Mergers of AAcA & AESO and then, later AAcA & AASA.
1995	Australian Health Ministers Advisory Council (AHMAC) formed a working committee to review criteria and processes for the future inclusion of health professionals in statutory registration. AHMAC criteria was published in 1995.
1995	Victorian Minister for Health formed the Advisory Committee on TCM.
1996	*Towards a Safer Choice: The Practice of Traditional Chinese Medicine in Australia* by Bensoussan and Myers was published by UWS in 1996.
1996	Australian Qualifications Framework (AQF) was established.
1996	Joint Submission for Occupational Regulation of Traditional Chinese Medicine was submitted to AHMAC.
1997	Victorian Department of Health Services. *Traditional Chinese Medicine: Options for Regulation of Practitioners: Discussion Paper September, 1997* (outcome of committee formed in 1995).
1998	Australian Acupuncture Association Ltd. (AAcA) changed its name to Australian Acupuncture and Chinese Medicine Association Ltd. (AACMA).
1998–1999	National Academic Standards Committee for traditional Chinese medicine (NASC) developed national guidelines for TCM education (outcome published in 2001).
1990s (late)	The Australian government introduced funding, via rebate on insurance fees, to support the uptake of private health insurance.
2000	The state of Victoria introduced occupational regulation (registration) of Chinese medicine practitioners (Chinese Medicine Registration Act). Chinese Medicine Registration Board of Victoria (CMRB) was established.
2001 (April)	*Australian Guidelines for Traditional Chinese Medicine Education* was published by AACMA in 2001.
2003–2004	Submissions for regulation of Chinese medicine practitioners were submitted to Western Australia and New South Wales Health Ministers.
2008	The Council of Australian Governments (COAG) agreed to proceed with a single National Registration and Accreditation Scheme (NRAS) for the health professions.
2008	AACMA lodged a submission for inclusion of Chinese medicine under the national scheme.
2010 (July)	National registration of ten professions already registered in each state or territory commenced.
2010	Chinese medicine was approved for inclusion under NRAS from July, 2012.
2011	The Australian government introduced new private health insurance regulations which codified the existing arrangements between health funds and professional associations, determining practitioner eligibility for rebated health services.
2012 (July)	National registration of Chinese medicine practitioners commenced under the Australian Health Practitioner Regulation Agency (AHPRA).
2012–2015	The transitional (grandparenting) period for existing Chinese medicine practitioners to apply for registration began.
2015 (July)	The transitional (grandparenting) period ends.
2015	Review of the Australian Government Rebate on Private Health Insurance commenced, reviewing health services covered by private health insurance.
2018 (July)	Paramedicine (paramedics) were included in NRAS.
2019 (April)	The federal government introduced restrictions on the types of services that could be rebated by private health funds. Acupuncture and Chinese herbal medicine services were not affected. Rebates were also permitted to continue for remedial massage services (including TCM remedial massage/Tuina).
2020	Chinese medicine was deemed an essential service for the purpose of providing health services during COVID lockdowns.

negatively affected. However, the mechanism for health fund provider recognition appears to have largely remained in place, and membership of a recognised professional association is still required, even for registered TCM practitioners.[8–11]

2.2 Professional leadership

The mid-1990s saw dynamic changes in how the TCM profession operated. Government policy was shifting toward nationally uniform approaches to regulation across various sectors. It became increasingly important to develop national strategies for the profession, and the need for a national association representing the majority of qualified practitioners became pressing.

Most associations, at that time, were incorporated under state-based associations and charities legislation which did not have the level of compliance and accountability expected of a registered company. The Australian Acupuncture Association Ltd. (AAcA), registered as a not-for-profit company in Queensland, automatically became a nationally registered body with the establishment of the national company regulator (Australia Securities and Investments Commission).

This made AAcA the ideal vessel to bring various entities together under one umbrella. The AESO merged with AAcA in 1994, followed by the AASA in 1995. In 1996, AAcA then extended its scope beyond acupuncture to include Chinese herbal medicine and later Chinese remedial therapy (*Tui Na*).[3] In 1998, AAcA changed its name to the Australian Acupuncture and Chinese Medicine Association (AACMA).

These amalgamations resulted in AAcA (now AACMA) becoming the single largest TCM professional body in Australia, and gave it the resources it needed to drive the profession to a level of maturity and capability to make statutory regulation feasible. AACMA initiated, managed, and funded numerous national projects, including the *National Competency Standard for Acupuncture* (1993–1994, published in 1995), the *Joint Submission for Occupational Regulation of Traditional Chinese Medicine* (1996) and the *Australian Guidelines for Traditional Chinese Medicine Education* (1998–1999, published in 2001) (Fig. 1). [12–14]

In addition to AACMA and other professional associations which focused solely on TCM, including some societies of practitioners with a common language and ethnic backgrounds, there were also several natural therapy associations that included acupuncture and Chinese herbal medicine along with a wide range of non-TCM modalities, such as naturopathy, homeopathy, remedial massage, and Western herbal medicine.

Over the following decade, with the advent of statutory registration in Victoria in 2000 and national registration in 2012, most of the smaller societies either merged with larger bodies or ceased operating. Based on 1996 and 2001 publications, the number of acupuncture- and Chinese medicine-specific associations reduced from approximately 15 in the 1996 to 2001 period to three by 2023, plus two other natural therapy organisations that also represent TCM practitioners.[14,15]

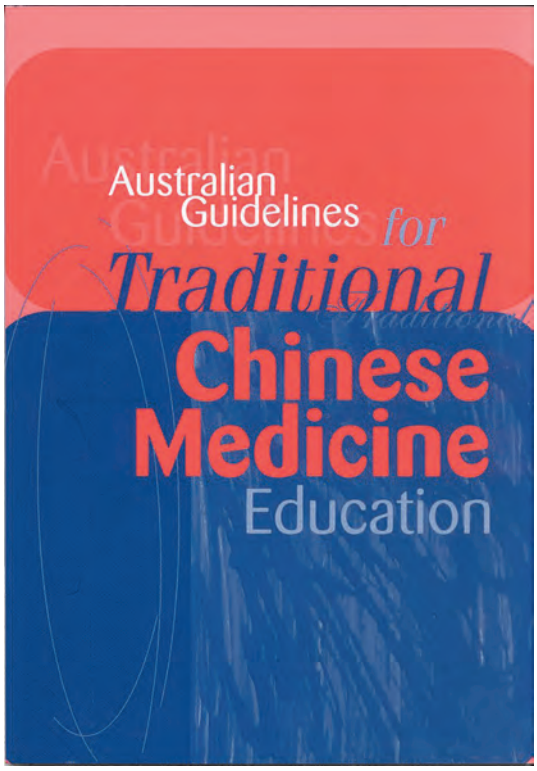

Figure 1 *Australian Guidelines for Traditional Chinese Medicine Education* set the benchmark for professional entry at Bachelor degree level or equivalent (source from: the authors).

3 Accreditation and establishing educational standards

The Medicare Benefits Review Committee (1986) cited a lack of consensus in acupuncture education as one of the reasons that acupuncturists should not be included in the Medicare benefits scheme (although medical acupuncturists had been included since the early 1970s in Medibank, the scheme which predated Medicare):

> *"(ii) There is no uniformity in the standard of training offered by different acupuncture colleges.*
> *(iii) There is no consensus as to appropriate education and training of acupuncturists nor as to the appropriate standards of practice."*[16]

This review committee also alluded to a lack of appropriate professional practice standards.[16]

Although this finding became an ongoing barrier to Medicare funding acupuncture services provided by acupuncturists, the political, educational and professional environment changed considerably over the next decade.

The proliferation of unregistered non-university education providers (colleges) forced state governments to introduce regulation of the non-government and

non-university sectors and place restrictions on the level and type of qualifications that could be awarded. This enabled many of the existing acupuncture and Chinese medicine colleges to progressively obtain accreditation to teach and award diplomas, and later advanced diplomas, in acupuncture. Accreditation for Chinese herbal medicine and/or traditional Chinese medicine programs followed. In 1986, the first acupuncture course to be accredited by state educational authorities was the Diploma of Applied Science (Acupuncture) at Acupuncture Colleges (Australia) (ACA), while the first accredited bachelor's degree was the Bachelor of Applied Science (Acupuncture), also at ACA, in 1991. In 1992, AAC, a Victorian affiliate of ACA, was incorporated into the Victoria University of Technology where the first university degree in TCM, the Bachelor of Health Sciences (Acupuncture), was established. Subsequently, ACA was incorporated into the University of Technology Sydney (UTS) in 1994.

RMIT University in Melbourne established the first university program combining both acupuncture and Chinese herbal medicine, a dual degree of Bachelor of Health Science and Applied Science (Chinese Medicine), in 1994. The University of Western Sydney [UWS, which later became Western Sydney University (WSU)] established a Bachelor of TCM in 1997, while the Australian College of Natural Medicine [now Endeavour College of Natural Health (ECNH)] received accreditation for the first Bachelor of Health Science (Acupuncture) in Queensland in 1998. A detailed review of TCM education and training in Australia up to 2010 has been provided by Janz and Adams.[17]

Around the same time, the Australian federal government initiated the development of nationally uniform regulation, in particular in the areas of health and education. This required the support and agreement of all Australian states and territories. A significant outcome of that process was the Australian Qualifications Framework (AQF), established in 1996, which sets the national policy framework for regulated qualifications in Australian education and training.[18]

Competency standards were also being developed for a range of vocations and professions. In 1994, the Australian Acupuncture Association (now AACMA) initiated and coordinated the development of Australia's first standard in the field of traditional Chinese medicine: the *National Competency Standard for Acupuncture* (1995).[12] It was also the first time that the vast majority of associations had worked together to develop a common standard for the profession. A steering committee, representing over 95% of practising acupuncturists, was formed and all identifiable stakeholder organisations were invited to participate.

The *National Competency Standard for Acupuncture* (NCS) outlined the knowledge, skills, and attributes necessary for new practitioners entering the profession.[12] It focused on the scope of what practitioners actually did in practice and the associated practitioner capabilities, rather than technical details of acupuncture treatment.

Knowledge, skills and attributes, the basis of competency standards, are now referred to as professional capabilities and are still a key part of the accreditation of education programs:

> *"The professional capabilities identify the knowledge, skills and professional attributes needed to safely and competently practise as an acupuncturist, and/or a Chinese herbal medicine practitioner and/or a Chinese herbal dispenser in Australia. They describe the threshold level of professional capability required for both initial and continuing registration."*[19]

Despite the positive aspects of regulating the education sector, it was not ideal. Professional associations admitted members based on recognised qualifications. However, the views of associations were not always sought or accepted in the accreditation process, and the depth, breadth and quality of accredited programs varied considerably. Colleges, in general, expected professional bodies to simply accept the outcome of the accreditation process and admit their graduates as members, despite some justifiable concerns.

This approval process became even more challenging once acupuncture and Chinese medicine entered the university sector where programs are developed and approved within the institution, and the absence of nationally agreed education standards for acupuncture and TCM became a major challenge.

The Victorian discussion paper on options for regulation of TCM practitioners recommended that consensus educational standards be developed before registration:

> *"If occupational registration proceeds, then it becomes the role of the registration board to accredit courses and determine the standard of training required for registration. To assist registration boards in this process, it would be valuable to have available standards that have broad support from the majority of professional associations."*[20]

In this critical context, AACMA commenced a national project to develop educational standards for TCM. The following extract from the 1998 *Traditional Chinese Medicine: Report on Options for Regulation of Practitioners* indicates the importance of this endeavour:

> *"The Committee anticipates that the forum and process facilitated by the Australian Acupuncture and Chinese Medicine Association may achieve consensus on draft comprehensive standards that can be used as a basis for the accreditation."*[20]

In order to create a national consensus on educational standards for TCM and acupuncture, in 1998 and 1999 AACMA convened a series of four meetings of all stakeholders. The group was called the National Academic Standards Committee for traditional Chinese

medicine (NASC) and included representatives from all identifiable colleges, universities, professional associations, and other interested parties. Observers from several states' Education and Health Departments attended a number of the meetings. An agreement was finally reached that entry-level educational standard for an acupuncturist or TCM practitioner must be a relevant bachelor degree or equivalent. This was consistent with the consensus from the earlier NCS process.[12] In 2001, AACMA published the *Australian Guidelines for Traditional Chinese Medicine Education*.[14] Table 2 provides a list of the NASC participating organisations (Table 2) .

4 Steps towards national registration

The acupuncture profession had actively pursued professional registration from as early as 1975 when the first submission to the government was lodged. The Australian government and various state governments had held a number of enquiries into complementary medicine (also known as alternative medicine). In 1986, the Victorian government conducted an investigation into alternative medicine and the health food industry.[21] This enquiry recommended that only chiropractic and osteopathy be registered as other major forms of alternative medicine (including acupuncture) did not appear to cause harm.[22] The committee also expressed concern that registration would confer legitimacy on alternative medicine which they considered to be "unwise".[21]

In 1995, the Australian Health Ministers' Advisory Council (AHMAC) formed a working committee to review criteria and processes for the future inclusion of health professions in statutory regulation. AHMAC developed six criteria regarding the potential registration of new health professions including complementary health practitioners:

> *"2.2.1 Criterion One – Is it appropriate for Health Ministers to exercise responsibility for regulating the occupation in question, or does the occupation more appropriately fall within the domain of another Ministry?*
> *2.2.2 Criterion Two – Do the activities of the occupation pose a significant risk of harm to the health and safety of the public?*
> *2.2.3 Criterion Three – Do existing or other regulatory mechanisms fail to address health and safety issues?*
> *2.2.4 Criterion Four – Is regulation possible to implement for the occupation in question?*
> *2.2.5 Criterion Five – Is regulation practical to implement for the occupation in question?*
> *2.2.6 Criterion Six – Do the benefits to the public of regulation clearly outweigh the potential negative impact of such regulation?"*[23]

Table 2 **Participants in the development of *Australian Guidelines for Traditional Chinese Medicine Education 1998–1999* (published in 2001)[14]**

Professional bodies
Acupuncture Association of South Australia
Acupuncture Association of Victoria Ltd.
Acupuncture Ethics and Standards Organisation
Aust-China Acupuncture and Chinese Medicine Association Inc.
Australian Acupuncture Association Ltd.
Australian Acupuncture Federation
Australian College of Acupuncturists
Australian Natural Therapists Association Ltd.
Australian Traditional Medicine Society
Federation of Chinese Medicine and Acupuncture Societies of Australia
Society of Chinese Medicine and Acupuncture (Vic) Inc.
TCM Association of Australia
The NSW Research Association of TCM
The Register of Acupuncture and TCM
Traditional Medicine of China Society Australia Inc.
Victorian TCM Association
Educational institutions
Academy of Natural Therapies, Gold Coast Institute of TAFE
Academy of Traditional Chinese Medicine Australia Pty Ltd.
Acupuncture College of Melbourne
Adelaide Training College of Complementary Medicine
Australian College of Natural Medicine
Australian Institute of Applied Sciences/National Institute of Applied Sciences
Australian Institute of Holistic Medicine
College of Traditional Chinese Medicine
Hepburns College of Natural Medicine
Melbourne College of Natural Medicine
Perth Academy of Natural Therapies
RMIT University
South Australian College of Natural and Traditional Medicine
Southern Cross University
Sydney Institute of Traditional Chinese Medicine
University of Sydney
University of Technology, Sydney
University of Western Sydney Macarthur
Victoria University of Technology
Other TCM bodies
Alliance of Chinese Medicine Associations Australia Inc.
Australian Acupuncture Federation
Australian Council for Traditional Chinese Medicine Education

Concurrently, a report exploring the potential registration of Chinese medicine was jointly commissioned by the Victorian Department of Human Services, the New South Wales Department of Health and the Queensland Department of Health. The report, *Towards a Safer Choice: The Practice of Traditional Chinese Medicine in Australia* by Bensoussan and Myers, was published in 1996 (Fig. 2).[15] This report concluded:

> *"The principal recommendation of this report is the introduction of statutory occupational regulation in the form of restriction of title."*

National competition policy, under which government agencies were urged to avoid introducing any new legislation which might have the effect of restricting

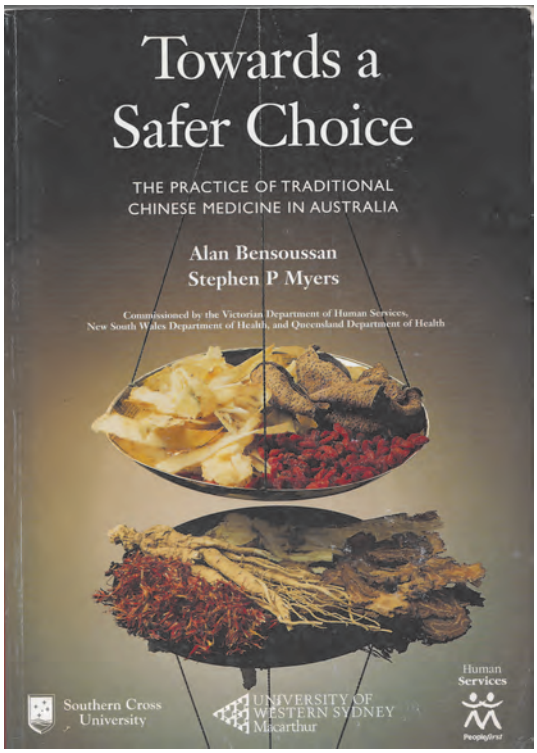

Figure 2 *Towards a Safer Choice* was a vital report in the path towards registration of Chinese medicine practitioners (source from: the authors).

competition, played an important part in opting for title restriction over practice restriction, as outlined in section 1.7 of the discussion paper.[20] As the move from state-based registration boards to national regulation for health practitioners was implemented, practice restrictions which appeared in state acts were largely abandoned in the national legislation.

The Victorian Minister for Health formed an Advisory Committee on traditional Chinese medicine in 1995, and the discussion paper, *Traditional Chinese Medicine: Options for Regulation of Practitioners – Discussion Paper*, published in 1997, reinforced the preference for title restriction over practice restriction.[20]

> *"The researchers recommended statutory regulation of the profession using a model based on the protection of title rather than licensing for the protection of practice. They argued that such a model would promote uniform standards of education and training for safe practice, and enable the public and other practitioners to identify appropriately qualified, safe TCM practitioners. It would also provide an enforceable mechanism for dealing with wrongdoing by practitioners and require practitioners to carry adequate indemnity insurance."*[20]

Furthermore, AHMAC agreed that Victoria should take the lead in developing the registration of Chinese medicine.

> *"That State and Territory Health Ministers agree that Victoria take the lead in developing template legislation for statutory registration of TCM practitioners that can be used as a model by other States and Territories, with an implementation timetable to be determined by each State and Territory."*[20]

Once AHMAC published its criteria, AACMA led an extensive consultation process, to prepare a joint submission laying out the evidence that Chinese medicine practitioners met all six of the AHMAC criteria for occupational registration.[13] This joint submission was prepared through a collaboration of 13 professional associations representing Chinese medicine practitioners in Australia. It was submitted to AHMAC in 1996.[13]

In 2000, the Chinese Medicine Registration Act was passed in the state of Victoria and the state's Chinese Medicine Registration Board (CMRB) was established. There were three divisions within the registration—acupuncturist, Chinese herbal medicine practitioner, and Chinese herbal dispenser.[23]

At that time the regulation of health professions was still a matter for state and territory governments resulting in dozens of different registration boards for professions such as medicine, pharmacy, nursing, physiotherapy and others. Submissions were lodged with the New South Wales and Western Australian Health Ministers in 2003 and 2004 respectively. The applications were progressing well at the ministerial level, but were not signed off by the cabinet, when they came to a sudden halt. In March 2008, the Council of Australian Governments (COAG, consisting of federal, state and territory governments) decided to establish a single National Registration and Accreditation Scheme (NRAS) for the health professions.[24] This meant the submission process had to start again.

National registration of health professions, which had previously been the responsibility of the states and territories, was now transferred to the single federal scheme, NRAS. Health professions that were not approved for inclusion in NRAS due to low risk, such as audiology, perfusion, and dietetics, have continued as self-regulated health professions.[24]

The first stage in the NRAS process was to establish the Australian Health Practitioner Regulation Agency (AHPRA) and the national boards for ten health professions that were already registered in every state and territory. National registration for those health professions commenced in 2010 (Fig. 3).

The second stage was to consider the partly-registered health professions, those registered in at least one state or territory. In 2008, AACMA lodged an updated version of the 1996 joint submission in support of national registration. In May 2009, it was agreed by Australian governments that Chinese medicine, along with three other health professions, satisfied the AHMAC criteria

Figure 3 (from left) Paddy McBride, now Chair of the Chinese Medicine Council of New Zealand with authors Dr. John McDonald and Judy James (taken at 2010 WFAS Conference in San Francisco) (source from: photo provided by John McDonald).

and would be included within the NRAS from July 2012.[25]

The third stage was to invite submissions from the unregistered health professions. Only one new profession, paramedicine, successfully joined the national scheme in 2018.

5 NRAS, AHPRA, and CMBA

In 2012, the Chinese Medicine Board of Australia (CMBA) was established to oversee the national registration of Chinese medicine practitioners. There are three divisions of practitioners, similar to the earlier Victorian registration, including acupuncturists, Chinese herbal dispensers and Chinese herbal medicine practitioners. Altogether there are now 15 national boards for 16 health professions (nurses and midwives being regulated by the same board) which operate under AHPRA. AHPRA is responsible for implementing the NRAS. The five core regulatory functions of AHPRA are advising on professional standards, managing registrations and renewals and maintaining an updated published register of registered practitioners, management of complaints, monitoring compliance with board requirements (such as advertising in compliance with the National Law), and accreditation of educational programs.[26] These AHPRA functions cover all 16 registered health professions.

Challenges which have been encountered in the implementation of Chinese medicine registration include language proficiency, recognition of overseas training, and definitions around allied health.

All registered health professionals in Australia must have a minimum level of English language fluency to enable safe practice. This presented a significant challenge for veteran practitioners in Australia for whom English was not their first language, with the biggest group being Mandarin and Cantonese speakers with limited English.[25] Transitional arrangements (grandparenting), in place for the first three years after registration commenced, allowed for a slightly lower standard of English competency [International English Language Testing System (IELTS) Band 6.0]. Where English language competency was not adequate, AHPRA usually placed conditions on registration relating to effective communication that enabled the practitioners to continue in practice.[27] This condition required an appropriately competent person to act as a translator during consultations with English-speaking patients. This particular condition was available only to people applying for registration under the grandparenting system. For applications from July 1st, 2015, a requirement of achieving the IELTS Band 7.0 (Academic), common to ten other registered health professions, has been applied.[28]

For Australian-trained practitioners, approved courses of study suitable for registration must be accredited

first by an accreditation authority [such as the Tertiary Education Quality and Standards Agency (TEQSA) or a university], and then must also be approved by the CMBA.[29] The recognition of overseas-trained practitioners was challenging during the initial transition period, especially when inadequate documentation of qualifications and study programs had been provided. Although many practitioners were registered on the basis of their Australian or overseas qualifications plus years of practice, alternative means of demonstrating their competence to practise Chinese medicine were available.[30] The main alternative pathway was to provide de-identified patients records as evidence of competence to practise and/or recency of practice. Some applicants without sufficient recent practice had various options to demonstrate their clinical competence, such as completing an approved short course in a specified area, undertaking additional supervised clinical practice, or undergoing a clinical assessment. The focus at the time was on enabling those who were genuinely in practice to continue to practise in the profession. There is no published data on the number of applications that may have been rejected.

At the end of the transition period, new applicants have had to meet a higher minimum standard (AQF Level 7), based on completion of a CMBA-approved qualification. For overseas-trained practitioners, it is much more complex, but is generally based on equivalence in the qualification, course content, and assessment. In some cases, examinations may be offered by the CMBA to test knowledge, skills, and competency to practise.[31] Further information on the process for overseas-qualified Chinese medicine practitioners can be found on the CMBA website.[31]

In 2020, when pandemic-related health orders were issued by state or federal government agencies, which applied to allied health practitioners, there was some confusion about whether or not the definition of allied health included Chinese medicine practitioners. This was due to various government agencies, both state and federal, having different definitions for allied health with some including registered Chinese medicine practitioners but others excluding them. This was significant for practitioners, because the health orders were about whether they had to close their clinics during lockdowns. For all practical purposes, it was declared that registered health practitioners (including Chinese medicine practitioners) were deemed essential services and could continue to provide health care during COVID lockdowns. While there have been efforts to create consensus on definitions of what constitutes allied health, the legal status of both acupuncture and Chinese herbal medicine as allied health services continues to be unclear. Nevertheless, in its 2022 health workforce report, the Australian National Institute for Health and Welfare included Chinese medicine as an allied health service in its key allied health workforce statistics.[32]

6 The current situation

The Chinese Medicine Board of Australia (CMBA) publishes a quarterly statistics report entitled *Registrant Data* on their website.[33] This data includes principal place of practice by state and territory, age and gender of registrants, and registrants in each of the three divisions: acupuncturist, Chinese herbal dispenser and Chinese herbal medicine practitioner. As of March 31st, 2023, there were 4,788 registered Chinese medicine practitioners. This included a total of 4,699 registered acupuncturists—1,661 registered solely as acupuncturists, 1,880 registered as both acupuncturists and Chinese herbal medicine practitioners and 1,155 in all three divisions. There were 40 practitioners registered as Chinese herbal medicine practitioners only, 32 as Chinese herbal medicine dispensers only, and 17 in both divisions.[33] In addition, as of March 31st, 2023, there were 659 medical practitioners endorsed by the medical board to practise acupuncture (Fig. 4).[34]

The practice of acupuncture by medical practitioners is under the jurisdiction of the medical board and, while the practice of acupuncture by medical practitioners is not restricted, their use of the title acupuncturist is restricted to medical practitioners who are endorsed by the medical board or who have been registered as acupuncturists by the CMBA.

Since the national law is based on title restriction rather than practice restriction, unregistered practitioners can still practise acupuncture legally but they cannot use the title acupuncturist. This has led to both registered practitioners (such as physiotherapists) and unregistered practitioners (such as massage therapists and myotherapists) describing their practice as dry needling, trigger point needling, myofascial release or other terms rather than as acupuncture (although only the term acupuncturist is protected).

An up-to-date list of approved courses of study is maintained on the AHPRA website and is summarised in the table of approved programs of study (Table 3).[35] There are currently six providers of nine approved Chinese medicine programs, with courses delivered over 12 campuses. Two programs have ceased to accept new enrolments and are teaching out existing students, after which they will be discontinued. A third program is also in teach-out, the current four-year Bachelor of Health Science (Acupuncture) course at ECNH which is proposed to be replaced by a new three-year Bachelor of Health Science (Acupuncture Therapies) and a four-year Bachelor of Health Science (Chinese Medicine). AHPRA maintains a register of students enrolled in all approved programs including Chinese medicine programs; however, this register is confidential, so no figures are available.

Figure 4 Dr. John McDonald presents at World Acupuncture Day in Paris, 2018, at UNESCO Headquarters auditorium (source from: photo provided by John McDonald).

Table 3 Accredited TCM education programs

Education Provider	Accredited Campus	Program Name	Current Accreditation Status
Australian College of Natural Medicine Pty Ltd. trading as Endeavour College of Natural Health	Sydney, NSW, Brisbane and Gold Coast, Qld, Adelaide, SA, Melbourne, Vic, Perth, WA	Bachelor of Health Science (Acupuncture)	Accredited Teach-out to May 2024
RMIT University	Bundoora, Vic	Bachelor of Health Science/Bachelor of Applied Science (Chinese Medicine)	Accredited Teach-out
		Master of Applied Science(Acupuncture)	Accredited
		Master of Applied Science(Chinese Herbal Medicine)	Accredited Teach-out to September 2024
Sydney Institute of Traditional Chinese Medicine	Sydney, NSW	Bachelor of Traditional Chinese Medicine	Accredited
Torrens University Australia	Melbourne and Fitzroy, Vic	Bachelor of Health Science (Chinese Medicine)	Accredited with conditions
University of Technology Sydney	Sydney, NSW	Bachelor of Health Science (Traditional Chinese Medicine)	Accredited Teach-out to end 2022
		Bachelor of Health Science (Traditional Chinese Medicine)/Bachelor of Arts in International Studies	Accredited Teach-out to end 2022
Western Sydney University	Campbelltown, NSW	Bachelor of Traditional Chinese Medicine	Accredited

Despite the significant progress to date, national statutory registration for Chinese medicine has not opened all doors. While registered acupuncturists are included in workers compensation schemes in all states and territories (either formally or informally), registered acupuncturists are not included in the chronic disease management scheme or Veterans Affairs white and gold card schemes. Medicare, Australia's national universal healthcare scheme, has provided rebates for acupuncture services performed by registered medical practitioners since its inception, but currently does not include acupuncture services delivered by registered acupuncturists.[36]

7 Conclusion

While the principal purpose of national registration of a health profession is to protect public health and safety, registration is also a process that has been actively pursued by the Australian community of acupuncture and Chinese medicine. Australia was the first Western country to introduce national registration of Chinese medicine, with Portugal being the second and New Zealand the third.

From the perspective of the government, the process leading to registration included numerous government enquiries at both state and federal levels, which established criteria for registration and then recommended occupational registration for Chinese medicine. From the perspective of the profession, the process involved several factors. Colleges and universities oversaw the gradual development of acupuncture and Chinese medicine courses from unaccredited diplomas to accredited bachelor's degrees. Professional associations and education providers came together through the NASC process, to develop consensus educational standards, resulting in the publication of the *Australian Guidelines for Traditional Chinese Medicine Education*. AACMA played a prominent role, in collaboration with other professional associations, in developing the *National Competency Standard for Acupuncture*. Professional associations also developed professional standards such as Codes of Conduct, Codes of Ethics, Infection Control Guidelines and continuing professional development requirements. It was also the professional associations which secured private health fund rebates and prepared numerous submissions to state and federal governments in support of Chinese medicine practitioners.

Priority areas for future work include the addition of acupuncture services by registered acupuncturists into Veterans' Affairs and Medicare allied health programs. To date, this has been a challenging process, and whatever progress that had been achieved ended with the onset of COVID. The leading associations continue to work towards inclusion in these programs, however, a consensus on how to achieve these goals remains elusive.

In general, governments outside of East and South East Asia, are reticent about regulating TCM practitioners as primary healthcare providers. Increasing numbers of TCM practitioners with varying levels of education and training and practitioner competency can be a trigger for governments to consider some form of regulation in the interests of public health and safety. However, in many countries, governments are unlikely to introduce registration of TCM practitioners at the same level as the more established health professions (such as medicine and dentistry) without well-organised and effective self-regulation for the majority of practitioners and formal degree-level undergraduate programs. The Australian experience shows one way to achieve that outcome.

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Ethical approval

This study does not contain any studies with human or animal studies performed by any of the authors.

Author contributions

John L McDonald and Judy B James participated in the writing and reviewing of the paper.

Conflict of interest

The authors declare no financial or other conflicts of interest.

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Appendix Acronyms

AAC	Australian Acupuncture College
AAcA	Australian Acupuncture Association Ltd. (now AACMA)
AACMA	Australian Acupuncture and Chinese Medicine Association Ltd.
AASA	Acupuncture Association of South Australia
ACA	Acupuncture Colleges (Australia)
AESO	Acupuncture Ethics and Standards Organisation
AHMAC	Australian Health Ministers' Advisory Council
AHPRA	Australian Health Practitioner Regulation Agency
AMAC	Australian Medical Acupuncture College
AMAS	Australian Medical Acupuncture Society
AQF	Australian Qualifications Framework
CMBA	Chinese Medicine Board of Australia
COAG	Council of Australian Governments
CMRB	Chinese Medicine Registration Board (Victoria)
ECNH	Endeavour College of Natural Health
IELTS	International English Language Testing System
NASC	National Academic Standards Committee for TCM
NCS	National Competency Standard for Acupuncture
NRAS	National Registration and Accreditation Scheme
RMIT	Royal Melbourne Institute of Technology (now RMIT University)
TCM	Traditional Chinese Medicine
TEQSA	Tertiary Education Quality and Standards Agency
UTS	University of Technology, Sydney
UWS	University of Western Sydney (now Western Sydney University)
VUT	Victoria University of Technology (now Victoria University)
WSU	Western Sydney University

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An Exploration of How Practitioners Make Meaning in a Chinese Medicine Consultation and Treatment

Felicity Clare Moir[1,✉]

Abstract

In Chinese medicine, practitioners assess patients' complaints, analyze their underlying problems, identify causes and come to a diagnosis, which then directs treatment. What is not obvious and not recorded in a consultation is the clinical reasoning process that practitioners use. The research filmed three practitioners in the UK while they conducted a consultation and treatment on new patients. The practitioners and researchers viewed the films and used them as aide-memoirs while the reasoning process throughout was discussed. In order to determine the pattern, practitioners used the four examinations to gather information from the patient in an iterative process; their aesthetic reasoning was highly developed. Through triangulation they checked the information they received against a detailed understanding of the qi-dynamic. They used highly analytical strategies of forward (inductive) and backward (deductive) reasoning against the prototypes of the signs and symptoms that indicate a specific *Zheng*. This was achieved through an abductive process that linked description with explanation and causal factors with pathological mechanisms. The feedback loop with the patient continued through the consultation and into the treatment. A process of translation and interpretation was needed to turn the patient's story into the practitioner's story of qi-dynamics that then directed the treatment. Awareness of our clinical reasoning process will mitigate against biases, improve our diagnoses and treatment choices and support the training of students.

Keywords: Chinese medicine; Clinical reasoning; Abduction; Translation and interpretation

1 Introduction

In my years as a clinical teacher, I have observed the difficulty students have in clinic synthesizing the information they are receiving from patients as it is being presented. They gather copious detail on signs and symptoms, but have difficulty anchoring this to an internalized classificatory structure that should lead their questioning. A practitioner goes through the process of thinking and decision-making within a therapeutic encounter to give structure to the information being gained, determine a diagnosis and formulate a treatment strategy. It is known as clinical or diagnostic reasoning. While there is a description in the texts of how a consultation should be conducted in Chinese medicine (CM), I found very little detail in the English or translated literature on this reasoning process.

One difficulty in describing CM is that it can be conducted in such diverse ways. Hsu provides an ethnographic study of three varieties of Chinese medical education in China.[1] For the master *Qi Gong* (气功) practitioner, clinical reasoning is not analytical, more an aesthetic reasoning with the practitioner's qi (气) in direct communication with the patient; this is healing as performance, short verses recited and potent gestures made. For senior Chinese doctors steeped in the classical texts, their reasoning comes from a profound knowledge base of medical and philosophical theories and the case statements of old doctors. This is experiential reasoning from a lineage of written experience. In the CM universities in China, biomedicine has had a major influence. Reasoning is analytical and systematic applying at times a framework of fuzzy logic and decision trees supported by extensive experience observing and then working in hospitals.[2]

Prof. Jiang at Chengdu University of Chinese Medicine considers that holism and dynamism are the key cognitive bases of CM, and the awareness of the interconnections and interactions of organic systems and functions is important.[3] One determines the *Zheng* (症 pattern) through perception of signs and symptoms from the

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four examinations, analysis of the pathological process through deduction, and then infers the pathological cause.

Farquhar[4] indicates that the *Zheng* is a fusion of the perceptions of the patient, the doctor's experience and an analysis of signs and symptoms from all four examinations. She proposes that clinical reasoning is an inductive process in which all signs and symptoms are gathered before a decision is made. Reconciling contradictory or accepting contradictory signs is seen as part of the diagnostic process illustrating that CM is at heart syncretic and integrative. Unschuld[5] describes diagnosis as a dialogic process articulated through description and analysis. He proposed that it does not follow a detached cognitive process. It is a subjective process with the practitioner interpreting the patient through their own body—looking, listening and touching. Ward explains clinical reasoning as an emergent, a phenomenological process requiring the use of all the practitioners' senses to read the signs of the body.[2]

But perhaps this variety of articulations is no different from biomedicine. Norman and Brooks, Elstein, Patel, Arocha and Zhang, and Higgs et al. agree that there is no single model that adequately represents all the different dimensions of clinical reasoning across different professions and different work contexts.[6–9] The aim of this research was to illuminate what it is that an experienced practitioner of CM in a UK-based teaching clinic does in a clinical encounter, and how they decide on the *Zheng* that will determine their treatment using the different models and contested arguments within the biomedical literature to guide my process.

2 Study design

Following the method of Groenier[10], I filmed three practitioners conducting single consultations and treatments each with different patients (Fig. 1). The practitioners watched the film and then I interviewed them to have them explain their thinking process. The film acted as an aide-memoir to help illuminate the practitioners' thinking process, their tacit processes, rules and orientations.[8]

Figure 1 A patient taking pulse diagnosis (source from: British Acupuncture Council, London, UK.).

The three practitioners who agreed to participate each had over 30 years in practice, had a range of training and experience and worked in a university teaching clinic. The three patients were:

1. A young woman with migraine and headache.
2. A young woman with multiple presentations of palpitations, poking sensation in ribs, insomnia, and headaches.
3. A middle-aged woman with diverticulitis and a history of bowel polyps and prolapse of uterus.

The consultations and treatments took from 60–80 minutes.

3 Results

I synthesised the descriptive analysis into 5 themes:

1. Sequence, use and combination of the four examinations.
2. Mode of questioning, communication and feedback.
3. Cause, history, sequence and interrelationship of symptoms.
4. Explanation of the pathological process and testing *Zheng* for plausibility.
5. Personal experience, advice and explanation.

Below are the key recurring components derived from the analysis: (Table 1)

The data was further analyzed using a framework of the theories of clinical reasoning decided on from a review of the biomedical literature namely:[11]

- Forward (inductive)-backward (deductive) reasoning
- Abductive reasoning
- Aesthetic reasoning
- Narrative reasoning

4 Discussion

Annotations used in the example exert

Pr = practitioner 1,2,3 with patient's words indented.
R = *researcher indented and italicised.*
… = when the extract is taken from a more complete sentence or when the patient's words or researcher's words have been excluded.

4.1 Forward-backward reasoning

In most clinical situations, it is proposed that doctors employ both a forward-reasoning strategy (inductive), that is, reasoning from the data (symptoms) to a hypothesis, and a backward-reasoning (deductive) strategy that tests or refutes a hypothesis already chosen through either gathering new data or the re-interpretation of data already gathered.

Inductive or forward reasoning relies on pattern recognition within a rule-governed approach and is

Table 1 Analysis of a Chinese medicine clinical encounter

ZHENG				
Four examinations: questioning, looking, listening, palpation	**Mode of questioning**	**Personal experience**	**Cause and history**	**Explanation of the pathological process**
practitioner	10 questions	treatment	sequence of symptoms	extensive knowledge
sequence	open & closed	explanations	inter-relationship	inter-relationships
structure	communication	advice	triggers	qi dynamic
fluid	rapport	needling	multiple	multiple
combination	cultural knowledge	teachers and texts	development or aggravation	elimination
triangulation	feedback	weighting of examination	clarification	plausibility
	space		what is absent	*Ben* (本 root) and *Biao* (标 tip)
	deliberative		patient understanding	change over time
	iterative		advice	
			CM theories	
			personal knowledge	

contingent on an extensive knowledge base and coherent problem representation.[12–14] The hypothetico-deductive model, also known as problem-solving, starts with a limited data set. Through filtering and grouping signs and symptoms into manageable and meaningful chunks of information, propositional knowledge is applied in an objective way with a few (maximum five) hypotheses formed and tested early in the process. As new data is obtained the practitioner revises each diagnostic possibility for probability. Hypotheses generated are seen to narrow the problem space transforming an open medical problem to a closed one. Research has revealed that experienced doctors commonly use more inductive than deductive reasoning and that exemplars from experiential knowledge can lead to more diagnostic accuracy.[15–18]

The CM practitioners applied this combination of forward-backward reasoning. This was an iterative process with data being gathered and tentative hypotheses formed (forward) which were then checked with further data gathering (backward). This process went on throughout the consultation and treatment as the practitioners came to a diagnosis not just of the patients' main presenting symptoms *Biao* (标 tip) but also *Ben* (本 root).

The practitioners' use of open questions showed the forward reasoning process in which questions were asked without a hypothesis established in advance.

Pr3. What kind of symptoms did you have?
What kind of pain did you have?
What is the blood colour like?

Or through the use of supporting comments or repeating what the patient had said to encourage them to talk further.

At various stages throughout the consultation, they invited the patient to offer more information and triggered a new set of questions. Practitioner 1 described why this was important:

Pr 1. This is another of these roll-arounds.
R… what are those, these are general questions?
Pr 1. They are kind of sparring questions … you can push and you can pull and sometimes you can just kind of do that *(shows pushing hands technique*). And sometimes when you do that here it is to create the connection. For me it is also giving her the opportunity to give me information.

This description resonates with Mattingly and Fleming who talk about the consultation being a therapeutic dance between practitioner and patient.[19] It allows for an inductive move so that the information is elicited without any controls.

Closed questions were used to check for a formed hypothesis:

Pr1. Do you ever get lightheaded?
Yes, a lot.
OK, when you stand up quickly?
Yes, a lot, yeh.
OK. Do you get electric shocks off door handles at all?
I did actually get one yesterday, yes, I do get electric shocks.

The practitioner acknowledged that this was to confirm his primary hypothesis, however, further aspects needed to be considered before he focused on this as he wanted to know how that led to the specific disruption of the qi mechanism.

The practitioners checked for a key symptom that confirmed a hypothesis and if not manifesting then ruled it out. For Practitioner 2 there were aspects of *Wei* (胃 stomach) fire manifesting but this had been ruled out as the patient had reported that she only ate small amounts:

Pr 2. Yes, this is where, what I am thinking. Stomach fire question mark, people with stomach fire eat a lot, frequently, a lot in quantity so I exclude this from my head.

However, it was not always the case that if the patient denied a key symptom the practitioners would not pursue that hypothesis. They had definite hypotheses that they were looking for and returned to them throughout the consultation:

Pr 1. I remember thinking there was something going on with the stomach because obviously whatever I was doing I wanted the nausea to fit in, I kept coming back to it.
Pr 1. You see for me I am quite happy that this causative link of blood deficiency is the root of everything … but as I said I have been exploring the stomach and spleen like mad and (*laughter*) not getting it.

An argument against the hypothetico-deductive model is that hypotheses made early may be incorrect and perpetrated by a confirmation bias (Fig. 2). Research by Kahneman et al. has found that doctors tend to over-emphasise positive findings, possibly because they seek data to confirm hypotheses rather than rule them out, or there is a tendency for neutral cues to be used to support a more favoured hypothesis.[20] The practitioners followed up hypotheses made early that did work to narrow the problem space. However, these became the substrate on which to add more information and were changed if not supported.

The practitioners reported that hypotheses formed early were the result of looking and listening examination.

Pr. 3 And second expression for me is her age so I can see her as middle age, she is quite overweight, and you can see the body is sluggish and lethargic so in my mind I will have lots of images in my mind to think of spleen anything damp…

Throughout the consultation, the four examinations could open up new leads through forward reasoning or refute or confirm hypotheses through backward reasoning.

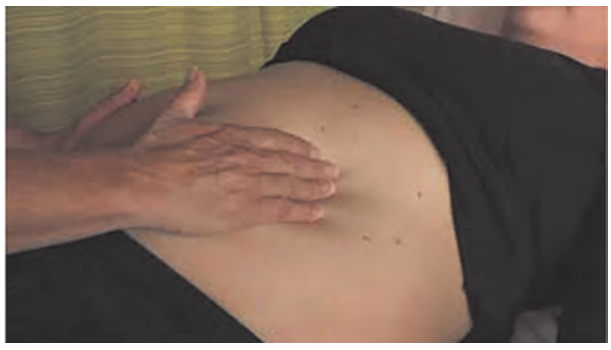

Figure 2 A doctor examines the patient's abdomen by pressing and massaging (source from: British Acupuncture Council, London, UK.).

Pr 2. Interesting things she has a purple spot on tongue but does not have blood stasis reaction on the abdomen.
Pr 3. The tongue and pulse did not match that pattern. I was probably thinking she might have a large swollen tongue but a thin body, but you think back to her she was a size 8 girl and …
R. That is the tongue of a size 8 person?
Yes matching...

For practitioner 3, while the patient's overweight body had led to a tentative hypothesis of dampness, the tongue and pulse did not match so a new explanation was needed. This is what Farquhar means when she says all signs and symptoms have to be reconciled and contradictions noted.[4]

Forward-backward reasoning also showed in their use of palpation.

Pr 2. There is an interaction between the patient and what I do and I confirm it always with the pulse, because I keep taking her pulse and palpating the abdomen again and I feel for a point. I ask for feedback and I press two points, Ren 14 and 13 [Juque (CV14), Shangwan (CV13)] and she likes Ren 13. I feel the resistance and I go for Ren 13.

A practitioner might feel the pulse or the abdomen to gain new information (induction) but in another situation deliberatively select a specific point to palpate to check if the feedback matched what they were expecting, confirming their hypothesis (deduction). As described by Ferreira, the four examinations were being applied incrementally, not sequentially,[21] progressively opening up to a range of *Zheng* and then reducing the association between similar *Zheng* and different *Zheng*. All signs and symptoms were considered collectively, and reconciling contradictory or accepting contradictory signs was part of the diagnostic process.

The practitioners' process did not manifest inductive reasoning in the way described by Farquhar or Anastasi et al. who propose that practitioners do not form any hypothesis until the end.[4,22] They were forming hypotheses from the beginning, however, if one considers that a diagnosis is enacted through the treatment then the diagnosis was being refined and changed up to the point the practitioner was putting in the needles. This observation is supported by Julliard et al. in describing one of the problems in doing research in CM.[23]

4.2 Abductive reasoning

Vertue and Haig consider that forward-backward reasoning is a descriptive process, its goal being diagnosis which in turn directs treatment.[24] It is primarily a process of classification subsuming clinical findings under a hypothesis of disease.[14] Peirce critiques induction and deduction as types of inference that intend towards

certainty.[25] He argues that what is needed in clinical medicine is a more realistic and pragmatic approach in which inferences should be regarded as more tentative, provisionally the case or something that pragmatically justifies action. Abductive reasoning is proposed as an inference to the best explanation,[26] an explanatory model of clinical reasoning a "narrative that integrates description and explanation of health problems".[24]

The interviews revealed the need for the practitioners to understand the pathological process, the disordered qi-dynamic, the interplay of patterns and how the problem had developed:

> Pr 1. I am still curious. I am quite happy I have blood deficiency, I am really comfortable with that; but that is the template, the underlying, but I think I am not satisfied I understand the nausea mechanism; we have stomach qi rising we know but why; there are 2 possibilities; it could be spleen deficiency, it could be heated from the liver… the liver deficiency was causing the *yang qi* (阳气) of the liver to disassociate; the yin and yang of the liver were separating, the *yang qi* was passing into the gall bladder meridian and hitting her eyes and there's your headache; but then I am thinking is it also finding its way into the stomach meridian and causing the nausea; it is now rogue *yang qi*.

In this form of reasoning, inferences move from descriptions of data patterns to an explanation of a causal mechanism.

As Furth suggests, while the *Zheng* need to be recognized they only have meaning in relation to an individual patient and will change depending on the context.[27] They are guides, not absolutes. Further, a sign or symptom might not be relevant directly to the current problem the patient had but was relevant to understanding the patient's overall *Zheng*. This was *Biao* and *Ben*.

> Pr 3. So damp phlegm but when she is having the attack it is damp heat located on the lower *Jiao* (焦). And her root, the *Ben*, is her spleen *Qi Xu* (气虚) and blood *Xu* (虚) and I put kidney qi (气) and *Yin Xu* (阴虚).
>
> *R. Now you say that's the Ben, the qi and blood stagnation is the Biao.*
>
> When she is in pain, the attack.
>
> *R. Ah The Biao is the damp heat. You started by saying liver qi and blood stagnation lower abdomen damp phlegm, is that Ben or Biao?*
>
> I would put it in the *Biao* as well.
>
> *R. I was unsure. So there is the Biao of the acute attack and the Biao of the chronic problem and there is the Ben of the chronic problem.*

This expert shows how the analysis of the *Zheng* was being made against a construct of cause and development of disease.

The practitioners did not just give explanatory hypotheses but also evaluated them.

> Pr 1. I think looking at her she has narrow eyes, and an angular face, now she falls into a category of *Jing* (精 Essence) kidney *Jing* liver blood deficient constitution … the narrow eyes are an indication that there would be a small liver hence a tendency to blood deficiency; blood deficiency; the blood of the liver supported by the *Jing* of the kidney is always going to be a candidate there or thereabouts; ….

While practitioners did all come to a final decision in the moment of treatment, the provisionality of their diagnosis shows in the caveats that surrounded it:

> Pr 2. Yes, but there is a thin pulse. But when I decide to treat her, I know she did not sleep wonderfully the night before, so I chose to use the least number of needles. The pulse is so deficient. And the other decision I make is, there is an excess here that I have to get rid of if I need the qi to circulate again. I need to choose points that will do everything, with a minimum number of points. So I know there is strong liver gall bladder pathology the blood etc. and there is *Shao Yang* (少阳) as well with dampness and damp heat so I use the earth point liver 3.
>
> Pr 2. Her manner and presentation contradict the way she is, this neat precise person. She puzzled me until the end, the things didn't match, so what struck me. If I act on the blood *Xu* I do not act with what I am seeing and what is puzzling me. I believe in treatment you have to treat what you are seeing here and now.

The diagnosis and treatment the practitioners came to was related to this patient in this space and time. It remained provisional, probably and possibly versus certainly even until the end as feedback from the patient and further palpatory and observational cues were gathered. The validity of the treatment and thus the diagnosis was in the results the practitioners gained as subjectively felt through palpation and observation of breathing:

> Pr 1. Because I knew her liver was misbehaving I went for LV13 (Zhangmen) to harmonise the liver and spleen and then I took the pulses again and down they went like an inner tube and that's when I thought definitely blood deficiency.
>
> Pr 1. But, I need to know more ... by this time her headache has gone so I think whatever I have done has worked but for the next part of the process I need to find out what it is.

The practitioners were not just aiming to treat the key symptoms. They were treating the whole person the tip and the root.

For these practitioners it seemed to be in the iterative process of the data coming from the four examinations and cross-checking of hypotheses through the four examinations that meaning emerged. They were triangulating the information in order to come to a meaningful understanding:

R. But it started with the palpitations and dizziness, is that part of Shao Yang?

Pr 2. The dizziness yes but not the palpitations. But there is a possibility. I hang it up, I leave everything hanging until I do the physical...

R. OK. So you have a number of possibilities?

Of patterns yes, I'll leave it all to what her body will tell me.

According to Vertue and Haig in abductive reasoning, three knowledge categories are at play. The first is a database of particular patterns of signs and symptoms related to particular diagnoses. The second is an understanding of causal mechanisms. The third are exemplars from experience that provide the analogies needed for reasoning.[24] With each *Zheng* comes a set of possible signs and symptoms, some being more indicative, and a list of possible causes and treatment strategies. The aim of the practitioners seemed to be to understand how the signs and symptoms manifest in this body and how they change with time. As such the reasoning process follows more of the abductive model.

4.3 Interpretive models

If we expand the concept of clinical reasoning to seeing it as the integration of all elements of practice (the philosophical basis of the medicine, practice-knowledge, technical skills, communication skills, ethics and the personal identity of the practitioner[28]) then we come to an understanding of clinical reasoning being more interactive than analytical. Feinstein differentiates between deductive logic which is used to determine aetiology, pathogenesis and diagnosis, and clinical judgment which accumulates through knowledge of patients,[29] what Braude calls "soft" data.[30] It is the availability of multiple representations of knowledge and the transformation and application of that knowledge into practice that is key to forming a diagnosis. If the aim of clinical reasoning is to get to a deep contextual level of understanding of the whole clinical encounter not just the diagnosis then what might clinical reasoning look like?

4.3.1 Aesthetic reasoning

The gathering of the data, the ability to perceive the data as well as the determination of what is or is not important, before the application of any informational content is applied, is a key aspect of the clinical reasoning process. An act of judgment informs the clinical decision. Bleakley et al. describe this as "aesthetic" reasoning (aesthetic meaning sense perception) requiring a highly developed perceptual discrimination so that casual looking is turned into deeper seeing.[31] They utilize the idea proposed by Foucault of the difference between the clinical gaze and the clinical glance:

"The 'gaze' is analytical and technical, and the 'glance' is appreciative and discriminatory."

Recognition, they say, precedes the interrogation of the symptom. Without the appropriate data, any final decisions on diagnosis and treatment will be limited if not wrong (Fig. 3). As CM relies entirely on the four examinations carried out by the practitioner to gain information, practitioners need highly developed skills of aesthetic reasoning.

The practitioners were applying looking, listening and palpation throughout the whole consultation and into the treatment. The seamlessness of their actions showed skilled craftsmanship. Information coming from each was used to check for significance and validity:

Pr 1. You see the thing is that l think looking at her she has narrow eyes, angular face … There is something about yin deficient people they come on hard and fast, they get to the point quickly its everything is so sudden. She does not do that, you have to draw it out of her it is much more of a soft deficiency,

Pr 2. So my diagnosis is definitely wind, but the wind is because of obstruction, because of this thick coating on the tongue and this strong reaction on palpation on the abdomen.

In terms of connoisseurship, a number of areas stood out. They all had detailed descriptions of the tongue:

Pr 3. Pink red. Not a full whitish fur but scatty whitish fur and dry on the fur area and with very fine cracks more on the centre and thin tongue but tooth marks quite pronounced. And interestingly twice she stuck out her tongue and there was phlegm line on the sides.

An examination by pulse was also a developed skill:

Pr 3. Generally, her pulse was very thin on both hands and deep on six positions all deep and much weaker on kidney, almost hidden on kidney both sides.

Figure 3 A practitioner observing the tongue (source from: British Acupuncture Council, London, UK.).

Abdominal palpation was a key examination for confirming and extending the developed *Zheng*. The examination was used to both confirm areas still not reconciled or was used for feedback on needle choice.

> Pr 2. There is a pulsation above the navel, so I know there is heat, there is emotional stuff … Then there is *Shao Yang* confirmation. Resistance. This was really disturbing. When I pressed on Ren 15 [Jiuwei (CV15)]/14, she had a strong reaction she did not like it … Then there is resistance on the left so confirms liver pathology. It is tight.

Hammersley describes what practitioners do as hermeneutical, that is they are interpreting the language and the body language of the patient into clinical decisions.[32] The discrimination of what to note and what to ignore involved judgement. The next phase of the reasoning was to place the information into a theoretical framework. The movement between information coming from all four examinations showed an iterative process with data being classified and reclassified into appropriate *Zheng*. One could see the practitioners moving in and out of information gathering and consideration of qi-dynamics as they attempted to explain the integration of their findings. However, it was not as opposed to deduction or induction but more a movement between skilled perception and judgment about the whole pathophysiological state of the patient; between classificatory knowledge and evaluative judgement.[33]

In observing the practitioners and hearing their accounts, there was a sense of artistry, as if they were painting a picture of the patient and their illness in the colours of CM. The concept of diagnosis by *Zheng* worked as an overall way of viewing the patient, it painted a broad picture, which then became more refined and developed as the details of the painting were filled in.

4.3.2 Narrative reasoning

Charon describes illness as unfolding in stories, it is dialogical, and so requires the practitioner not to be a passive listener but an active interpreter seeking for meaning.[34] This method of reasoning sees the patient as a whole over the time of their story as in a novel with all the complexities and interrelationships informing the practitioner's understanding.

According to Bleakley, plot structures narrative by putting events into a sequence.[35] It was important to all the practitioners that they had the right order of events.

> Pr 2. PMS how long before your period?
>
> But at the moment is it happening not in a period time?
>
> It happens at any time of the month?
>
> This irritability carried on when you finished bleeding? Is it the first time it happened?

As in any story, the patient's story had to hold together, and it had to be internally consistent.[36]

> Pr 1… if I can subtly go back and keep starting again, to make sure that the information I am getting is consistent…
>
> *R: consistent with an idea in your head of how the pathophysiological mechanism works?*
>
> No, the information I am getting from her is consistent…
>
> *R: consistent with what?*
>
> Consistent with what she says.

Bleakley considers that a story should bring temporal order to a series of chaotic events when elements of the story are inconsistent creating confusion in the practitioner.[35] This came across when Practitioner 2 talked about the problem she was having in trying to interpret what the patient was saying in relation to the manner in which she said it:

> Pr 2. Yes and more serious. Because she is trying to tell me everything is so short-lived and so recent but she was totally ok and these have just come up. But these are serious symptoms and she does not seem to relate to them in an appropriate way. She is not in sync with the story. This is another reason why I don't buy the story.

Even as Practitioner 2 was saying that she was confused by what the patient was telling her she was interpreting her words as a manifestation of an emotional sign that she was able to weave into her developing *Zheng*. Gale describes this interpretation of patients' behaviours and emotions as "body-talk".[37] This was the listening diagnosis of Chinese medicine, not the words but the expression:

> Pr 2. At the moment, the idea is that she is so precise, so gall bladder'ish, and at the same time she is instead of telling me I suffer from this, this and this, she comes to the end and then adds ... I have this and then I also have that. So, there is a contradiction between the way she is and how she tells me the story. It is like a *Shao Yang* thing that goes from one side to the other. The narrative does not match the person. She is worried, I know she is worried but she is in total denial and minimizes everything. She goes from one extreme… so at this point I have to make sense of what is going on. So, my conclusion is I am dealing with *Shao Yang*. So that is my priority, from symptoms and also … And *Shao Yang* is to do with all this muck, accumulation.

What they are doing is what Waymack describes as a process of interpretation.[38] They were interpreting the patients' words into the language of Chinese medicine in order to make it meaningful.

> Pr 1. Well it's always; the name migraine for one thing and there are headaches and headaches so it is a good first question to establish which kind of headache you

are dealing with. Because out of the blue onset if the answer is yes which it was but that is not the right answer...

R: it is what she says happens.

It's what she says but when you get down to it, it's not what happens at all.

R: Ah because she gets an aura, an hour, I see what you mean.

Sudden onset for me is heat/wind; I always see it as heat rising.

For the patient her migraines came on suddenly, but for Practitioner 1 sudden onset would be no warning at all. If there was a warning, his understanding of the pathological process would be different and his diagnosis different. More than just interpretation, what the patient was saying first had to be translated and then interpreted.

What the practitioners were seeing and feeling, the signs, seemed more straightforward to the practitioners. By not needing to be channeled through the patient's words, they did not need to be translated. The patient's illness as manifest in their body came directly to the practitioner only filtered by their own experience. For Practitioner 2 she was keen to leave the words the patient was saying and go straight to the body where she would be in direct communication without the need of language:

Pr 2. Now what I want to do is feel her body… I'm itching to feel her body.

This "dialogue" with the body continued into treatment. They inserted needles, felt the pulse and interpreted its change, confirming their diagnosis and treatment decisions. It is not just the words the patient uses but also their bodies that need to be read as texts.[38]

Charon considers that the secrets of medicine are bound up in its language and that within a consultation there is conflict between the purpose and meaning of the practitioner and the patient:

"…patients use language to express multiple levels of knowledge: thoughts, feelings, descriptions, associations, metaphors, guesses about causality, and reports of their own behavior in trying to manage the problem."[39]

To express their illness patients are not bounded, they enlarge and embroider while the practitioner thinks within physiological and anatomical concepts, they contain and control.[39]

Pr 2. No, the first thing I thought with palpitations, I wanted to know was what she meant by the palpitations. Is it something she feels or is it an objective thing, is she feeling anxious about something or is it a medical thing?

The patient's language is free while the practitioner's is determined by their conceptual categories. In the gathering of the signs and symptoms, description and interpretation went together as a story was written and discernment of meaning was embedded throughout.[40] Further, the practitioner's story is an interpretation in their own professional language with the aim of explaining their actions. There seemed to be three stories in the consultation: the patient's story, the practitioner's story and what Mattingly calls "chart talk",[41] that is the medical case notes. What we see written down as case notes is the personal story of the patient translated by the practitioner and then interpreted. If, as Farquhar says, "we know Chinese medicine not just have knowledge of it",[4] to know must also mean to interpret.[42]

5 Conclusions

The CM practitioners displayed a highly developed knowledge base that they were able to draw on as they went through a systematic and analytical process of matching signs and symptoms in a rule-governed approach. Not exactly feature-by-feature but the *Zheng* could be seen as the prototypes they matched against. But this was not a linear process. Using an abductive approach, they weaved in and out of possible *Zheng* checking for supporting signs and symptoms coming from all four methods of diagnosis against a detailed understanding of the qi dynamic.

While the *Zheng* decided on as a diagnosis was quite general, the detail was in the point prescription modified through feedback from the patient up until the moment of treating. Here the *Zheng* gained its nuance and match to the individuality of the patient.

If as Scheid proposes, the teaching and learning of CM must be related to the context in a post-modern Western culture in which it is practiced, then how do we maintain the essence of the Chinese medical clinical encounter? How do we teach a "novel articulation between the domains of science, technology and art" that he suggests we should be seeking?[43] This research shows the way forward. It includes continuing to teach the knowledge not necessarily just through lists of *Zheng* with attached signs and symptoms, but through an in-depth understanding of the qi-dynamic. Signs and symptoms are only meaningful if attached to that process. It involves the taking of cases and analyzing the analytical process the students are using, taking them through the process in a systematic way. It is only if they have enough experience that can they start to lay down patterns of working that they can call on. That diagnosis is a process of translation and then interpretation needs repeated practice in order to build up the cognitive structures needed for analysis. And along with this they need to develop their senses. They need to learn the clinical glance as much as the clinical gaze through repeated practice in looking, listening and palpation, and learn the ability to triangulate the information coming from those senses against each other.

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Ethical approval

This study does not contain any studies with human or animal subjects performed by any of the authors.

Author contributions

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Review

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MEDICINE AND CULTURE

OPEN

Reflections on Studying *Huang Di Nei Jing* in the West

Edward Neal[1,2,✉]

Abstract

Huang Di Nei Jing (《黄帝内经》 *The Yellow Emperor's Inner Classic*) has been the source text of Chinese medicine knowledge and innovation for over two thousand years. Despite this key relevance, many of its ideas and practices have proven difficult to understand and implement fully into clinical practice. Cultural and language differences can be compounded with these challenges but may also present new opportunities for advancement and insight when studied by researchers outside of the originating culture. This article introduces the method of Classical-Text Archaeology and delves into the author's two-decade journey of researching this text, with a discussion on cultural differences and issues of medical scholarship.

Keywords: *Huang Di Nei Jing*; Chinese medicine; *Nei Jing* nature–based medicine; Classical text research; Global health; Medical anthropology; Classical-Text Archaeology

1 Personal experiences studying Chinese medicine

At the beginning of my medical career, I became interested to a question that changed the trajectory of my professional life. The question is quite simple: why do some patients get better while others do not?

At first, this question appears deceptively easy: patients who fail to recover must do so because current therapies do not adequately address their needs. Yet, I began to wonder whether there might be something more; perhaps these limitations arose not only from a lack of treatment options but also from a failure to ask the right questions or tell the right stories about the patient's illness. Perhaps these shortcomings arise from fundamental errors in the way we perceive the world, rather than technical limitations alone. In a search for answers, I began to explore different medical traditions and focused on the medical traditions of China.

My first exposure to Chinese medicine came from introductory physician-training courses. After completing this training, I began to use my skills. Patients were receptive, and despite my limited skills, there were definite successes. Yet, I also noted a significant issue.

My physician training was comprehensive. As a trained physician, I was skilled at handling complex medical situations. Yet, my understanding of Chinese medicine was something altogether different. I achieved positive outcomes, yet lacked the ability to adjust my approach when things were not as expected. I treated with unfamiliar protocols without comprehending their rationale. Essentially, in the realm of Chinese medicine, I practiced as an ancillary healthcare provider rather than a true physician (Note 1).

Thus, a second question began to form: in the context of Chinese medicine, regardless of licensure, what defines physician-level practice and how is this best achieved?

I studied under the guidance of Dr. Anita Cignolini, an Italian anesthesiologist with a dedicated Chinese medicine practice in Milan. Dr. Cignolini received training in China during the later years of the Cultural Revolution, studying at the Harbin Acupuncture Research Center and Nanjing Medical College. She was a fervent advocate for acupuncture practice and research in Europe and possessed strong skills as both a practitioner and a teacher. From her, I learned how to practice at a more advanced level and was taught the importance of the medical classics.

I then returned to university to study Chinese languages, completed formal training in traditional Chinese medicine (TCM) and made further studies in China. During this period, I was fortunate to study with skilled and knowledgeable teachers, yet comprehensive discussions on the medical classics were sparse, and my deeper questions remained.

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2 Development of Classical-Text Archaeology

At this time, in the late 1990s, a revolution in classical text research was quietly taking place. Many early Chinese texts had been digitized and became available in databases: this led the way for new approaches to text research based on the comparative evaluations of characters and text passages.

Traditionally, physicians have studied the medical classics through memorization and by learning in apprenticeship relationships, working closely with experienced teachers to perceive their deeper meanings. This approach has considerable merit. By committing texts to memory, the student develops a deep relationship with the texts, while the guidance of an experienced teacher ensures the preservation and transmission of knowledge that is difficult to attain by individual study alone (Note 2).

Yet, there are also limitations. Knowledge passed down through lineage systems may tend to emphasize the preservation of individual viewpoints and may limit the exploration of alternative perspectives. Students may accept a teacher's viewpoints in ways which can hinder critical thinking and independent exploration. Cultural perspectives can simultaneously reinforce the conservation of precious knowledge while restricting new ways of thinking.

Classical text research has also lacked a formal research methodology that can be used in a shared way, using distinct approaches and verifications among diverse professional colleagues. Rather, understanding has more often come from knowledgeable physicians, studying deeply, working on their own, and coming to their own analysis. While this has yielded treasured knowledge, this approach lacks basic features shared by other academic fields, such as a common approach to methodology and terminology and formal methods of verification and evaluation.

As I began my translation work, it became increasingly clear that a formal methodology was needed to organize and interpret the large amount of information being discovered.

One of the first passages I encountered was *Tian Yuan Ji Da Lun* (《天元纪大论》 *The Great Treatise on the Original Patterns of the Heavens*), the 66th Chapter of *Su Wen* (《素问》 *Basic Questions*). This passage begins a lengthy section on the meaning of the complex interactions between heaven and earth that occur as they progress through their sixty-year annual cycles.

The opening passages discuss the meaning of the character *Shen* (神 Spirit):

"SW66. 阴阳不测谓之神
English Translation: [Aspects of] yin [and] yang [that] cannot [be] measured (*Bu Ce*), call them *Shen*.

SW66. 神用无方谓之圣
English Translation: Manifestations [of] *Shen* [that] lack directionality (*Wu Fang*), call them sacred (*Sheng*)…

SW66. 神在天为风在地为木
English Translation: In [the terrestrial] heavens, *Shen* creates wind (*Feng*), on earth, [it] creates wood (*Mu*);

SW66. 在天为热在地为火
English Translation: in [the terrestrial] heavens, [it] creates heat (*Re*), on earth [it] creates fire (*Huo*);

SW66. 在天为湿在地为土
English Translation: in [the terrestrial] heavens, [it] creates dampness (*Shi*), on earth [it] creates soil (*Tu*);

SW66. 在天为燥在地为金
English Translation: in [the terrestrial] heavens, [it] creates dryness (*Zao*), on earth [it] creates metal (*Jin*);

SW66. 在天为寒在地为水
English Translation: in [the terrestrial] heavens, [it] creates cold (*Han*), on earth [it] creates water (*Shui*);

SW66. 故在天为气在地成形
English Translation: thus, [the celestial] heavens create [intangible patterns of] qi, [while the] earth [governs the] maturation (*Cheng*) [of tangible] forms (*Xing*)."[1]

As I read these lines, it became clear that the terms and concepts I had studied in my Chinese medicine training were being used in new and unfamiliar ways. They describe a very different world and vision of Chinese medicine practice. But how to understand them?

In Chinese medicine, the term *Shen* typically describes an intrinsic essence of the human spirit—an indispensable force for maintaining overall health and vitality. Yet, these passages portray this term as a basic force of the universe, something intimately involved in the creation of the patterns of the natural world. What could this mean? How does an aspect of the human spirit create patterns of weather and trees? What does it mean that there is a dimension of yin (阴) and yang (阳) that cannot be measured? What defines the sacred and how does it differ from the concept of spirit? How do the celestial heavens produce intangible patterns that shape the physical world? And, importantly, how, in an epistemological sense, can we best research these issues in a formal way?

It became clear that a new approach to text research was needed to navigate the vast amount of information being discovered. In this regard, the placement of early Chinese texts in databases played a pivotal role.

Over the past twenty years of *Nei Jing* (《内经》 *The Inner Classic*) research, using text databases, a new approach to text research has been developed to address these issues: the name given to this practice is "Classical-Text Archaeology". In this research method, characters, text passages, and basic concepts are viewed as the unearthed artifacts of an ancient civilization whose true nature is not yet fully known. Like the initial discovery

of pottery shards and other findings at an archaeological site, individual text findings may offer crucial hints but do not yet provide a comprehensive description of the civilization being discovered. Only through prolonged investigation does a more accurate understanding begin to emerge over time (Fig. 1).

Figure 1 An excavation cite (source from: the author).

In the practice of Classical-Text Archaeology, each text research fragment undergoes a series of formal analyses. For example, in *Nei Jing*, the character *Shen* is a key text artifact that appears in 233 text passages. The practice of Classical-Text Archaeology begins by identifying each of these text passages and translating them in their entirety according to established criteria for research translation (Note 3).

Next, each passage is placed in different categories and sub-groupings for further analysis. For example, the character *Shen* is found in diverse passages that describe basic patterns of cosmology, nature, issues of human health and disease, clinical treatment, and so forth. This creates a natural hierarchy and grouping for studied text fragments.

After that, each passage and sub-grouping is evaluated to identify interwoven themes that might run through them. In Classical-Text Archaeology, themes of meaning common to all text passages being studied are called *holographic translation viewpoints*. These are defined as translation perspectives that hold true for each instance of the studied material.

Once a holographic translation viewpoint is tentatively established, it next undergoes a series of secondary validation challenges by posing a series of specific queries:

1. Is the proposed definition consistent with all instances of the source text?
2. Does the proposed definition accord with observable patterns of nature?
3. Is the proposed definition congruent with current knowledge of the culture and history of early China?
4. Does the proposed research definition lead to enhanced clinical outcomes?
5. Does the proposed research definition accord with understandings of contemporary scientific research?

If a new definition passes these steps, it then undergoes a third level of validation through professional feedback, teaching, and clinical practice over time. Once a new research definition has been tentatively established, it is then used as a basis to retranslate the original text and further our understanding of the perspectives and practices of the original authors of the text.[2]

For example, following this method to analyze the meaning of the character *Shen* in *Nei Jing* text yields the following research definition:

In *Huang Di Nei Jing* (《黄帝内经》*The Yellow Emperor's Inner Classic*), the character *Shen* defines a basic aspect of space-time that transcends the observable cyclical patterns of yin and yang and that cannot be perceived directly. In certain balanced states of yin and yang motion, *Shen* emerges as a special form of transcendent illumination known as *Shen Ming* (神明 Shen Illumination). *Shen Ming* organizes patterns of yin and yang motion into coherent patterns of dynamic expression; and thus serves as a basis for organized patterns of motion within the cosmos, natural world, and human body. In human beings, *Shen Ming* arises spontaneously within the heart and circulates throughout the body via the three-dimensional vascular system. In this way, *Shen Ming* bestows biological coherence, and serves as the basis for human life and vitality.

It is important to note that this constitutes a research definition. For example, it is unlikely that one were able to speak with the authors of the *Nei Jing* directly that they would describe *Shen* exactly in this way, but as a constructed research definition that remains true among different text instances, it becomes a powerful tool to uncover the original perspectives of the source text. Further, this definition leads to new understandings that may have practical implications for current global healthcare challenges. For example, this definition has led to the development of a new model of tumor formation and cancer treatment based on a model of the restoration of vascular flow, new approaches to the understanding of resistant infectious illnesses based on the concept of the ecological restoration of tissue planes, a new understanding of the original practices of acupuncture, now seen as a form of traditional surgery, whose primary aim was the restoration of normal flow within the vascular rivers of the body, and a new model of human illness based on a model of three-dimensional tissue coherence.

Because this is a formal research methodology, its conclusions can be studied, questioned, shared, analyzed, and progressed collaboratively by different groups of researchers working in diverse specialties, something

that has been previously difficult to accomplish in lineage systems alone.

3 Discussion

Early Chinese medical texts provide the fundamental terms and principles upon which the tradition has been based for over two thousand years. As such, classical text research constitutes a critical basic science of Chinese medicine, comparable to the role that genomics research plays in modern cancer care. While the study of these texts has traditionally occurred in hidden lineage teachings and through the writings of individual physicians, the digitization of these texts allows for new approaches to classical text research and creates new opportunities for study in collaborative settings.

Requirements for meaningful scholarship include a clear understanding of where knowledge arises, and what this knowledge includes, as well as formal research methodologies that can be used among diverse colleagues and specialties; these systems should include valid means of validation, questioning, and refinement. Particularly in the West, these criteria have often been lacking regarding classical text research. While many practitioners recognize the significance of ancient texts in shaping clinical practice, fewer have a meaningful understanding of their contents and there are few opportunities to study more deeply. In China, the situation is much better, yet reductions in classical text education and an emphasis on biomedical approaches have led to a not entirely dissimilar situation.

Cultural differences play an important role in classical text research. Western researchers do not possess the same nuanced understandings of language, history, and culture that a researcher from the original culture may have. Yet, because they are not bound by established cultural perspectives, they may also see new viewpoints that lead to innovative ways of thinking. Moving forward, the best research model will likely be collaborative, including researchers from both within and outside the originating culture and from a variety of disciplines. Established research methodologies will facilitate these collaborations.

4 Summary

The digitization of early Chinese medical texts has led to new approaches in classical text research that have the potential to change our understanding of the basic principles of Chinese medicine in meaningful ways. Using these new research methodologies, Chinese medicine may be poised to enter one of its most transformative chapters. These approaches augment traditional forms of learning and allow researchers from diverse cultures and specialties access to the critical knowledge contained within these ancient texts with important implications for Chinese medicine, Western biomedicine, and many current global health challenges.

Notes

1. For the purposes of this discussion, physician-level care is defined as the capacity to manage complex medical situations from a deep understanding of basic theory and principles. In contrast, ancillary care refers to the ability to manage less complicated conditions following established protocols.
2. As noted in *Li Ji* (《礼记》*Book of Rites*), "If a physician does not come from a family that has practiced medicine for at three generations, their medicine should not be taken (医不三世不服其药)."
3. Basic criteria for research translations include the following: a) translations should be as literal as possible and not idiomatic or explanatory; b) original word order should be retained as much as possible; c) all words required by the translator for grammar and sentence structure in the target language should be indicated in square brackets and; d) words in the target language that have multiple character options should be clarified by Pinyin terms in parentheses.

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Edward Neal, MD, MSOM, is trained in both Western and Chinese medicine. He has been involved in the study and teaching of Chinese medicine for over thirty years. As part of this work, he has consulted with the World Health Organization on matters of traditional East Asian medicine and has served as a visiting scholar at the University of San Diego Medical School. He is the medical director for the Apricot Grove Project and director for the Xinglin Institute NGO. These organizations study traditional forms of medical knowledge to find innovative solutions to current global challenges. Further information about these projects and training opportunities can be found at www.neijing-studies.com.

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Author contributions

Edward Neal drafted and reviewed the article.

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Review

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OPEN

Chinese Medicine, Acupuncture and Science

Peter Eckman[1,✉]

Abstract

Ever since the introduction of Western biomedicine into China, there has been friction between proponents of this new approach, and proponents of the traditional medical practices that had evolved over thousands of years in China. For the most part, this friction has been couched in the unexamined assumption that Western medicine is based on science, while Chinese medicine is not. This article will examine that assumption, which in this author's opinion is unjustified and incorrect. Having practiced acupuncture for the past 50 years, after receiving my doctoral degrees in medicine and physiology, my thinking on this topic has also evolved over time. I will begin this article with some historical information that bears on the topic under discussion, followed by my personal ideas about how to resolve the conflicts that have arisen.

Keywords: Science; Chinese medicine; Western medicine; Resonance; Constitution

1 Historical perspective on Chinese medicine and science

An early example of the belief that Chinese medicine is unscientific was expressed by Yu Yunxiu (余云岫), author of a proposal by the National Public Health Conference in China, sponsored by the Ministry of Health, for "Abolishing Old-Style Medicine in Order to Clear Away the Obstacles to Medicine and Public Health," that was unanimously passed in 1929. He argued that because Chinese medicine was a system based on mysticism (*Xuan Xue* 玄学) rather than science (*Ke Xue* 科学), it had no place in a truly modern state.[1] This characterization of the two medical systems was an a priori description, not based on research into their underlying philosophical principles, their historical record of textual resources, or their records of clinical efficacy. To some extent, Yu's viewpoint has continued to be endorsed as official policy in China into the 21st century.

A fairly contemporary repetition of this viewpoint can be seen as the underlying belief expressed in the following report by Paul Unschuld, a well-respected Sinologist and translator of texts on Chinese traditional medicine: "Outright condemnations of Chinese medicine by the political leadership ended after the founding of the People's Republic of China, but the hidden agenda has remained the same. A committee was ordered from the early 1950s until the mid 1960s to define those elements of Chinese historical medicine that might be worth continuing in a new China devoted to Marxism-Maoism as its social science, and Western science as its natural science. This committee created 'traditional Chinese medicine (TCM)'….The bottomline has been to slowly decrease the impact of ancient theory, and to use modern Western scientific approaches to research…in a modern biomedical environment….Hence in 2007, the Chinese authorities invited ministers of science and ministers of health of 50 leading nations to China to resolve a Beijing Declaration of TCM. Its main message was twofold. First, 'TCM is part of modern biomedicine', and second 'the basis of TCM is molecular biology'."[2] The import of such a statement excludes any theories such as yin-yang (阴阳) and *Wu Xing* (五行) from TCM, as they clearly are not supported by molecular biology. However, in reality, almost all practitioners of TCM follow these traditional theories, since Chinese medicine would be impossible to practice without them. In spite of this declaration, TCM practitioners seem to be accepting the need to retain many traditional theories, while at the same time espousing respect for science. So, we are left with a conundrum: how to keep the baby (TCM) while spilling out the bathwater (unscientific beliefs).

In our modern world, invested in nearly every aspect of life by marvels from the internet to magnetic resonance imaging, it is hard to imagine a more dismissive epithet than to call something "unscientific". Particularly in the field of healthcare, being unscientific is equated with charlatanism. Such a distinction takes on great importance when we recognize that societal approval, via government programs such as Medicare in the USA,

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uses the language and customs of biomedical science to determine appropriate medical care. The resolution of this conundrum fortunately lies in a deeper understanding of the meaning of science itself.

Conclusion: Historically, Chinese medicine has been viewed by some commentators as unscientific, but others, including this author, disagree. Can this dichotomy be resolved?

2 What is science?

The Merriam-Webster dictionary defines science as "knowledge about or study of the natural world based on facts learned through experiments and observation". Who could doubt that Chinese medicine was developed using just such an approach, as any historian of Chinese medicine could verify? As it happens, I am a strong proponent of science, but at the same time I am wary of the common misunderstanding of what science is really about, and whether science is the only discipline that should inform our thinking about topics such as healthcare. In fact, I will posit that crucial questions, such as, "What is life?" cannot be answered by science alone. Science is, above all, a methodology, and implicit in its very nature is the recognition that we must remain open to challenges to even our most fundamental beliefs about reality. Certainly, Einstein made this abundantly clear by using science to replace the hallowed Newtonian understanding of physics with his more accurate relativistic explanations.

However, even if we accept the latest advances in science in grappling with questions about the nature of life, we will inevitably come up short. There are aspects of life, and for simplicity's sake, I will refer here specifically to human life, that are apparently not part of the proper territory of scientific investigation. In this category, I would include phenomena such as mind and spirit. It is not that science cannot investigate these phenomena, but rather that it cannot fully explain them, only clarify some of the epiphenomena associated with them. An electroencephalogram (EEG) is an example of science investigating mental functions, but at the same time recognizing that it does not have the ability to explain what the mind truly is. So, in discussing what science entails, it is vital that we recognize the areas that science leaves unexplained; while allowing that these very areas may be of the utmost importance to human beings, and may be necessary considerations in discussions about healthcare.

2.1 The nature of science

Many scholars have written extensively on this topic, but I do not want to approach the subject from a highly technical point of view. Rather, I would like to discuss it as something easily understood by the average person, one who might benefit by being able to distinguish between healthcare practices that fit within a scientific paradigm, and those that do not. To this end, I see science as entailing three important characteristics which are interlocking: firstly, it is a methodology which recognizes certain basic attributes of nature (gravity, for instance) which have explanatory value; secondly, this methodology can be tested and its resulting findings can be evaluated as to their universal applicability; and finally its theories should lead to predictions about the outcome of experiments that are more accurate than predictions based on alternative explanations. Thus gravity is recognized as a natural law because it can be reliably found to be universally present, it clearly explains natural phenomena (such as the orbits of the planets, or why apples fall to earth), and it can successfully predict the behavior of objects we may not yet have investigated. But, science does not necessarily have to be able to explain how gravity operates, and as far as I understand the current state of physics, the mechanism of gravity is still unknown.

To the average person, the concept of gravity is perfectly reasonable, regardless of whether or not they are familiar with the equations used by scientists in predicting gravitational effects in an experimental setting. Following the lines of thought found in classical Chinese texts, I plan to propose that Chinese medicine also posits some basic attributes of nature (for example yin-yang and *Wu Xing* theories) which, like gravity, have universal applicability, are quite useful in explaining natural phenomena (such as the cycles of the seasons and the effects of emotional factors on health and wellbeing), and can serve as a useful guide in formulating treatments via acupuncture and herbal medicine, as well as other modalities (Note 1). I will even present a theoretical mechanism that is helpful in rationally understanding how these cardinal principles of Chinese medicine operate, however this mechanism, which I will refer to as resonance theory (*Gan Ying* 感应), cannot itself be further explained, much as gravitational force can be calculated and is universally applied without proponents knowing its mechanism of operation.

2.2 Experimental validation of scientific findings

2.2.1 Western medical double blind experiments

Before I leave the topic of the general nature of science, I would like to discuss some issues that are especially applicable to medical science. In my training as a physician, I was taught that the "gold standard" of scientific postulates was their proof via "double blind" experiments. These are experiments in which both the investigator and the subject are shielded from knowledge of whether any given subject is receiving the experimental treatment or an inactive placebo. There is much to be said for such experiments, but in my opinion that methodology is open to criticism on a number of grounds.

As we all know, many of the wonder drugs employed in modern medicine have numerous potential side

effects, which can even include the death of the patient as a possible outcome. If the frequency of such drastic side effects is small enough, then the drug may still be considered effective and useful. Well, it may be 100 percent effective for 99.9 percent of patients, but 100 percent deadly for 0.1 percent of patients. The point I would like to make is that the double blind trial is a statistical approach, but it does not tell us how any given individual will respond to the treatment being studied. One possible explanation for this phenomenon is that people are quite different from each other in many ways; so that what is good for one individual may be bad for another, even if they have the same biomedical diagnosis. As a shorthand term, I will refer to these differences between individuals as their "constitutions", and I will return to the importance of individual constitutions in the presentation of my own experiences in the practice of acupuncture.

Chinese medicine differs from Western medicine in this regard partly by using different treatment strategies for patients sharing the same disease label, depending in part on the patients' different natures and partly on the different patterns displayed in their signs and symptoms.TCM emphasizes this latter differentiation, while other traditional approaches place more emphasis on the former differentiation identified as constitutional. These considerations make double blind experiments less informative, because there can be no standard treatment to compare against a placebo. Also, Chinese medicine is a "hands-on" profession, and the relationship and interaction between patient and practitioner is an important part of the treatment process. Such interactional effects are incompatible with the double blind testing procedure.

2.2.2 Chinese medical experiments

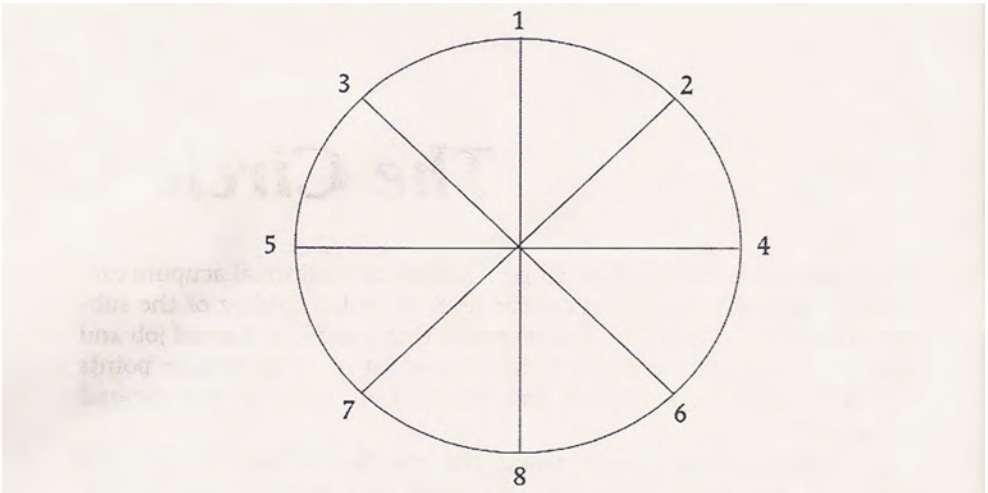
How are we to evaluate the efficacy of Chinese medical practices on the one hand, and how can we discriminate whether any efficacy is due to the rationale of the procedure itself, or due to powerful placebo effects, which are not related to the validity of the rationale, otherwise known as the reputed scientific basis for the treatment? This is not an easy question to answer, given that the interaction between patient and practitioner plays such an important role, but the successful use of acupuncture, for instance in treating infants and animals, seems to me to be a good argument that such practices are reality-based (not placebos), and thus must have some scientific foundation. There will always be room for scientific advances in both Eastern and Western medicine, which is as it should be. Science is a methodology not a fixed body of knowledge. One example of carrying out a more complex experiment to validate Chinese medical theories was performed by this author in 2019 at the Beijing University of Chinese Medicine and elaborated in Notes 1 and 8.

3 Viewing Chinese medicine in comparison to Western medicine

In 1988 I was the co-editor of the English version of *The Essential Book of Traditional Chinese Medicine,* written by the prominent Chinese professor Liu Yanchi (刘燕池), and published by Columbia University Press. Dr. Liu saw a strong similarity between the underlying structures of Western and Chinese medical systems. I was inspired by him to expand his model into a schema, which I called the "Circle", that I presented in my book on the history of Chinese medicine, entitled *In the Footsteps of the Yellow Emperor*, first published in 1996. This book is currently in the process of translation and publication of a Chinese edition, scheduled to appear by 2024 at the latest. Figure 1 is a reproduction of the model, representative of my early ideas towards the end of the 20th century. The reader can see that various versions of Chinese medicine apparently share the same basic structure as Western medicine. From here on to the next paragraph TCM is simply used in this figure as an abbreviation for the methodology taught at the time in Chinese institutions, while LA is an abbreviation I used to refer to the Five Element (Note 2) style of acupuncture taught by the late Professor J. R. Worsley, one of my early teachers. LA is an approach that Worsley claimed was based on Chinese sources, and which he taught at his school in Leamington Spa, England. While there are differences of emphasis between TCM and LA, they both can be seen to share the same underlying structure as Western medicine, and I believe that this structure is a necessary basis for any medical system that is rooted in science, or natural law. Chinese medicine and other traditional Asian medical systems are at the same time also arts, and it is not a simple matter to draw a line between art and science. This is true whether the discipline is Western or Eastern medicine. I could use acoustics and music as an example in my discussion, and I hope it will be apparent to even those readers with no medical background, that there are both scientific principles (frequencies, intervals, harmonics, etc.) and artistic contributions (emotional communication, for example) in a musical performance, and while these can be discussed separately, they do not exist independently, but are two aspects of a unitary experience. Likewise, the practice of medicine is an inseparable combination of science and art, and while I will primarily be discussing the former, the art of the practitioner is at least as important in providing healthcare, and merits its own presentation. Because art and science are so intimately intertwined in medical practice, I will inevitably cross the line separating these two in my discussion, and I hope that this will not unduly confuse the reader.

3.1 The Circle, a model of scientific medical systems

Dr. Liu listed seven disciplines, which he felt were at the root of Chinese medicine. In contemplating this



Categories	Western Medicine	TCM	LA
1. Axioms & Laws	Physics & Chemistry	Yin/Yang > 5 Elements Material Substances >Spirit	5 Elements >Yin/Yang Spirit >Material Substances
2. Essential Functions	Physiology	12 Zang Fu Organ Systems	12 Officials
3. Essential Structures	Anatomy	Meridians and Points	Meridians and Points
4. Causes of Illness	Etiology	Exogenous >Endogenous or Miscellaneous Factors	Endogenous >Exogenous or Miscellaneous Factors
5. Nature of Disharmony	Pathology	Qualitative >Quantitative	Quantitative >Qualitative
6. Clinical Investigation	Examination	Four Exams—Overt and Objective	Four Exams—Subjective and Interactive
7. Case Analysis	Diagnosis	Differentiation of Syndromes	Causative Factors
8. Treatment	Therapy	Herbal Orientation	Acupunctural Orientation

Figure 1 The Circle (source from: Eckman P. *In the Footsteps of the Yellow Emperor: Tracing the History of Traditional Acupuncture*. San Francisco: Long River Press; 2007.p.2.).

part of his work, it occurred to me that his idea could be expanded into a more general model; one which describes the nature of any scientific medical system. I added an eighth discipline, and arranged these eight items in a circular format, with the result being a more coherent model that has an internal logic not apparent in the original list. Categories 1-3 are the basic pre-clinical sciences relating to the lives of healthy as well as unhealthy people. Categories 4-5 introduce the factors related to the development of any illness. Categories 6-8 are then the clinical portions of each medical system. The Circle's eight components are deliberately arranged from the top down in order to highlight the different components of all scientific medical systems. This arrangement allows for horizontal lines to connect disciplines two and three, four and five, and six and seven, each pair of which displays a special interactive relationship. For the purposes of this article, I will focus on Category 1, as it underlies all the others (Note 3) and is crucial in evaluating whether or not the system based on it is scientific or not. Number one includes the basic axioms or assumptions, and their corollaries, which are used to explain phenomena at each of the other levels. These notions may be reducible to simpler hypotheses; but ultimately involve concepts that are posited to be true in the sense that they represent natural laws that are observed to be true, but not necessarily derived from simpler principles. As natural laws, they are of course subject to investigation and verification, but are not always amenable to an analysis of how they operate. For instance, Western medicine is essentially based on chemistry and physics, two branches of science that are in turn dependent on fundamental laws such as Einstein's famous equation $E=mc^2$ and the wave equations of quantum mechanics. Both of these equations can be observed to accurately reflect reality, but cannot be explained on the basis of a

deeper description of nature. That is why I am referring to them as axioms.

Do Chinese medicine and other versions of traditional Asian medical systems have any comparable axiomatic beliefs; concepts that can be observed to be true reflections of reality, but not explainable on the basis of any deeper description of nature? There are many possible choices to consider here, but I am going to pick one that is not commonly mentioned in English language texts on Chinese medicine, acupuncture, or other branches of traditional Asian medicine. I believe the fundamental axiomatic belief in traditional Asian medicines is the concept of resonance, already mentioned, and which underlies the corollary principles of yin-yang and the Five Elements. Resonance is the word I am choosing to translate two essentially synonymous Chinese terms, *Gan Ying* (感应) and *Xiang Ying* (相应). Among my reasons for proposing resonance as the fundamental axiom in Chinese medicine is its simultaneous occurrence in Western science, thus offering an easier route to understanding my point of view regarding the scientific nature of Chinese medicine, but I should also add that in fact, resonance theory is mentioned in one of the earliest of Chinese classical texts, and is not a modern reinterpretation or justification of Chinese medicine (Note 4). The next section will examine the nature of resonance in Chinese medical theory, based on its etymology.

4 Philology as a guide to understanding Chinese medical concepts

Perhaps the place to begin discussing resonance theory is by examining the Chinese characters for *Xiang Ying* and *Gan Ying*. Until now, I have been transliterating from Chinese using the modern Pinyin system, but in most early English publications dealing with classical Chinese texts, the older Wade system of transliteration was used, so I will begin by presenting these two terms for resonance in their Wade format, with the Pinyin in parentheses: *Xiang* in Wade is hsiang, while *Gan* in Wade is kan. *Ying* is the same in both Pinyin and Wade.

4.1 The character *Xiang*

Here, in Figure 2, is how hsiang (*Xiang* 相) is explained in Wieger's text[3] on Chinese characters:

On the left in Fig. 2 we see the classical script used in writing Chinese characters, and to its right is the more primitive form from which it evolved. Wieger explains the meaning as to examine or inspect, but further down notes that the main usage of hsiang (*Xiang*) is to indicate the abstract idea of reciprocity. Reciprocity is certainly an important aspect of resonance, as we shall see. Wieger attributes this connotation of hsiang (*Xiang*) to a pun on the identical pronunciation of the two components of its character, wood and eye, which are both pronounced "mu". I believe Wieger misses the deeper significance of the reciprocity connotation, which refers back to Chinese medical theory. The eye, in Chinese medicine, is the sense organ associated with the Wood Element and its associated liver organ, and as such, it participates in all of the resonances of that element. So the character *Xiang* is literally illustrating the concept of reciprocity, central to resonance theory. The Wood Element influences the eye, and the eye influences the Wood Element. The Chinese way to describe this relationship is to say that the Wood Element and the eye mutually (reciprocally) influence each other. When the character *Xiang* appears in Chinese medical texts, it is usually translated into English as "mutual". We can see this in the Chinese terms for the (mutual) Creative and (mutual) Control Cycles of the Five Elements—*Xiang Sheng* (相生) and *Xiang Ke* (相克)—fundamental aspects of Five Element

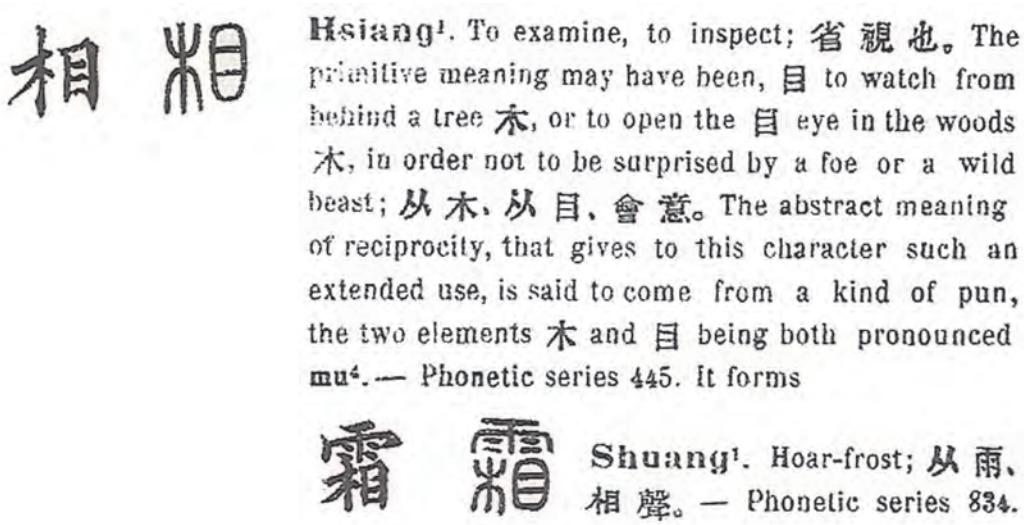


Figure 2 Reciprocity (source from: Wieger L. *Chinese Characters: Their Origin, Etymology, History, Classification, and Signification: A Thorough Study from Chinese Documents*. New York: Dover Publications; 1965.p.323.).

theory, and thus two of the multiplicity of items appearing in category 1 of the Circle in regard to Chinese medicine. Next I will examine the character for *Ying* (應) (Fig. 3), which when combined with *Xiang*, more technically indicates resonance. Of great importance is its radical, depicting the heart.

4.2 The character *Ying*

Now let us examine the character for *Ying*. In Figure 3, Wieger shows the classical and primitive forms of two different, but related, characters, which are both pronounced *Ying*.

The character we are interested in as part of the term for resonance is the lower one. The upper character, which is duplicated in the lower one, is the phonetic component, indicating the pronunciation, *Ying*, although it does also contribute to the meaning of the lower character. The difference between lower and upper characters is the presence in the lower character of the "radical" for the heart. Radicals generally have a stronger influence on the meaning of a character than the phonetic component, although they both contribute to some degree. In this case, the heart radical indicates, as Wieger points out, that the feelings are central to the meaning of *Ying*, which he explains as "to answer, to correspond, to do what one feels is right and ought to be". We will see that the other character used in discussing resonance, kan (*Gan* 感), also has this heart radical. I will point out that the heart is the organ of both mind and spirit in Chinese medicine, and that is why I think it appears as the radical in both of these characters used to convey the concept of resonance. Resonance relates to actions that cannot be explained on a purely physical basis, much as I have already stipulated for what is meant by both mind and spirit in Chinese medicine. Metaphysical considerations are important in Chinese medicine, as illustrated in Figure 4, and reinforce rather than diminish its scientific scope.

4.3 The character *Gan* and its metaphysical associations

In Fig. 4, Wieger explains the derivation of kan (*Gan*), with the upper left characters serving as the phonetic component of the character for kan (*Gan*) itself, shown below and to the right. Wieger uses the words, "bitten by a passion, an emotion", and we can better understand

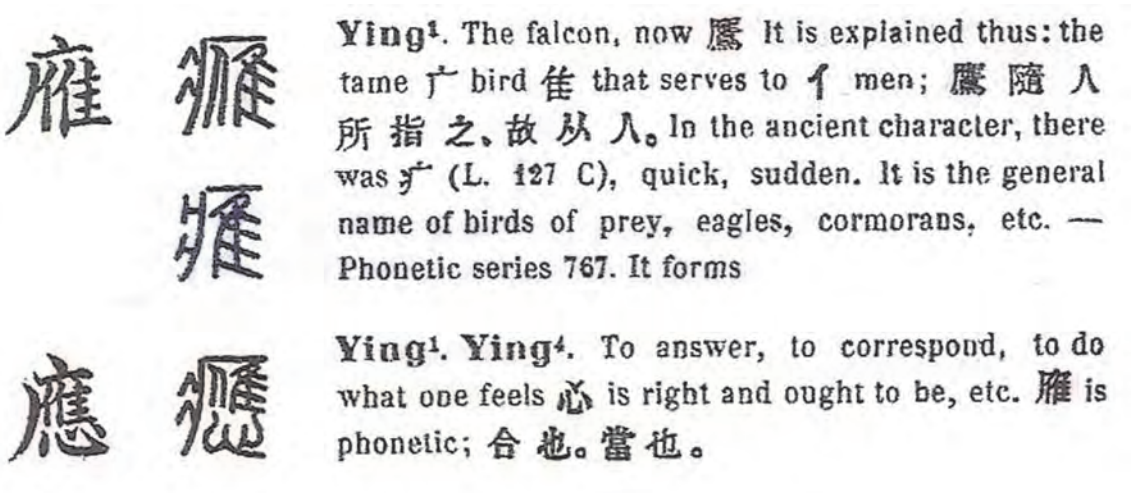


Figure 3 *Ying* and the Heart Radical (source from: Wieger L. *Chinese Characters: Their Origin, Etymology, History, Classification, and Signification: A Thorough Study from Chinese Documents*. New York: Dover Publications; 1965.p.335.).

Figure 4 Non-physical nature of Resonance (source from: Wieger L. *Chinese Characters: Their Origin, Etymology, History, Classification, and Signification: A Thorough Study from Chinese Documents*. New York: Dover Publications; 1965.p.179.).

the notion of being "bitten" by looking at the usage of *Gan* in both classic and contemporary medical texts. Passion and emotions are in the non-physical realm of nature. Curiously, *Gan Ying* does not appear at all in either the *Nei Jing* (《内经》*The Inner Classic*) or *Nan Jing* (《难经》*The Classic of Difficult Issues*), two of the seminal classics of Chinese medicine, but *Gan* itself does, in the compound term *Xiang Gan* (相感).

Conclusion: A philological study of the above Chinese characters is one way of illustrating the scientific underpinnings of Chinese medicine. Resonance theory is shown to be an axiomatic basis for this science-based viewpoint.

5 Axiomatic thinking in Western and Chinese medicine leads to two branches of science

I am choosing resonance as the primary concept in Chinese medicine to be discussed because its general usage applies to relationships that cannot be explained as being due to any underlying mechanism, similar to the way gravity is treated in Western scientific treatises. Thus the lack of any mechanism for the effects of resonance (a phenomenon that is delocalized in time and space) cannot be used to classify it as an unscientific belief. In fact, it is my understanding that even in modern physics, the creation of opposite elementary particles from what can only be called the "void" leads to their quantum entanglement with each other throughout time and space, all without any proposed mechanism to account for such strange behavior. Resonance is thus no more an unscientific principle than the fundamental theories of Western science. As a result, I propose that there are two separate branches of science: the familiar Western branch typically dealing with quantities, analytic thinking and deductive methodologies, and the Eastern branch of science typically dealing with qualities, synthetic thinking and inductive methodologies. The Western branch of science primarily depends on measurement, associated with the cardinal aspect of numbers, while the Eastern branch of science primarily depends on pattern recognition, often associated with the ordinal aspect of numbers (how things are ordered). These two branches of science are not absolutely restricted to either Western or Eastern thought, but rather express dominant tendencies.

Chinese philosophers have recognized the importance of both aspects in regard to understanding nature, which they termed qi (气) and *Li* (理). Curiously, it is rare to find discussions of *Li* in Western treatises on Chinese medicine, and I wonder if the same is true of Chinese works. In actuality, these two aspects of nature can never be separated, as they reflect essential properties of everything in the cosmos. When it comes to therapeutics, I'm certainly not claiming that one should accept all theories in Chinese medicine uncritically, but rather that they should be examined by the criteria used in any scientific proposal: Do they have explanatory value, are they validated by their record of clinical utility, and do they possess the ability to predict clinical outcomes?

6 Constitution, the forgotten paradigm in Chinese medicine

Let me return to the topic of the importance of the constitution in Chinese medicine, as I believe it holds one possible key to establishing a scientifically verifiable approach to some of the illnesses that can be beneficially treated with acupuncture. My ideas in this regard are ripe for applying Western research protocols, and I am currently looking for an institution that will support such a project. Some background information however is needed to understand such an endeavor. Worsley's teachings were based on this constitutional difference between individuals (Note 5), and in his opinion, this diagnostic finding was considered the most reliable guide to safe and effective acupuncture treatment. Essentially, Worsley divided individuals into five groups based on *Wu Xing* categories manifesting as color, sound, odor and emotion signals, detectable on examination. The *Nei Jing* however prioritized the two most important diagnostic findings as primarily relating to the pulse and the color of the individual.[4] The chapters in the *Nei Jing* on *Ren Ying Cun Kou Pulse* (人迎寸口脉) diagnosis also offer strong support for the idea that one of the Five Elements was the optimal target for acupuncture treatment in every case, regardless of the symptomatology or disease name, an approach that is consonant with a constitutional perspective. Careful reading of the *Nan Jing* will be found to support the existence of this constitutional paradigm, based on its change in focus from the acquired qi generated by the stomach and spleen, to the inherited qi (the moving qi between the kidneys) that determines our original nature. Another constitution-based system of acupuncture that I studied directly from its originator is Korean Constitutional Acupuncture (KCA), later renamed Eight Constitutions Medicine, by its founder Kuon Dowon. Obviously, there is a difference between parsing constitutions into five or eight types, and I spent years looking for an explanation that would account for how both systems might reflect findings amenable to scientific validation. My research focused on the pulse, which has always held a high place of honor in Chinese medicine. Eventually, I was able to discover the link between these two versions of constitutional diagnosis, which resulted in my own belief that there are actually 20 different constitutions; if practitioners use all the varieties of pulse diagnosis described in the Asian literature. Each of these methods of pulse diagnosis can be thought of as a lens through which we can observe a different aspect of an individual's constitution. I published this new approach in 2014 in *The Compleat Acupuncturist* (Note 6), and taught it around

the world in workshops including three times in China, before the pandemic (Note 7).

The fundamental idea in Constitutional Conditional Acupuncture (CCA) is that each individual is conceived with a unique order of the relative strengths and weaknesses of their internal organ systems. As long as they maintain this inherent order, they are in an optimal situation to let nature homeostatically resolve any disturbances to their health. However, if the stresses they are exposed to disrupt their original order of organ functions, they now have a Condition that is different from their Constitution in that regard. In this conditional state they don't feel like themselves, and indeed they are unwell. A logical approach to treatment is then the use of acupuncture, following its classical laws, to encourage a return of constitutional order to their organs. This approach has proven very effective in treating all manner of health problems as was demonstrated in my clinical workshops in Kunming and Beijing. One special finding that was revealed by this style of diagnosis is that many illnesses share the same pathomechanism (*Bing Ji* 病机) in patients with the same disease diagnosis, when viewed from the perspective of the relationships between their organ systems, as stipulated by their Constitution. I call this phenomenon a constellational classification of pathomechanisms. A surprising finding revealed by this approach is that the organ systems of Chinese medicine do not only have responsibilities governed by their classical functions, but they also have roles to play that are governed by the constellational positions of their organ systems dictated by their Constitution. The clearest example I can present of this finding is shown in the diagnosis and treatment of cancer. My clinical impression is that all cases of cancer show a shift in the pulse depth of the *Fu* (腹) organ systems from their usual depth per the *Nan Jing* to the Fire Element depth. Additionally, the protocol I use for treating these cases of cancer is strictly defined by the individual's Constitution, and has nothing to do with the type of cancer, its location or the stage of metastatic progression. This work is too complex to explain in detail in this article; but can be found in *Acupuncture Pulse Diagnosis and the Constitutional Conditional Paradigm*, which has just been published (Note 8). In Western medicine, different illnesses are characterized by the pathomechanisms that accompany them, and it seems possible that a similar situation may be the case in Chinese medicine. Research to investigate such a possibility holds the promise of a closer coordination of these two systems of medicine with the additional benefit of establishing a scientific basis for each of them. Together they form a complementary approach to treating patients without any reason to label one as more scientific than the other. So far, my clinical results predict that such an outcome will be the conclusion of future research.

7 Summary

Chinese medicine has often been dismissed as being unscientific, both in its native country and elsewhere. This article examines both the historical roots of such thinking and its refutation based on examining the meaning of science itself. A proposal is put forth that there are two branches of science that are the primary guides used in Western and Chinese medicines. Indeed, the combination of these two ways of understanding natural law offers the best path forward towards a humanistic approach to medicine that does not ostracize unconventional therapies, which have proven their efficacy for thousands of years, while at the same time opening the door to new discoveries in the realms of diagnosis and therapeutics.

Notes

1. One argument against considering TCM theories as scientific is the claim that they are not amenable to experimental verification. Such a claim can be disproven by experiments such as the one I carried out at the Beijing University of Chinese Medicine in 2019, using the freshman student body to test assertions in both the *Nei Jing* and *Nan Jing* about the 50-fold circulation of nutritive and defensive energy, *Ying Qi* (营气 Ying-nutrient qi) and *Wei Qi* (卫气 Wei-defensive qi). The positive results of this experiment were reported in my most recent text, cited in Note 8, which shows how such fundamental theories, even the most obscure ones, can be validated or rejected by an appropriately designed research study.
2. The Five Elements represent one choice for translating the Chinese term *Wu Xing*. Other authors prefer translations such as Five Phases, Five Movements or Five Actions. My choice reflects the historical usage of Elements in the acupuncture traditions popularly taught in the Western world.
3. In Chinese medical theory, the organizing principles are designated as "Heavenly" while the structures and functions they lead to are referred to as "Earthly", with their final development as "Human", in parsing the nature of medicine.
4. The clearest presentation of resonance theory can be found in *Huai Nan Zi* (《淮南子》), a Han dynasty text.
5. Worsley coined the term Causative Factor (CF) to indicate these constitutional differences, and practitioners of his lineage have differences of opinion about whether the CF is present from conception or is acquired at some later time. For that reason, some of them reject the term constitution as being equivalent to their understanding of CF. In my opinion, however, the two are equivalent terms.
6. Eckman P. *The Compleat Acupuncturist*. London: Singing Dragon Press; 2014. This book is also in the process of creating a Chinese edition, presently under

contract with People's Medical Publishing House, although no expected date of publication has been announced yet.
7. Three days in Kunming in 2017, five days in Beijing in each of 2018 and 2019.
8. *Acupuncture Pulse Diagnosis and the Constitutional Conditional Paradigm*, Self-published in 2022 by Peter Eckman, and available from Amazon and other distributors.

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Ethical approval

This article does not contain any studies with human or animal subjects performed by the author.

Author contributions

Peter Eckman drafted and reviewed the manuscript.

Conflict of interest

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Review

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Acupuncture: Effective and Recommended but More Implementation Needed

Mel Hopper Koppelman[1,✉]

Abstract

Acupuncture enjoys a robust evidence base for dozens of clinical conditions and decades of research exploring its mechanisms of action. It has over 9,000 positive recommendations from official government and clinical guidelines. However, it still remains relatively inaccessible in the United States, Europe and elsewhere, especially compared to the strength of evidence-based recommendations for its use. Acupuncture would benefit from robust implementation strategies, utilizing insights and approaches from implementation science. The clinical use of Botox for migraine suffered from weaker evidence of effectiveness and greater evidence of harm, but using a streamlined and robust implementation strategy, Allergan was able to achieve widespread implementation from when it began its efforts around 2010. Such a systematic approach that identifies and overcomes barriers to implementation for acupuncture would benefit millions of people who currently are offered less effective and more invasive treatments, contrary to the recommendations of clinical guidelines.

Keywords: Acupuncture; Implementation science; Accessibility; Emergency use; Migraine

1 Introduction

Acupuncture is a technique and medical science originating in China, the theoretical basis of which dates back at least 3,000 years.[1] Its practice spread from China to Korea and Japan in the sixth century and to Europe and the Americas beginning in the sixteenth century.[2] Its popularity as a technique and its use in medicine, as well as clinical research into its effectiveness and mechanisms of action, have grown steadily over time.

In comparison to acupuncture's widespread clinical and mechanistic evidence, as well as overwhelming support in official clinical guidelines, its accessibility to patients, utilization within healthcare services and coverage by public and private insurance in most industrialized countries outside of South East Asia is sorely dwarfed. However, the commonly cited barriers to acupuncture's utilization are a lack of research, a lack of understanding of its mechanisms and a lack of acceptance and recommendation by conventional guidelines–may be misguided.

Rather, practical experience teaches us that acupuncture's largest hurdles to implementation and accessibility are: the lack of a clear referral pathway, inconsistent funding and a lack of implementation strategy. This last obstacle encompasses the previous two challenges; as such, a strategy would include the logistics of ensuring personnel are available to administer treatment as well as how to fund the implementation. By correctly identifying these barriers to acupuncture treatment, the acupuncture profession, research community and medical services can develop a strategic implementation strategy. This approach would focus effort and resources where they can be most effective for improving access to this safe, effective and recommended treatment.

2 Incorrectly identified barriers

2.1 Acupuncture is a highly evidence-based treatment in modern medicine

One commonly cited barrier to acupuncture's implementation is the lack of scientific evidence to support its efficacy. However, research into acupuncture as a medical treatment has grown exponentially in the past 20 years, increasing at twice the rate of research into conventional biomedicine. Over this period, there have been over 13,000 studies conducted in 60 countries, including hundreds of meta-analyses summarizing the results of thousands of human and animal studies (Fig. 1).[3]

A large-scale individual patient meta-analysis which included over 20,000 patients found that acupuncture

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Figure 1 Presenters at Science Day at the Annual Conference in Rothenberg - Back row: Velia Wortman (Germany), Beverley de Valois (UK), Debra Betts (New Zealand) ; Front row: Andrew Flower (UK), the author (US/UK), Florian Beissner (Germany) (source from: the author).

Figure 2 Inaugural American Society of Acupuncturists conference with Dr. David Miller on the left. DR. Sina Leslie Smith, then the author and Bill Reddy (source from: the author).

was more effective than usual care and sham. Of particular note, the researchers found that the effects of treatment persisted at one year follow-up and for many months after the treatment was discontinued, making acupuncture unique amongst analgesic treatments.[4]

On the other hand, evidence for conventional treatment is typically assumed to be greater than it is in reality. A recent review of Cochrane Reviews, which is considered to be the pinnacle of the evidence hierarchy, found that only 5.6% of the interventions assessed had high-quality evidence supporting their benefits. They also found that harms were under-reported.[5]

This literature makes acupuncture one of the most evidence-based treatments in modern medicine. A wide variety of clinical areas have been studied, including pain, cancer, pregnancy, stroke, mood disorders, sleep disorders and inflammation, to name a few.

2.2 Research into acupuncture's mechanisms of action is extensive and robust

Due to the lack of standardization of the various explanatory models of acupuncture practice, a lot of confusion exists around how acupuncture works to achieve its therapeutic benefits. However, the mechanisms underlying how acupuncture relieves pain have been extensively researched for over 60 years (Fig. 2).

Acupuncture has been shown to modulate nociception, the process of sensory nerve pathways that are specialized for pain, involving Aδ, Aβ and C fibers. Acupuncture attenuates biochemicals involved in pain pathways, including opioids and non-opioid neuropeptides, neurotransmitters such as serotonin, norepinephrine and dopamine, and cytokines (Fig. 3).

Acupuncture analgesia has been shown to involve several classes of naturally produced opioid neuropeptides including enkephalins, endorphins, dynorphins, endomorphins, and nociception (also known as Orphanin FQ). Among the non-opioid neuropeptides, substance P (SP), vasoactive intestinal peptide (VIP) and calcitonin gene-related peptide (CGRP), which plays a central role in the pathogenesis of migraine, have been investigated for their roles in both the analgesic and anti-inflammatory effects of acupuncture.[6,7]

Many biochemical and signaling pathways have been identified as playing a direct role in how acupuncture achieves its clinical effects, but perhaps the most central pathway that acupuncture uses, one that helps explain how it is effective in such a diverse array of clinical areas, is that acupuncture has been demonstrated to directly initiate a process called purinergic signaling, a primitive and ubiquitous[8] system in the body using adenosine and ATP for signaling and regulation in all tissues and organ systems.[9] It is now understood that all nerve transmission requires ATP as a co-factor and that the body uses purine levels as a primary background signal of both healthy function and tissue damage. Studies on mice demonstrate that those bred to be unable to bind to adenosine did not have pain relief from acupuncture or any of the chemical changes associated with acupuncture pain relief, while the normal mice did.[10,11] This effect has since been replicated in humans.[12]

In addition to biochemical actions, studies also demonstrate the direct effects of acupuncture on the central nervous system. These include spinal reflex effects, where acupuncture stimulates muscle relaxation and changes in visceral organs. In the brain, acupuncture has shown to change functional connectivity, decreasing activity in limbic structures associated with stress and illness while improving the regulation of the hypothalamus-pituitary-adrenal axis, the primary system that the body uses for regulating hormones and the physiological stress response.[13] Additionally, acupuncture modulates parasympathetic activity, the branch of the nervous system associated with rest, relaxation, digestion and tissue healing.

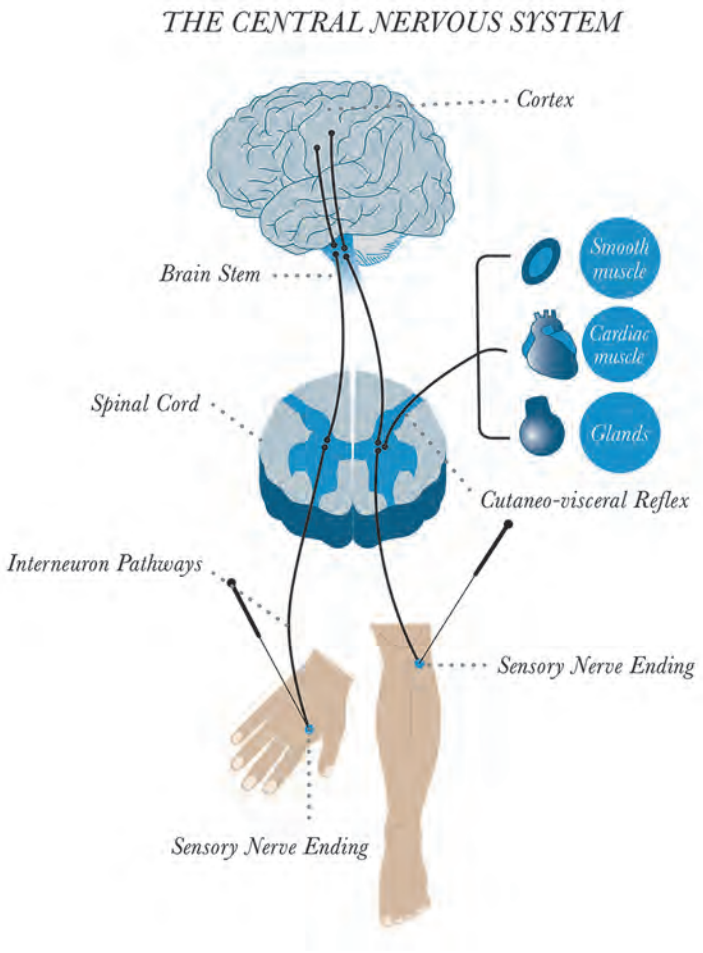

Figure 3 Acupuncture analgesia through the nervous system (source from: https://www.evidencebasedacupuncture.org/acupuncture-scientific-evidence/).

More recently, researchers out of Harvard have zeroed in on specific PROKR2^{Cre}-marked sensory neurons that are required to trigger vagal-adrenal reflexes to produce anti-inflammatory effects.[14] By studying the somatotopic organization of these nerve fibers, they have derived a greater understanding of acupuncture point effects.

Studies utilizing brain imaging to non-invasively study acupuncture's neuromodulation also yield interesting insights. From 1994 to 2020, over 829 studies have been performed utilizing functional neuroimaging to access a window into acupuncture's effects on the brain for a variety of clinical conditions using diverse treatments and comparators.[15] These studies yield insight into acupuncture's analgesic effects, differences between acupuncture and sham, and acupuncture point specificity, as well as providing a glimpse at differing brain effects of various acupuncture styles in the treatment of a variety of conditions.[16]

When contrasted with the knowledge of mechanisms of commonly used medications in conventional medicine, the hypothesis that lack of understanding of how acupuncture works is a barrier to its implementation becomes even less likely. For example, paracetamol (acetaminophen) is the most commonly used and recommended analgesic in the world and yet its mechanisms of action are largely unknown. Additionally, recent research has demonstrated that it is one of the least effective analgesic drugs available. In the case of paracetamol, popularity and medical recommendations appear unlinked to effectiveness or an understanding of mechanisms of action.[17]

2.3 Acupuncture is a guideline-recommended treatment for many indications in modern medicine

Another common misconception is that acupuncture lacks recognition within mainstream medicine as an efficacious, effective and safe intervention. However, the growth and breadth of acupuncture's scientific support have translated into widespread policy support. A 2018 review examined clinical official recommendations from around the world made by a variety of groups including government health institutions, national guidelines, and medical specialty groups. Over a 27-year period, they found 2,189 positive acupuncture recommendations for

204 health problems, mainly in guidelines published in North America, Europe and Australasia.[18] Updates to this data presented in October, 2022 bring these numbers up to 9,340 positive recommendations for acupuncture from 3,809 different publications.[19] These official recommendations indicate that acupuncture's evidence is now officially acknowledged by medical experts globally and that acupuncture is no longer "alternative".

What can be seen at any given snapshot in time is variation in guideline recommendations for acupuncture due to inconsistencies in how research is interpreted. For example, in 2020 the United Kingdom's National Institute of Health and Care Excellence (NICE) recommended acupuncture as a first-line recommendation for chronic primary pain due to any cause. This recommendation brought the NICE guidance into alignment with clinical guidelines already existing in the USA, Australia, Canada, New Zealand, Germany and Austria (Fig. 4).[20]

3 Applying implementation science to acupuncture–from "letting it happen" to "making it happen"

While those in the acupuncture research and practitioner community recognize acupuncture's under-utilization, misidentification of acupuncture's most significant barriers to implementation have hampered progress in ensuring appropriate access for the public, with well-intentioned calls for more research and greater recognition in the absence of an implementation strategy.

Establishing the effectiveness of a medical intervention does not guarantee its usage or availability within a healthcare system. Implementation science studies methods to overcome utilization barriers and facilitates the uptake of effective treatments.[21]

Greenhalgh et al.[22] distinguish between three strategies when it comes to making treatments that have been found effective and recommended in guidelines available to the public:

- *Diffusion*: passive spread
- *Dissemination*: active and planned efforts to persuade target groups to adopt an innovation
- *Implementation*: active and planned efforts to mainstream an innovation within an organization

Figure 4 Mark Bovey, head of research at the British Acupuncture Council and Professor Nicola Robinson, editor-in-chief of the *European Journal of Integrative Medicine* with the author (source from: the author).

Aaron Lyon, Ph.D., associate editor of the journal *Implementation Research and Practice*, refers to these three approaches as: "letting it happen", "helping it happen", and "making it happen", respectively (Fig. 5).[22] Despite recommendations in thousands of guidelines globally for hundreds of indications, acupuncture has suffered from a lack of stewardship when it comes to implementation and has defaulted to a "letting it happen" stance, perhaps with a somewhat naive belief that recommendations in clinical guidelines automatically lead to real-world availability.

In contrast to pharmaceuticals, devices, and patented techniques, no organization or entity stands to benefit from a windfall profit should acupuncture be widely implemented in a healthcare system. As such, acupuncture has lacked the ministration to develop strategies to ensure that it is not simply recommended but that it is actually made available to patients and utilized by healthcare systems.

4 Learning from Allergan: the importance of proactively applying implementation strategy

When it comes to making evidence-based treatments accessible to patients in the real world, implementation strategy may be more important than the strength and quality of the evidence-based or guideline recommendations, as clearly illustrated by comparing the accessibility of acupuncture and Onabotulinum toxin A (Botox) for the treatment of migraines within the National Health Service (NHS) in the United Kingdom. Botox for migraine serves as a helpful reference point since it has many overlapping uncommon challenges as acupuncture does when it comes to studying the intervention and implementing it as a treatment.

Some of the specific hurdles encountered and overcome by Allergan that are often thought to apply to acupuncture in the rollout of Botox for migraine include:

- Little clinical trial data with small effect size over placebo
- Poorly blinded studies
- Lack of established mechanism of action
- Lack of trained clinicians to administer the treatment within the NHS
- Lack of public awareness of Botox as a treatment option

Figure 5 Comparison of implementation strategies (source from: Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank Quarterly* 2004;82(4):581–629.).

In 2012, both treatments became recommended by NICE for the treatment of migraines. Acupuncture was included as a formal recommendation in the NICE Guidelines based on an independent evidence review, and Botox through a Health Technology Appraisal (HTA) requested and funded by Allergan. While acupuncture is formally recommended and indicated for a larger population, Botox remains by far the more accessible treatment.[23,24] As such, a look at the differences in the implementation strategy used is extremely informative.

In 2012, the NICE Guidelines for the Prevention of Treatment of Migraines recommended a course of acupuncture as a second-line treatment and an Allergan-funded HTA recommended Botox as a third-line treatment. A course of 10 acupuncture treatments was recommended for anyone with episodic or acute migraines where topiramate and propranolol are ineffective or contraindicated. The recommendation for Botox is only applied after a patient has tried three other medications, has headaches over 15 days per month and is not overusing painkillers.[25] Getting detailed information about the number of Botox or acupuncture treatments in an NHS setting is challenging; however, it is interesting to note that while the recommendations for acupuncture apply to a far larger patient population, treatment with Botox appears to be more common in an NHS setting.

Acupuncture generally has many hurdles to overcome in order to be recommended and adopted by healthcare systems where the treatment is not currently mainstream, such as the UK's NHS. But interestingly, Botox had all the same hurdles, some to a far greater degree, and yet through a comprehensive implementation strategy that addressed each of these, it became more widely available than acupuncture. It managed to achieve this while having weaker evidence, a smaller population for whom it was recommended, greater safety issues, and no clinicians trained to administer it at the time of recommendation.

Botox had less evidence for effectiveness than acupuncture, with support coming entirely from one multi-centered study, where the first arm found no between-group differences in the primary outcome and 65% of the included patients had medication overuse, a condition which precludes the diagnosis of migraine.[26] At the end of the study, there were no differences between the two groups in acute medication usage.[27] While the Phase III REsearch Evaluating Migraine Prophylaxis Therapy (PREEMPT) studies did not assess blinding as recommended by International Headache Society guidance,[27] an earlier study that did found that 70% of recipients correctly identified their treatment group, indicating that the study was in fact mostly unblinded.[26]

As headache experts Jes Oleson and Peer Tfelt-Hansen remarked: "No assessment of the effectiveness of blinding was done. Blinding seems likely to have been far from optimal… This presumed lack of blinding alone can probably explain a 10% difference between the active drug and placebo."[26]

It had greater evidence of harm, was more expensive to administer and lacked clinicians trained in providing it. And yet, today, 12 years later, it is still easier for patients to access than acupuncture. In order to understand this apparent contradiction, it is instructive to look at Allergan's implementation strategy in 2012 and the subsequent years.

The first step in the implementation strategy was for Allergan to fund and conduct the PREEMPT studies. When Botox was found no better than placebo for the primary outcome in the first arm of the trial, the primary outcome was changed. For the second arm of the trial, it was already well underway. The next step was to fund a review to be conducted by Warwick Evidence using evidence and analysis submitted by Allergan, which would become the basis of the NICE Health Technology Assessment.[26] Given there was very little published evidence on using Botox in the prevention of chronic migraines at the time the 2012 Guidelines were under development and the evidence that was available was very weak, it is unlikely that the NICE committee would have included it in an evidence review if left unprompted. As such, Allergan funded and conducted

Figure 6 The author with Professor Hugh MacPherson and Dr. Richard Hammersclag at the Society for Acupuncture Research conference in Boston (source from: the author).

its own evidence review and provided it to the Guideline Development Committee in the form of a Health Technology Assessment (Fig. 6).

When it comes to accurately assessing the safety of new interventions, it has long been established that the vast majority of accurate safety signal is only available after new drugs and treatments are made available to the public. This is partly due to a larger sample size; with more people using the intervention a more accurate and robust signal of true harms can emerge. Allergan only included harms data from the published trials and failed to include the more accurate and inclusive post-market harms data from the post-market analysis that was available.[28]

Because there were no clinicians offering the treatment within the NHS, Allergan funded eminent neurologists, such as Dr. Fayyaz Ahmed, chair of the British Association for the Study of Headache, to both train in providing the procedure and to train other neurologists, thus creating a clear referral pathway, ensuring that once patients were identified for the procedure, they would have a clear path to receive it.[29]

Both then and now, the evidence for acupuncture is much stronger than that for Botox. Indeed, a 2017 study comparing acupuncture, Botox, and valporate head-to-head found that while all groups had a reduction in migraines, those in the acupuncture group had by far the greatest benefit with 40% fewer migraine days, half as much need for medication, and less than half as many days off work or social engagements missed compared to the Botox group.[30]

Today, the original Health Technology Assessment provided by Allergan remains and despite acupuncture's greater evidence for preventing migraines and stronger recommendations in the NICE guidelines since 2012, Botox is much more accessible today for migraine sufferers in the UK. The key differentiator in accessibility is Allergan's clear, thorough and well-orchestrated implementation plan, rather than evidence of effectiveness or cost-effectiveness.

According to the Migraine Trust, the largest migraine charity in the UK, which receives funding from pharmaceutical companies including Allergan, a patient can access Botox within the NHS when other treatments have failed by requesting a referral to a specialist. On the other hand, the same site explains that "acupuncture is not widely available on the NHS" and that most treatment is accessed privately.[24]

5 Untapped opportunities to support patients in the emergency room presenting with pain with acupuncture in the US

According to the U.S. Centers for Disease Control (CDC),[31] every year there are 130 million emergency room visits and pain is the primary presentation for up to 78% of these visits.[32] Opioids remain a mainstay of treatment, despite having a high addictive potential and leading to over 80,000 deaths in 2021 alone (Fig. 7).[33]

Receiving a prescription for opioids from the emergency room to manage acute pain is a significant risk factor for going on to develop opioid dependence.[34] One study found that of those presenting to the emergency room with acute pain, 48% received an opioid prescription and of those who had never taken opioids before, 17% were still using opioids one year later.[35]

Acupuncture has emerged as an effective, safe and feasible treatment option to effectively treat pain in the emergency room and has been demonstrated to reduce the need for opioids.[7]

As such, the Joint Commission, a non-profit organization operating in the United States that accredits over 22,000 hospitals and healthcare services, hence the overwhelming majority,[36] implemented new standards in 2018 requiring all hospitals to make non-pharmacological treatment for pain, including acupuncture, available and, when not available, to educate patients on where these treatments could be accessed on discharge. This recommendation to offer or refer for acupuncture would apply to over 100 million emergency room visits annually in the United States alone.

While we do see a growing number of hospitals offering traditional acupuncture in-house, these services are mainly in oncology and pain settings. Just as with guideline recommendations for acupuncture for migraine in the UK, in the United States we see a clear wide-reaching recommendation for acupuncture in emergency rooms with no implementation strategy.[37]

In 2022, a protocol was published for a multi-center feasibility study for using acupuncture for pain management in the emergency room.[32] While such a trial would provide information on efficacy, safety and tolerability,

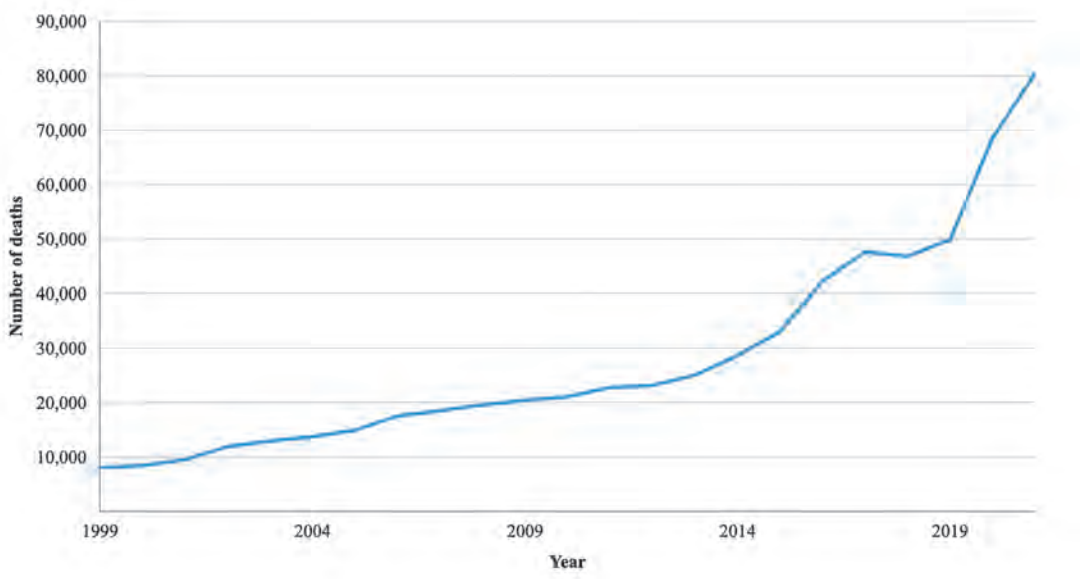

Figure 7 Opioid deaths in the United States from 1999-2021 [source from: Spencer MR, Miniño AM, Warner M. Drug overdose deaths in the United States, 2001–2021. *NCHS Data Brief* 2022;(457):1-8.].

Figure 8 The author with Sandro Graca and Gil Barzilay supporting Evidence Based Acupuncture at the TCM Kongress in Rothenburg, Germany, 2018 (source from: the author).

wide-spread implementation is unlikely without a coherent strategy (Fig. 8).

Another 2022 study focusing on the feasibility of acupuncture for pain in a pediatric emergency setting concluded that all emergency department physicians should be trained in acupuncture, that electronic medical records needed to facilitate documentation of treatment, and acupuncture supplies, as well as patient educational materials need to be made available.[38]

6 Conclusion

Research into acupuncture's effectiveness, safety and mechanisms of action is growing exponentially. Acupuncture is widely recommended in thousands of clinical and government guidelines. Concrete, coherent implementation strategies have lagged behind this robust evidence base, leaving a large gap between recommendations and accessibility. Future efforts should be made to articulate referral pathways, funding, physician education and logistics of implementation.

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Ethical approval

This study does not contain any studies with human or animal subjects performed by any of the authors.

Author contributions

Mel Hopper Koppelman drafted and reviewed the paper.

Conflict of interest

The author declares no financial or other conflicts of interest.

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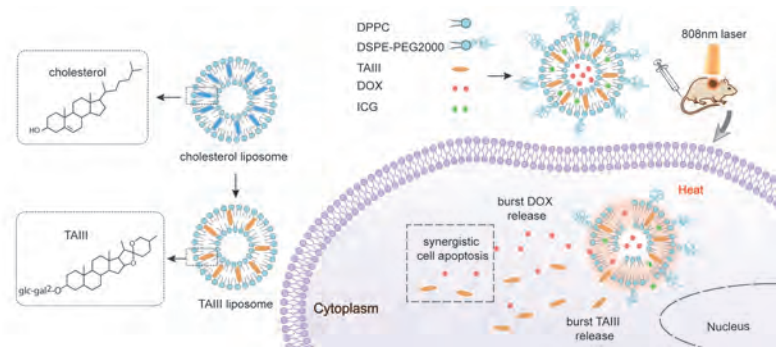
Introducing Traditional Chinese Medicine New Medicine Creation Team led by Professor Zhang Tong

The Traditional Chinese Medicine (TCM) New Medicine Creation Team is led by Professor Zhang Tong (张彤), who has dedicated his career to pioneering advancements and modernizations in TCM pharmaceuticals. The team currently comprises over 10 faculty members, including 2 professors, 2 researchers, 3 associate professors, and 6 senior laboratory technicians. Notably, Professor Zhang Tong, the team leader, holds the esteemed position of the Dean at the School of Pharmacy, Shanghai University of TCM. He also serves as a visiting professor, doctoral supervisor, recipient of special government allowances from the State Council, and a distinguished member of the National Pharmacopoeia Committee. Recognized as an outstanding talent of the new century by the Ministry of Education, Professor Zhang Tong is also lauded as a leading figure in Shanghai and an exemplary academic leader with multiple important positions.

In order to inherit the essence, apply ancient wisdom to the present, and meet the demands of clinical medication, the team, based on the clinical efficacy of traditional Chinese herbal compound formulas, focuses on the "classic prescriptions" and "clinically proven formulas" of TCM as breakthroughs to explore innovative medicine development models for Chinese herbal compounds. The team has successively undertaken and participated in more than 20 research projects at various levels. The team has published over 300 academic papers and obtained 22 authorized invention patents, and has obtained 2 new medicine certificates and 5 clinical trial approvals. A notable achievement is the successful development and market approval of the inaugural classic renowned prescription, *Ling Gui Zhu Gan Tang* (苓桂术甘汤 Poria, Cinnamon Twig, Atractylodes Macrocephala and Licorice Decoction), charting a novel course for the registration of classic renowned prescription new medicines.



In pursuit of enhancing the efficacy and safety of clinical Chinese medicine, the team remains dedicated to the continuous innovation of Chinese medicine analysis technology. The team endeavors to develop sophisticated high-end formulations that adhere to the highest standards of efficacy and safety. Noteworthy innovations include the exploration of targeted preparation processes for active ingredient clusters in Chinese medicine, grounded in the metabolic and transformational principles of these ingredients. Additionally, the team has devised advanced nano-formulations for intelligent medicine delivery, thus laying a robust foundation for innovative Chinese medicine medicine development.

The team has actively pursued international exchanges and project collaborations with renowned universities and teams worldwide, such as University of Washington, University of North Carolina, and University of Wageningen. This collaboration aims to advance the innovation and development of new medicines in Chinese medicine and also natural medicine.