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《中医药文化》 (Chinese Medicine and Culture) Special Issue "The Experience in Treating COVID-19 with Traditional Chinese Medicine"



Call For Papers

Dear experts or scholars:

Chinese Medicine and Culture (ISSN: 2589-9627) is a peer-reviewed academic journal dedicated to publishing new and original research and their results both at home and abroad. Since the outbreak of COVID-19, traditional Chinese medicine has played an important role in the process of fighting the epidemic disease in China, and has shown remarkable clinical efficacy. In this process, we have accumulated significant medical experience. With the worldwide spread of COVID-19, traditional Chinese medicine has attracted considerable attention and received positive evaluation from the international community for its excellent performance in fighting COVID-19. Therefore, Chinese Medicine and Culture plans to publish a special issue "The Experience in Treating COVID-19 with Traditional Chinese Medicine", which aims to timely summarize the research results of TCM in treating COVID-19, and provide reliable TCM diagnosis and treatment methods for the whole world. For this purpose, here is the call for papers and the following are the explanations of the requirements.

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- (7) Study on the history of traditional Chinese medicine in treating epidemic diseases from an interdisciplinary perspective

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Response to Epidemic Disease in Ancient China and its Characteristics

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Abstract

This article introduces the history of epidemic diseases in China and analyzes its characteristics. It aims to explore the relationships between human beings and nature, nation and society, which enlightened us to understand and recognize the influence factors and historical logic behind the history.

Keywords: Chinese medicine, epidemic disease, history research, social science

Pestilences have existed since antiquity and run through the history of human beings. China is no exception. As early as Yin and Shang Dynasties over three thousand years ago, there have been definite records of epidemic disease [Note 1]. Although such records are inconspicuous in a multitude of books in Chinese history, careful untangling and thinking reveals multiple traces of pestilences in the long history and enables us to further ponder over the influence factors and historical logic, so as to explore the state and mode of life existence in light of relationships between human beings and nature, nation, and society.

Although for a long time, this topic escaped the notice of historians, research on medical social history in China has been springing up since 1980s or 1990s under domestic and foreign influence factors, particularly the direct impetus from severe acute respiratory syndrome in 2003 and has evolved gradually into one of the remarkable frontier research fields in China. Disease, especially epidemic disease, heath practice, and epidemic prevention attracted the most attention in such research and related research results have been obtained. In these studies, the important epidemics in China history were sorted out, the response to epidemics and the experience obtained were investigated and summarized from different perspectives and a high value was set on the response and experience [Note 2]. Undoubtedly, these studies are helpful

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for us to understand the achievements of traditional disease control in China. However, most of the current studies lack an overall perspective, deliberate elevation, and a lack of rigor is observed in the evaluation on epidemic prevention achievements, and the characteristics of traditional response to pestilences in China are seldom discussed and summarized as a whole. Therefore, with the attitude of historicism, this article investigated the traditional response to epidemic disease and the experience in China from an overall perspective, in hope of analyzing the epidemic prevention achievements in ancient China as they were on this foundation.

RESPONSE TO EPIDEMICS

Measures taken against epidemic disease are nothing more than emergency responses and medical treatment. Emergency responses fall generally into two categories: immediate countermeasures after the occurrence of pestilences and routine preventive measures and health practices. Speaking about the response from a national point of view, measures were often taken by both of the imperial court and local government whenever there was pestilence, although specified institutional provisions were not in place, which was different from the case in other disasters such as floods, droughts, and locust

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disaster. For instance, in the second Yuanshi year (A.D. 2) under the reign of Emperor Ping of Western Han Dynasty, a grave locust disaster occurred all over the country, especially in Oingzhou area where the disaster led to a pestilence. The local government "made a requisition of houses of the dignitaries to store medicine" and paid funeral expenses for the dead.[1] In the sixth Dahe year (A.D. 832) under the reign of Emperor Wen of Tang Dynasty, there were floods and droughts and subsequent pestilence in the south, the emperor issued an edict titled "Save and Help the Sufferers of Pestilence," in which he wrote that "Ever since floods and droughts occurred and caused pestilence, I have assumed the blame and have not been able to sleep. I have issued multiple edicts to care about the sufferers" and required that "In areas with an unsettled situation, officials should ask about medical treatment and provide medicine and relief to the patients."[2] In summary, the measures taken by the imperial court and local government in ancient China mainly included establishing hospitals for doctors to diagnose and treat the patients, preparing and dispensing ready-made medicine, performing Taoist sacrificial ceremony to pray for blessings and remove ill fortune, publicizing and giving prescriptions, burying the corpses, providing places to accommodate the patients and put them in quarantine, as well as patient isolation in the local areas.

It is no doubt that the lack of specific national institutional provisions on the treatment of epidemics is related to the fact that unlike other disasters, epidemics do not tend to directly lead to mass uprising, but at the same time, it cannot be divorced from complexity of the disease treatment. Under the social medical conditions then, the government could not actually take full responsibility of epidemic prevention and treatment. On one hand, medical facilities run by the government were limited in efficiency and capability and could not meet the demand of epidemic treatment of the general public. On the other hand, epidemic treatment was technically more complex than relief for hunger and cold, because of complexities including the ever-changing epidemic situation and inter-patient variability, regional imbalance in ancient medical resources and difficulty in cross-regional deployment for the government then, and more importantly, syndrome differentiation of yin and yang, cold and heat, deficiency and excess, exterior and interior in the traditional Chinese medicine (TCM) that would otherwise lead to exactly the opposite. Therefore, the central government allowed the local authority to act as the occasion demanded instead of setting up uniform regulations. In this situation, the nation tended to encourage the folk to take the responsibility of pestilence prevention and treatment, especially in Ming and Qing Dynasties, when the government urged the emerging folk power (for example, county sages) to play an even more active role and performed diversified treatment activities by making the use of local medical resources and the growing charities. The measures taken mainly included supplying medicine, printing and distributing prescriptions, requesting the government to help in treatment, setting up foster homes to accommodate patients, performing institutionalized treatment

by using organizations including public house of the patriarchal clan and public affairs office and setting up dedicated charitable organizations such as medical bureau. Individually, people tended to stay at home, escape from the epidemic-stricken area or dispel pestilential qi by burning incense or herbs like Cang Zhu (苍术 *Rhizoma Atractylodis*) and Bai Zhi (白芷 *Radix Angelicae Dahuricae*).

The Chinese society has accumulated rich experience in routine preventive measures and health practices. There was the idea of "treating disease before its onset" a long time ago. Although it cannot be put on a par with preventive medicine today, it is beneficial in maintaining personal health to a certain extent. Moreover, many of the festival customs that have developed over a long period of time are related to health and pestilence prevention, including burning herbs like Cang Zhu (苍木 Rhizoma Atractylodis) at the Dragon Boat Festival, drinking and spraying realgar wine, as well as mountaineering at the Double Ninth Festival. In addition, the environment is cleaned and bath is taken frequently to maintain personal hygiene and repel mosquitoes and flies, a sober lifestyle is kept to ensure plentiful vital qi, and drinking boiled water and eating scallions and garlics are encouraged to avoid pestilential qi.

In addition to rich experience and diversified measures in responding to epidemic disease, the Chinese medicine has made remarkable achievements in the treatment. Although it is generally believed that TCM is good at treating chronic disease and strengthening the body, as a matter of fact, its understanding and treatment of infectious diseases such as "cold damage diseases" and "warm diseases" are one of the most important strengths and achievements of TCM. This can be easily comprehended as long as we get to know the significance of Shang Han Za Bing Lun (《伤寒杂病论》 Treatise on Cold Damage and Miscellaneous Diseases) by Zhang Zhongjing, the "medical sage" in Han Dynasty and the "theory of warm diseases" in Ming and Qing Dynasties in the Chinese medical history. At the end of Eastern Han Dynasty with an ongoing pestilence, of over 200 members in Zhang Zhongjing's clan, "two thirds died and 70% of them died of cold damage diseases" in a decade. He "thought of the departed and sighed with emotion" and wrote Treatise on Cold Damage and Miscellaneous Diseases "based on ancient experience and by consulting numerous prescriptions". This classic has the following achievements: establishing the syndrome differentiation system of three yin and three yang and laying down the basic principles for TCM understanding of disease transmission and change; modifying the popular simple therapies of the time, such as acupuncture with a stone needle as well as sweating, emetic and purgative therapies, and making more than 200 effective prescriptions (including 113 ones for cold damage diseases), apart from the distinctive views on diseases including "cold damage diseases" then. It lays the foundation for clinical treatment in later generations, particularly the treatment of externally contracted heat disease. After Song Dynasty, Zhang Zhongjing and his Treatise on Cold Damage and Miscellaneous Diseases were gradually

sanctified, leading to blind worship of the classic and hindering doctors of the time to understand the pathogens of externally contracted heat disease from multiple perspectives. In Song and Jin Dynasties, especially in the early 13th century, China witnessed repeated epidemics. Doctors like Liu Wansu, in their long-term clinical practice, became aware of the existence of various heat diseases, and put forward the idea of "fire and heat causing disease" based on the exposition in Huang Di Nei Jing (《黄帝内经》Huangdi's Internal Classic). In a serious pestilence at the end of Ming Dynasty, Wu Youxing wrote a book Wen Yi Lun (《瘟疫论》Treatise on Pestilence) by further referring to Huangdi's Internal Classic and combining the experience of doctors in Jin and Yuan Dynasties. He pioneered the "theory of warm diseases" in Ming and Qing Dynasties, and this theory was perfected by many doctors represented by the four renowned scholars in warm diseases in Qing Dynasty and promoted the development of TCM as a whole with systematic and theoretic exposition of pathogens, patterns of disease transmission and change, prescriptions and drugs for treatment of externally contracted heat disease including pestilences.

Apart from the development of medical theories, progress was made in artificial immunity, medical resources and techniques, etc., Since Song and Yuan Dynasties, especially in Ming and Qing Dynasties, obvious changes were observed as follows. First, starting from the 15th century, variolation, a quite effective method to prevent and treat smallpox was invented and popularized. Second, social and economic development and relative popularization of medical knowledge provided abundant medical resources for the people, medical books were published in large quantities and the number of doctors increased rapidly. Third, technical advances in the manufacture of ready-made medicine and the increasing number of shops for drug manufacturing and marketing offered more possibilities for pestilence treatment in emergency.

CHARACTERISTICS OF RESPONSE TO EPIDEMICS

It can be seen from the above that there was a rich experience in responding to epidemic disease in China history and most of the experience is still used today. Thus, current research tends to speak highly of traditional Chinese experience in preventing pestilences. For example, a latest study has claimed that "A history of three thousand years reveals the bravery and ability of China to fight against pestilences, as well as its tradition of defeating various infectious diseases."^[3]

Historically, this claim makes sense certainly. Achievements of ancient China in this aspect should not be inferior to those of any other nations, and maybe this explains in part why there were no pestilences that had structural impact on society as Black Death (the plague) in Europe and smallpox in America. However, it seems inappropriate to overstate or be complacent over the achievements in fighting against epidemics in China history. First of all, the above measures and experience were not common practice whenever pestilence occurred in ancient

China, but are "carefully selected" from numerous historical materials. Nowadays, in review of epidemic preventive measures in ancient China, the experience in different time and space was actually merged in one dimension and the consequent understanding is bound to be lop-sided. Then, as long as the historical situation is concerned, it can be easily seen that in pestilences, what were laid bare in society were panics and population decrease more than active and effective prevention and control of disease. In this regard, the serious pestilence between Jiaqing and Daoguang years in Qing Dynasty might as well be taken as an example. The prevalence of this cholera vera peaked at the first Daoguang year (1820) when the political situation was stable and the new monarch just ascended the throne, but official response to the pestilence in Beijing was only an imperial edict to order officials in the capital to make and distribute pills, and buy coffins to bury the dead bodies on the road. At the local level, only a few officials and individuals or organizations set up hospitals and sent for doctors to treat patients or make and give pills.

More significantly, there was a lack of institutional provisions on pestilence treatment in ancient China. Famine management was always taken seriously in China, and specific and systematic regulations were set up for relief from natural disasters including floods, droughts, and locust disaster and for preparation against natural disasters, particularly in Ming and Qing Dynasties when national famine management was quite perfect. However, although pestilence can be regarded as a disaster, its prevention and treatment are obviously different from relief from disasters in general, since ordinary relief efforts including giving money and food, exempting from taxation and providing porridge are not applicable for epidemic prevention. Nevertheless, review of an extensive literature about famine management revealed no relief clauses for epidemics. In government organizations, only the Imperial Health Institute mainly serving the royal court was somewhat involved in response to pestilences, in addition to the charitable Huimin Drug Store that was set up all over the country in Song and Yuan Dynasties to help the poor and the sick. It can be seen that there were no institutional provisions on pestilence prevention and treatment in ancient China. The relatively proactive policy on the medical aid in Song and Yuan Dynasties was increasingly negative in Ming and Qing Dynasties when there were a larger population and more frequent pestilences. But at the same time, folk forces played a relatively positive role, especially in Ming and Qing Dynasties when the government drew support from the emerging folk forces, particularly county sages, encouraged and guided them to make use of the increasing local medical resources and charitable organizations to perform various temporary rescue activities and set up facilities like medical bureau, and promoted these facilities to develop into places for routinely diagnosing and treating epidemic diseases from pure charitable organizations.

Pestilences are to civil society what bacteria are to the human body. They trigger wide-ranging responses of the society,

which is self-evident, especially in China that has a long history and magnificient civilization, and it is no wonder that the country has accumulated comprehensive understanding of pestilences and rich experience in fighting against them. Despite the achievements, we have to say that the Chinese society failed to summarize and develop a system of measures for pestilence prevention and treatment, and then generate a modern mechanism for health practice and epidemic prevention. Controlling the source of infection, cutting off the route of transmission and protecting vulnerable populations are the key to prevention and treatment of epidemics, and the most important is to control the flow of people as much as possible to prevent the spread of such diseases. In this light, the measures taken, including sending for doctors, giving medicine for free and publicizing prescriptions, missed the point actually. Certainly, as mentioned above, there was a clue to quarantine and even to artificial immunity. For instance, in the early Qing Dynasty when the Manchus had just entered Shanhaiguan Pass of Great Wall, out of fear of smallpox with which they were otherwise seldom infected, dedicated high-ranking officials were ordered to screen for patients with smallpox and put them in quarantine. Meanwhile, there were also events that patients were arranged to live in isolation in epidemics. Unfortunately, these measures were only occasional in history and were very different from modern institutional compulsory moves, since smallpox screening was only a temporary behavior in that special circumstance, and arranging patients to live in isolation was occasional and the purpose, as indicated by historical records, was more to help treat and care for patients than to prevent infection. Variolation that touches on artificial immunity is no doubt a very important invention of China, but it is just an individual case and a nongovernmental commercial behavior. Moreover, although people intuitively realized the infectivity of epidemics and took actions for self-protection, including avoidance and some degree of isolation, but this was not supported by the medical theories then, and was even criticized by those holding the mainstream opinion. For instance, Cheng Jiong, a famous scholar in Southern Song Dynasty, wrote in his Yijing Zhengbenshu that: "There are people who get away from the patients and fall ill elsewhere; and there are also people who share a bed or a house with the patients and are not sick. Then I know the disease is not infectious..... When my relatives. friends, subordinates or servants get ill, I always visit them in their bedrooms and talk about medicine and syndromes. Both ancient and current experience suggests no infection." So avoidance of epidemics was completely unnecessary.^[4] Zhu Xi, another scholar in Southern Song Dynasty, recognized the possibility of infection, but he believed that it was "the most immoral and unreasonable" to evade the responsibility of caring for the family and relatives for fear of infection. Hence, considering a debt of gratitude, avoidance of epidemics was discouraged even if infection was highly probable, and moreover, "Whether infection occurs or not also depends on evil or good of the human heart as well as deficiency or excess of qi, and it cannot be generalized."[5] Liang and Chen, a scholar

in the early Qing Dynasty, utterly detested the practice of avoidance of epidemics, and criticized that "It (avoidance of epidemic disease) disregards family ethics and is an ignorant conduct by ignorant fools. I just cannot understand why a scholarly family follows suit." [6] Such remarks were very popular then, and apart from stinging rebuke, there were also a lot of descriptions that eulogized those who did not avoid epidemics to take care of their family and relatives and were not infected, which fully reveals the mainstream ethical value orientation that was against avoidance of epidemics in ancient China.

In summary, the following three characteristics can be seen for traditional response to epidemics. First of all, although the nation always paid attention to pestilences and their treatment, a complete system of institutional provisions was not in place, which was different from the case in other disasters, and treatment was mainly performed voluntarily by the society. And then, rich and significant experience in responding to epidemics was accumulated through the long history of China, but it was emotional and fragmented without systematic review and summary, and failed to give rise to holistic knowledge about epidemic treatment. Finally, with regard to quarantine, the key to epidemic prevention and treatment, although there was avoidance, isolation and even quarantine out of intuition and instinct or for specific purposes, such behavior was not encouraged or supported by the main stream of the society and ideology, resulting in its failure to develop in theory or practice.

CONCLUSION

In conclusion, rich experience and diversified measures were accumulated both in health practice and in the treatment of epidemics in ancient China, which are undoubtedly our precious cultural legacy. However, it has to be admitted that these experience and measures did not develop into systematic understanding. On one hand, in traditional response to epidemics, the society was relatively more proactive. Despite some achievements, the nation did not take the responsibility institutionally, so there was not much to be proud of from a national perspective. On the other hand, even though rich experience was accumulated in response to epidemics, there seemed to be a lack of driving force to promote the society to summarize and improve the knowledge about and measures for epidemic prevention and treatment, and as far as the key issue of infection was concerned, its prevention and control was hindered by a force that could not be ignored. That is, there was an apparent tension between the society and the nation in response to epidemics.

Translator: Shuna Zhang (张淑娜)

Note:

Note 1: There have been books reviewing the history of epidemics in China preliminarily, including *Chronology of Epidemics in Ancient China* by Zhang Zhibin (Fuzhou: Fujian Science and Technology Publishing House, 2007),

Historical Data on Infectious Diseases in China by Li Wenbo (Beijing: Chemical Industry Press, 2004) and Epidemic Situation of Three Thousand Years in China History by Zhang Jianguang (Nanchang: Jiangxi University Press, 1998). Epidemics in ancient China can be learned about from these books.

Note 2: Currently, there have been relevant research results, including *Bubonic Plague in Nineteenth-Century China* (translated by Zhu Huiying, China Renmin University Press, 2015), *Plague and Modern China: Institutionalization and Social Change of Health* by Wataru Iijima (translated by Pu Yan et al. Social Sciences Academic Press, 2019), *Pestilences and Society in Jiangnan in Qing Dynasty: a Study of Medical Social History* by Yu Xinzhong (Beijing: Beijing Normal University Publishing Group, 2014), *History of Epidemic Prevention in China* by Deng Tietao (Nanning: Guangxi Science and Technology Publishing House, 2006), *History of Epidemics in China* by Liang Jun et al. (Beijing: TCM Ancient Books Publishing House, 2003), *Plague: War and Peace—Environmental and Social Changes in China* (1230-1960) by Cao Shuji and Li Yushang (Shandong Pictorial Publishing

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There are no conflicts of interest.

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Epidemic Diseases and Chinese Medicine: Example of Severe Acute Respiratory Syndrome and COVID-19

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Abstract

Epidemic diseases, known and studied in China since antiquity, are one of the main chapters of the School of Exogenous Febrile Diseases (温病学派). Along with the legends about epidemic demons, China has developed over the centuries a medical approach based on the teachings of *Huang Di Nei Jing* (《黄帝内经》*Internal Classic*), *Nan Jing* (《难经》*Classic of Difficulties*), and *Shang Han Lun* (《伤寒论》*Treatise of Harmful Cold*). However, it was in the 17th century, after the great break of the Song, Jin, and Yuan eras that an innovative spirit Wu Youxing (吴有性) first foresaw the existence of microorganisms as we know them now. His *Wen Yi Lun* (《瘟疫论》*Treatise on Pestilences*) foreshadows an original approach to epidemic diseases, particularly emerging infectious diseases of the 21st century: severe acute respiratory syndrome 2003–2004 and the COVID-19 pandemic are perfect examples. In this first article, which will be followed by two others, we will examine the classical and modern Chinese definitions of these dreadful plagues.

Keywords: Ancient and modern terminology, epidemic geniuses and demons, pestilences, severe acute respiratory syndrome and COVID-19, traditional medical approach

INTRODUCTION

Epidemic febrile diseases have been known and studied in China since ancient times. Their causes, circumstances of appearance, diagnosis, and treatment have been discussed and tested for centuries. However, it was not until the middle of the 17th century AD that a specialized medical school gradually formed and then systematized to become a discipline in its own right, known as the School of Febrile Diseases by the Heat (温病学派), which we will more simply call School of Heat Diseases or School of Exogenous Febrile Diseases [Note 1]. [1,2] This term actually means contagious and noncontagious febrile illnesses.

In the following pages, I will outline the history of this medical adventure which is rooted in the original statements of *Huang Di Nei Jing* (《黄帝内经》*Internal Classic of the Yellow Emperor*) and continues to the present day. I will focus on the concepts of contagion and epidemic to try to better bring out the main phases of this historical evolution punctuated by the observations and discoveries of the most famous doctors of ancient times. Then, I will fly over the progress of the

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following centuries, marking the break between the 12th and 14th centuries followed by uninterrupted extensions from the Ming period (1368–1644) until the systemization which took place under the Qing (1644–1911). The School of Heat Diseases can indeed be considered as an original contribution, in medicine, of this historical period. But, I will deliberately neglect the issue of variolization and vaccination, which should be dealt with separately.

In the wake of world health news, taking it as an example, I will return to the epidemic of severe acute respiratory syndrome (SARS, in Chinese 非典 – the abbreviated form of 非典型肺炎for an atypical pneumonia – which occurred in China and various countries during the years 2003–2004). This will serve a good basis for understanding some aspects of the current pandemic of SARS-CoV-2-19 or COVID-19 (新冠病毒肺炎), which also falls within the traditional framework of

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the "Pestilences (瘟疫)," as will be explained later. I will try to give an idea of what these old methods can still, or should still, bring to the table of contemporary medicine, challenged by the emergence of new infectious diseases [Note 2].

By the way I stopped on the singular figure of a 17th century doctor, Wu Youxing (吳有性) alias Wu Youke (吳又可) (1582–1652) who first foresaw the existence of microorganisms and found himself to be the true precursor of this School of Heat Diseases, even if he was not the main organizer.

The sources used in this article, cited progressively, will be grouped in the bibliography. A doctoral thesis defended in 2011 at the Nanjing University of Chinese Medicine was particularly useful to me [Note 3].^[3]

PART ONE: ETYMOLOGY

Contagion and epidemic in ancient texts

Modern definitions

In modern Chinese, epidemic is called Liu Xing (流行), contagion is called Chuan Ran (传染), infection or infestation Gan Ran (感染), so that epidemic disease is called Liu Xing Bing (Bing refers to disease), contagious or infectious disease is called Chuan Ran Bing (传染病) and acute infectious diseases Jixing Chuanranbing (急性传染病). However, we would be hard pressed, apart from the word "illness," to find these terms as they are in ancient texts.

Chinese characters of epidemic diseases in ancient texts

Classical Chinese indeed uses other characters to translate the feverish and epidemic nature of diseases. Let us look at the main ones:

Yi (疫).

It is the most important. It means "epidemic, contagion, plague," a bit like the Latin pestis: "epidemic, destruction, plague." Associated with the character of the disease — Yi Bing (疫病) — today it designates all forms of "pestilence", any contagious disease characterized by high mortality. It is used in particular for all serious epidemic febrile illnesses.

Bubonic plague, the black plague due to the bacillus of Yersin, in Chinese antiquity was called Shu Yi (鼠疫), with the character Shu which is the generic name of rats, mice, and other rodents – because it is transmitted to humans by rats. In contemporary Chinese, we would rather say, with reference to modern Western terminology, Hei Sing Bing (黑死病) to mark its darkness and its deadly nature, or Hei Shu Bing (黑鼠病) which literally means "black disease transmitted by rats" (Ricci c. 2364). Without being so expressive, these last terms therefore always imply the seriousness and the contagiousness of this disease.

In fact, the character Yi has a broad meaning which hardly allows us to conclude, when we meet it, with the exact nature of the disease in question except that it is rather "cold" or "hot," produced by a "epidemic breath" or by a "mixed" epidemic-agent — Cold Pestilence (寒疫), Warm Pestilence

(温疫), Pestilent Qi(疫气), and Miscellaneous Pestilence (杂疫). Above all, it shows, in the context that it appears in several documents that preceded the Qin era (先秦,221–207 BC) that Men from these distant times were already faced with serious epidemics, causing loss of many human lives and great social damage.

Within the upper part the radical of the disease 广(ne) which represents the shape of a man leaning against, lying on a bed with dots which represent sweating [Note 4], 每 is formed by a figure 殳 which is pronounced shu and which means "stick" "hit" "a stick to hit people."

This long stick of octagonal section with sharp edges was made of assembled bamboo or cut wood. He was the weapon of the guard who walked in front of a military tank. The inscriptions on the turtle shell further suggest a hand brandishing this weapon or a club [Note 5]. [4] More than long speeches, these pictograms suggest the violence and anonymity with which any epidemic plague strikes, which is found in fairly similar terms in Western legends. Émile Littré, for example, in a book made up of fragments devoted to medicine, followed the first quarantine of his study on "great epidemics", by other quarantine devoted to "talking tables and striking spirits [Figure 1 and Note 6]!" [5]

• Wen 癌.

Another equivalent ancient character of Yi, to say epidemic diseases, is Wen(癌). Formed with the radical of the disease, it should not be confused with its namesake Wen (温) constructed with the radical of water and which indicates a notion of temperature, therefore of heat; this Wen (温) character largely structures the nosological frameworks of febrile affections in traditional Chinese medicine, as we will see below.



Figure 1: (a and b) Etymology of the character Wu, magician, diviner, represents the movement of the sleeves during chants and shamanic dances. Su Wen "Yi Jing Bian Qi Lun Pian Di Shi San" (《素问·移精变气论篇第十三》 Plain Questions "Discourse on Moving the Essence and Changing the Qi") keeps the memory of very distant times when shamans (巫医 wu yi) treated the sicks just by invocations, to move the Essences and transform the Qi

The two characters Wen (瘟) and Yi (疫) associated Wen Yi (瘟疫) had in ancient times the general and asserted sense of epidemic, as reported by the Ci Yuan (《辞源》 Great Dictionary of the Chinese Language of the Beginning of the 20th Century [1915]):

"Wen stands for epidemic disease Yi, acute contagious diseases which affect humans or domestic animals and backyard birds."

But sometimes, Wen (瘟) was able to replace Yi(瘟) with the same sense of contagiousness, gravity, and epidemic dissemination, and it is common to see Wen Yi (瘟疫) replaced by Wen (瘟) or by Yi (疫) at all. On the other hand, Yi (疫) associated with the character Wen (温) carrying the radical of water — Wen Yi (温疫) — will first indicate the hot, feverish nature of such a contagious disease. Wen Yi (瘟疫) connotes all species of contagious diseases, whether feverish or not, all kinds of epidemic diseases whether in humans and animals. Hence the title of the work published in 1642 by Wu Youxing, precursor of the School of Heat Diseases: Wen Yi Lun (《瘟疫论》 The Treatise on Pestilence).

• Li 疠.

This other classical character also sometimes has a meaning identical to that of Yi (疫). It is found in certain texts of Chinese literature or in local chronicles, an inexhaustible source of information on the events of ancient Chinese life. Thus, Shan Hai Jing Guo mentions:

"Li, these are epidemic diseases" (疠, 疫病也).

A more complete study of ancient medical terms relating to epidemiology should focus on a number of proper names. For example, Zhang Yi (瘴疫), the meaning of which varies according to the case between "miasma, pestilential vapor," "epidemic disease," or even "malaria, falciparum malaria;" Huo Luan (霍乱), the graphic expression of which well expresses the sudden disorganization which the body causes cholera morbus or acute gastroenteritis; Lan Hou Sha (烂喉痧), very formerly used to say scarlet fever; Da Tou Wen (大头瘟), literally "infection with swollen head," name of mumps seen as the result of an attack by an "epidemic wind-heat;" or even Ke Yi (咳疫) for whooping cough or pertussis, where the cough is associated with contagion ideogram [Note 7]. [6]

But, all these terms, as we can see, are names of well-defined contagious diseases and were never taken as generic terms for epidemic diseases.

In sum, and although the questions of nosology compared with distant times are far from simple – they are sometimes insoluble – It is nowadays admitted that the characters examined above cover a whole class of infectious, febrile epidemic diseases whose characteristics are to be suddenly triggered, very aggressive, and easily contracted, regardless of age or sex.

These general notions should be remembered by those who wish to study the theoretical and practical lessons of the Chinese

School of Heat Diseases as they are currently transmitted in the Universities of Traditional Medicine of China.

Legendary explanations of epidemic plagues

In Chinese High Antiquity, epidemics were explained by the intervention of one or more particular geniuses or demons who indiscriminately "struck" the entire populations [Note 8]. $^{[7]}$ Mythology mentions a deity of the Wind (风神) named Bo Qiang.

In an old commentary on the Elegies of Chu, this deity, whose memory was perpetuated in a poem of the 19th century, is considered as the entity responsible for the epidemics:

"Boqiang is the name of the deity of epidemics, when it manifests it harms human health" (伯强为疫鬼名, 所致伤人 [Figure 2]).

Another work of antiquity, the Ancient Rituals of Han Officials, in its supplement, reports a legend that three children who died at birth became demon-guards of epidemics [Note 9]. [8] One became the evil genius of malaria, the second the genius of the waters, and the third, hidden behind doors in men's apartments, now terrorizes children. The story told by Littré of werewolves who terrorized children is somewhat in Chinese mode [Note 10]. [5]

These beliefs in demons responsible for epidemics or collective mental disorders are in fact very widespread in ancient Chinese texts. We find traces of it even in medical texts. Thus, the famous Compendium of Needles and Moxas. published in 1601 by Yang Ji Zhou, reproduces Sun Zhen Ren Zhen Shi San Gui Xue (《孙真人针十三鬼穴》the Song of the Thirteen Vital Points of Sun Simiao) deemed to treat "ghost diseases," in fact psychiatric disorders [Note 11].[9] It precedes it with a "charm," with a therapeutic talisman (符咒), accompanied by incantatory formulas, entitled Zhen Xie Mi Yao (《针邪秘要》Essential Secrets for the Puncture of Harmful Influences). This charm present in all editions of Dacheng until the mid-20th century has been removed - superstition requires! - in the 1963 edition and unfortunately also in the following, which are otherwise excellent. I reproduce it below after the third edition of this work, dated 1657 [Figure 3].

These explanations were convenient for the people; popular Buddhism and Taoism added other elements which were not without influencing the prophylactic recommendations of these plagues. This is how specific rites to expel epidemic demons were part of the techniques of conjuring up harmful



Figure 2: (a and b) Bo Qiang Elegies of Chu IV – 3rd century BC Warring Kingdoms (c) Yi Gui



Figure 3: Zhen Jiu Da Cheng (《针灸大成》Therapeutic Talisman) 3rd edition 1657

influences Nuo (触), of which there are still many traces today in China [Note 12].^[10]

Under the brilliant Tang Dynasty (618–907), such rites were even practiced in all classes of the society, from the peasant world to the highest dignitaries of the Imperial Court. It is now proven that they went back in a direct line to the Western Zhou Dynasty (1066–221 BC). Yao He (姚合), a poet of that time, left the memory:

"The candle of the year just out as the rooster announces the new year

against the epidemics are heard the Nuo with the spring welcoming libations."

烛尽年还别,鸡鸣老更新 傩声方去疫,酒色已迎春

It would be difficult these days to properly assess these practices. Their efficiency was linked to the representations of man and the cosmos totally different from ours. As Marcel Granet noted, it was still believed in the time of the Han that the Earth and the Sky gradually increased in volume. The distance between them grew. They once stood, when Spirits and Men lived in promiscuity, so close together (the Earth offering Heaven its back and Heaven holding it embraced) that one could "ascend and descend" at any moment from one to the other [Note 13]. [11]

Notes

Note 1: French Chinese Medical Dictionary. Beijing: People's Medical Publishing House; 1992. p. 1513. *Great Dictionary Ricci of the Chinese Language*. Paris: Desclée de Brouwer; 2001. volume VI p. 599.

Note 2: Several dozen since 2000.

Note 3: Wang Wenyuan, under the supervision of Pr Yang Jin: Concepts and Methods of Epidemic Prevention in Ancient China and their Modern Applications Research. Nanjing.

Note 4: Morel P., Xu GuangCun. The 214 Keys to Chinese Writing. Editions You Feng, Paris. 1997 p. 104.

Note 5: Ibid p. 79.

Note 6: Littré É. Medicine and Doctors. Paris: Academic Bookstore (Librairie Académique); 1872.

Note 7: Analysis of the inscriptions on the shell of turtles (甲骨文) in the 20th century revealed in fact the existence during the Yin dynasty (殷代, 1401–1222 BC) of more than a hundred proper names of contagious diseases. Like again malaria (疟) or scabies (疥). Cf Li Zhaohua. Chuan Ran Bing Zheng Zhi Cong Xin (《传染病证治从新》New Approach to the Diagnosis and Treatment of Contagious Diseases), Popular Editions of Hebei, Shijiazhuang 1981 pp. 1-3. The modern Chinese name for pertussis is "cough for a hundred days (百日咳)," presumably because the coughing fits of this disease which normally last 2 to 4 weeks often prolong episodes of dry cough. But, we see that the modern name of the disease no longer contains the meaning of contagion.

Note 8: Lee T'ao, a medical historian in the 1930s, noted that "the original meaning of epidemics in Chinese is Yi (疫), which means evil spirits making people sick" Lee T'ao History of Medicine – A short history of the acute infectious diseases in China "Chinese Medical Journal 1936, 50, 172-83. Source: GERA (Study and Research Group in Acupuncture, Toulon). Note that in this article, 伤寒is translated by typhoid, whereas it means in traditional texts "reached by the cold" as we will see later.

Note 9: *Han Guan Jiu Yi* (《汉官旧仪》*A Work Dating from the East Han* [AD 25–220]).

Note 10: É. Littré, Medicine and Doctors, Academic Bookstore (Librairie Académique), Paris 1872.

Note 11: Yang Jizhou (杨继洲). Zhen Jiu Da Cheng (《针灸大成》Compendium of Needles and Moxas) first edition 1601. Zhen Jiu Da Cheng Jiao Shi (《针灸大成校释》Compendium of Needles and Moxas Commented), under the supervision of the Heilongjiang Province Research Institute, People's Medical Publishing House. 1984 pp. 1186-1189.

Note 12: Dr Rouffiandis Vincent (medical doctor assistant—major, 1st class of colonial troops): Chinese theories on the plague cf. GERA database. The author makes a rather folk recension of the popular ceremonies which he witnessed at Fu Zhou at the beginning of the 20th century. He is mistaken about the name of the bubonic plague (鼠疫) which he mixed with that of "pestilential diseases" in general, 瘟疫. On the other hand, the West through Catholicism specially has kept old prayers, still current today, for cases of epidemics in humans or animals as we have seen recently in Europa. The action in the 15th century of St François de Paule (1416–1507) against the plague epidemics in the south of France was remembered. There are thus constants on this subject, interesting to observe within civilizations as different and distant from us as the Far Eastern civilization.

Note 13: Granet M., La pensée chinoise, Paris: Albin Michel 1968. p. 288.

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Preventing COVID-19 with Chinese Medicine: Concepts and Suggestions

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Abstract

The category of "epidemic diseases" is discussed extensively in the literature of traditional Chinese medicine, however it is often overlooked in modern Chinese medicine education precisely because population-level prevention and treatment do not fit easily into the dogma that individualized herbal formulas "based on patterns identified" is the primary mode of clinical reasoning in Chinese medicine. In the recent COVID-19 epidemic, the contingencies of treating large numbers of patients meant that it was not possible to provide "one prescription for each patient." In fact, four categories of patients were sometimes given the same formula: mild and moderate confirmed cases, close contacts of confirmed cases, and suspected cases. The lines between prevention and treatment, along with clear demarcations between individual and population-level immunity, were blurred in the mist of the urgent imperative to provide what could reasonably be expected to be effective. Lessons from the large-scale participation of Chinese medicine in the COVID-19 public health crisis are relevant for the global community of Chinese medicine practitioners and may provide insights into how future epidemics could be addressed in the absence of effective vaccines or pharmaceuticals.

Keywords: Covid-19, Chinese herbal medicine, prevention of Covid-19, novel coronavirus

《全球考卷》

张伯礼

东边春花烂漫开,西方疫魔猖厥来。

隔岸观火丧时机,仓促应对现乱态。

病毒不识亲与疏,嘴上功夫也无奈。

一张试卷考全球,千万生灵赌判裁?

A Global Test [Note 1]

Zhang Boli

While in the east, spring flowers brightly bloom,

The western epidemic won't abate.

They watched the fire, numb to distant doom;

Then rushed in rashly, heedless and too late.

This virus cares for no one far or near:

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No power nor boastful speech holds any sway.

One test examines all the earth as peers;

Why gamble with a million lives at play?

As we celebrated Lunar New Year's Eve in Beijing on Jan. 24th, my family and friends expressed both alarm and relief at the news of the lockdown of the city of Wuhan the day before. Banning all trains, planes, and cars from entering and leaving the city must mean that this new infectious disease is very serious, perhaps even more serious than the authorities were admitting, many people worried. At the same time, most were optimistic that the virus would be contained, and people in other provinces, and other countries, would be spared. Needless to say, our hopes were disappointed.

It is hard to convey the sense of urgency with which people devoured information. Millions of people were simultaneously

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following not only the number of infections and the news from Hubei but also the debates about whether the virus was airborne, the length of the incubation period, whether asymptomatic people were infectious, why there were such stark differences in severity, and many basic questions that were not yet clear at that point in the epidemic. Around me, people with very little education in science to help them were eager to understand "R" numbers, protein spikes, and the details of the 1918 influenza epidemic.

Well-credentialed scientists and self-proclaimed ones, all commanded the public's attention. Claims to have knowledge of secret reports and conversations were the common headlines on social media. The day the World Health Organization met in Geneva to decide whether to declare "a public health emergency of international concern," word started to spread through social media around midnight in China that they had determined such a declaration was premature. But we closed our eyes on this uncertainty, knowing that it could be yet another rumor as it was only afternoon in Europe. The next day, January 30, 2020, with 82 cases outside of China, it was officially announced. It would not be the first time we woke to the news of policies with repercussions that would impact our daily lives for months to come. School and workplace openings were delayed; people were required to wear masks in public, residential compounds issued gate passes that were checked by groups of volunteers with red armbands, and even essential businesses had reduced hours of operations. The streets of Beijing, far from the epicenter of the epidemic, were almost empty of cars and people, as if every day were the 1st day of Spring Festival.

These events were immediate and relevant, yet surreal. I think that most human beings caught in unexpected crises must feel this way. Even when you know that experts are predicting that your neighborhood or your farm will be flooded or hit by a hurricane, it is hard to be emotionally prepared for what that will really be like for you and those around you.

In this case, the suddenness felt like a natural disaster had struck, yet the crisis developed slowly. I can only compare it to following the news of a military conflict that we fear might escalate into a full-blown world war. In a sense, it is an apt comparison since what seemed to be an epidemic confined to Hubei, China, has turned out to be a worldwide pandemic. It now seems relatively certain that the virus was already spreading in other parts of the world either shortly before, simultaneously, or very shortly after the initial cases were discovered in Wuhan. The world focused on one arena, largely ignoring the possibility of activity in others.

Since that time, the epidemic in China has been successfully controlled, though more than 4600 people in China lost their lives to the disease. The global toll stands at 330,000 as I write this, and it is still not clear when this public health crisis will end. However, at this point, it is possible to begin assessing the value of the participation of Chinese medicine in the prevention and treatment of COVID-19 in China, and this may

offer useful insights for other countries and medical systems. This article focuses on the concepts and methods of prevention employed in the campaign against the epidemic. I assess these in light of the particular meanings of "preventing illness" that we find within the tradition of Chinese medicine, as well as the scientific data that are now becoming available. As new infectious diseases emerge, the efficacy of herbal medicine, acupuncture, health cultivation exercises, and other modalities for treating and preventing them will continue to be of interest to physicians and patients around the world, particularly in the absence of effective, targeted biomedical pharmaceuticals.

PREVENTION IN THE POPULAR IMAGINATION

One of the ways that ordinary people in China coped with the unknown and frightening possibility of being infected with this novel coronavirus (SARS-CoV-2) was to search for drugs to treat or prevent the disease that they could purchase themselves. Hoarding of over-the-counter Chinese prepared medicines and purportedly effective Western treatments, such as hydroxychloroquine, was common in the 1st month of the epidemic.

An online buying spree sold out all suppliers of the three-herb prepared Chinese medicine Shuang Huang Lian Kou Fu Ye (双黄连口服液 Double Coptis Oral Liquid) after major news outlets reported that scientific research had demonstrated that one of the components could inhibit SARS-CoV-2 in the lab [Note2]. Chinese medicine authorities, including Zhang Boli, quickly pointed out that any number of the medicinals in the "clear heat resolve toxin" category might have inhibitory effects if they were also subjected to tests [Note 3]. This alone was not enough to warrant confidence in their use. Although general formulae for prevention, designed to be taken by those with no confirmed exposure to the virus, continued to be widely shared and recommended, this behavior added to the general atmosphere of distrust in Chinese medicine amongst many in the biomedical and scientific communities in China. This debate has piggy-backed on recent discourse regarding whether single herbs such as Banlangen (Isatis Root) can "prevent". Some segments of the biomedical community in China have taken this claim as emblematic of "fuzzy-thinking" or "unscientific" assertions in Chinese medicine [Note 4]. This social and professional context has made discussion of preventing COVID-19 with herbal medicine a "sensitive topic" that corporate medical groups and professional biomedical associations often simply avoided.

THINKING THROUGH THE CONCEPT OF PREVENTION

This incident actually highlights a level of confusion around what exactly "preventing COVID-19" could and should mean from the perspective of Chinese medicine. I think that it is helpful if we first identify some basic principles:

 Inhibition of a virus in a Petri dish does not necessarily translate into prevention of infection or the development of disease due to a pathogen in individual human beings under real-life conditions. Laboratory results are good news; however, inhibition in isolated cells in a laboratory is several important and arduous steps away from showing positive results for preventing the viral infection in humans. The road from laboratory findings to animal testing to human clinical trials is a long one.

- 2. Formulas or single herbs that are indicated for the treatment of a disease are not necessarily effective for preventing that disease. Chinese medicinals have inherent properties and multi-faceted functions that are selected to address a symptom, a pathological process, or something that is lacking in the body and therefore leading to less than optimal functioning. Often, all of these can be skillfully addressed with a decoction prescription tailored to an individual.
- 3. Chinese herbal medicine rests on the foundation of a set of principles that has its own internal logic. The composition and dosages in herbal formulas are based on the traditional properties ascribed to each medicinal substance, their synergistic effects in compound formulas, and the functions they have within the framework of the human organism and the environment in Chinese medicine.

In fact, the combination of bitter and cold herbs in Shuang Huang Lian Kou Fu Ye could be counter-productive in light of the nature of the illness caused by the novel coronavirus from a Chinese medicine perspective. Many expert physicians in traditional Chinese medicine departments around the country, including those on the frontlines in Wuhan, report that COVID-19 manifests as a pattern of dampness, heat, and toxins invading the lungs. In some cases, there are also cold and dryness with damage to the fluids, as well as blood stasis.

From a professional, clinical perspective, "clearing heat and resolving toxins" is only one part of a strategy that one might use to treat a pattern that called for this approach. We might also need to "transform phlegm" to increase expectoration and clear airways, "dispel wind" to get rid of chills and headache, or "diffuse the lung" to stop wheezing. Cold and bitter herbs could actually drive the "external pathogens" deeper into the body and make recovery both longer and more difficult. In the case of the novel coronavirus, it causes dampness that can obstruct the lungs or the intestines, so heat-clearing herbs could potentially make the dampness, and therefore the symptoms, worse.

This is all common knowledge for professional herbalist, of course, but it was also a frequent topic for public education during the coronavirus crisis, as the Chinese medicine community strove to help the public understand traditional herbal medicine on its own terms. In fact, the buying-spree and the official and unofficial responses to it highlight the contradictions around the status of Chinese medicine in China today. Simply put, we live in times in which some segments of the public trust in the efficacy of Chinese medicine because of

their perception of its semi-scientific basis and not because they share, or even possess a rudimentary understanding of, its underlying concepts of the body and illness. Using Chinese medicinals as pharmacological substitutes is easily accepted and endorsed, while rationales based on premodern etiologies such as wind and warm disease are increasingly rejected by non-specialists in China.

"Treating Illness before It Manifests" in Chinese Medicine

A colleague recently asked me how to translate "Zhi Wei Bing (治未病)," or "treating illness before it manifests", in the context of a government document about the impending establishment of departments with this name in hospitals throughout the country. This led to a discussion about the word, its meaning in different texts, and the concept. Is this really equivalent to "preventative medicine" as it is conceived in biomedicine?

Preventative medicine is a branch of modern medicine that has become increasingly important as we conquer infectious diseases with hygiene, vaccines, and improved treatments, but suffer from diseases of aging and affluence in ever-growing numbers. Preventing chronic diabetes, heart disease, or hypertension with behavioral interventions and/or prescribing pharmaceuticals to control these conditions and prevent complications are all aspects of disease prevention. Being able to prevent infectious diseases based on knowledge of transmission and other risk factors is one of the greatest achievements of modern medicine, but new diseases are driving us to consider exactly how we might "improve immunity" or "host defense." Since we cannot always avoid coming into contact with microorganisms that cause disease, especially in the case of diseases such as COVID-19 with long incubation periods and many asymptomatic patients, how we might make both individuals and populations less susceptible is a logical question to ask. Recent research on the role of gastrointestinal microbiota in the regulation of immune responses throughout the body, particularly in the respiratory system, may help answers these questions [Note 5].

One of the most frequently cited aphorisms in Chinese medicine today is "The superior physician treats illness before it manifests (上工治未病)." This is the word that was used for the naming of "new" departments of Chinese medicine preventive medicine mentioned above. In modern textbooks, this is said to include three aspects: treating small imbalances, indicated by signs and symptoms, before they become actual illnesses; treating a current illness in a timely manner so that it does not become more serious; and preventing complications or the development of chronic conditions. Although one can argue that this definition is, in fact, an amalgamation of different classical medical works written centuries apart, it is nonetheless representative of modern literature on the subject for the purpose of our discussion here.

Since the 1950s, modern Chinese medicinal education and institutional practice have emphasized "treating based on pattern differentiation (辨证论治)." The advantage of this is that one can almost always find some imbalance that can be given an appropriate pattern designation and can be treated based on the Qi dynamic or zang-fu functions one has learned. This holds true for both serious, even life-threatening disorders and minor discomforts. Occasionally, someone does come to the clinic asking for an evaluation of subtle imbalances that do not manifest in any discomfort or weakness, usually after hearing a lecture or reading an article about the wonders of pulse or tongue diagnosis. This happens in both China and the United States or Europe. In practice, patients almost always have a complaint when interviewed extensively enough, however, and this then becomes the basis for treatment strategies and self-care advice. For example, patients with signs of spleen qi deficiency and dampness, and a family history of diabetes mellitus, could reasonably conclude that treating this is preventing obesity, insulin resistance, and the potential to actually develop diabetes in the long run.

At the broadest level, all health cultivation practices (Yangsheng 养生) are aimed at improving health, well-being, and longevity. These can be classified into "universal" advice that all people are said to benefit from, such as drinking ginger water in the winter, making the cooling tea (Liang Cha 凉茶) so popular in the south in the summer months, or following any of the practices of the 24 solar nodes (Ershisi jieqi 二十四节气). Or, they can be based on correcting the imbalance of a particular Zang-fu, such as Bo He, Gou Qi Zi, Ju Hua, Jue Ming Zi as teas for liver–kidney yin vacuity.

In the recent discourse on preventing and treating COVID-19 with Chinese herbal medicine, one commonly hears both professionals and lay people asserting that its efficacy is due to "boosting immunity" and "improving the environment of the body so that it can fight the disease [Note 6]." There is a reluctance to assert that Chinese herbal decoctions can "kill the virus." This is understandable as eliminating or deactivating tiny microorganisms has certainly not been a part of the theories or treatment strategies of Chinese medicine. However, when groups of patients who have been confirmed to have COVID-19 through nucleic acid tests have symptoms for shorter periods of time and test negative more quickly than cohort groups that did not take herbal decoctions, this line of inquiry is not easily dismissed. The same question arises when we look at instances when all the personnel at a particular hospital took a decoction designed for prevention for the entire period in which they had contact with infected patients, with the result that there were no infections amongst medical personnel, while seemingly comparable hospitals suffered multiple infections. The same is true of anecdotal descriptions of close contacts of confirmed cases who took decoctions preventatively and later tested negative for the virus. Obviously, these situations will never be part of a rigorous randomized controlled trial (RCT) for practical, ethical, and scientific reasons.

One can certainly still explain this phenomenon as "supporting the healthy (upright) qi (Fuzheng 扶正)", quoting the line from the Yellow Emperor's Classic Italic: "If pathogenic qi invades, then this is certainly because the qi is vacuous (邪之所凑其气必虚)" [Note 7]. However, this is a normative idea that does not, in fact, match the actual ingredients in the formulae used to prevent contraction in effected geographical areas and to prevent the progression from mild to severe disease in confirmed cases. These formulas included medicinals to clear heat and resolve toxins, clear the lung and transform phlegm, moisten the lung, supplement qi, dry dampness, percolate dampness, regulate qi, and disperse wind. These can hardly be subsumed under the principle of "supporting healthy qi."

This has a direct bearing upon how we conceptualize prevention. Within the tradition, it is clear that *Fuzheng* [using supplementing medicinals to boost some aspect of the healthy qi of the body] is either one component of a more comprehensive strategy to treat illness, or it may be the primary treatment principle employed when a patient is either constitutionally weak or recovering from disease. This is commonly seen in prescriptions for recovering COVID-19 patients who often have qi and yin vacuity. However, if we are not merely supporting the body and making it more resistant to contracting disease, then the prevention we are speaking of here entails aspects of "treating illness before it manifests" that do not neatly overlap with the concepts of prevention or host defense in biomedicine.

RECENT EPIDEMICS, PREVENTION, AND CHINESE MEDICINE

One of the best known Chinese Medicine doctors in Beijing, Lu Zhi-Zheng, who will be 100 years old at the end of the year, wrote a piece just a few days ago (May 13th, 2020), reflecting upon the outbreak of Japanese Encephalitis in Shijiazhuang (a city about an hour south of Beijing) in 1954 [Note 8]. He was one of the three members of a team designated by the Ministry of Health to investigate the efficacy of Chinese herbal medicine treatment during the outbreak in Shijiazhuang. It is striking to see the parallels with the recent epidemic of COVID-19. In both cases, Chinese medicine utilization was high (over 90%) but was rarely used exclusively. A small set of cases who were only treated with Chinese medicine became a key factor in the analysis of the fact finding mission in 1954. Then, as now, this evidence, combined with retrospective comparisons of cohort that used only biomedical treatments, was used to show the efficacy of Chinese medicine. At that time, there were no effective drugs or other treatments for Japanese encephalitis, and physician used a variety of means, Lu tells us of treatments such as ice pillows and cold-water enemas to bring down the high fevers in an attempt to prevent brain damage. Chinese medicine stood out as having a rational and systematic approach, despite being denied the designation "scientific."

Eric Karchmer gives us another example from the 2003 SARS outbreak that highlights the actual situation doctors faced as they treated patients in the middle of an epidemic when triage and prompt confirmation of a biomedical diagnosis was not always possible:

In a review of the 103 SARS patients admitted to the Guangdong Provincial Hospital of Chinese Medicine from January to April 2003, researchers found that seven had died, with a mortality rate of 6.79% that compares quite favorably to other epidemic areas where the rate was as high as 15%. Deng Tie-Tao insisted that these statistics, although notable, do not tell the whole story, because they omit all the patients with high fevers who were cured by timely herbal medicine treatments before the disease progressed to a stage where it could be positively identified. They also fail to recognize that there were no cases of SARS among hospital staff, who all took Chinese herbal medicine prophylactically, thus highlighting another presumed advantage of Chinese medicine – its preventive emphasis [Note 9].

Many of the same advantages, and the same difficulties, are evident when we attempt to evaluate Chinese medicine's role in the recent COVID-19 epidemic.

COVID-19 AS DAMP EPIDEMIC QI MANIFESTING AS PATTERNS (ZHENG)

The category of "epidemics" is often overlooked in modern Chinese medicine education precisely, because their treatment does not fit easily into the dogma that "treating according to patterns identified" is the primary mode of clinical reasoning in Chinese medicine. Although the treatment plans created by the National Health Commission and various provinces do indeed divide the stages of COVID-19 into patterns that will be familiar to the modern Chinese medicine practitioner, my analysis of the lectures and the essays written by senior CM physicians on the frontlines revolves around explaining treatments in terms of the nature of the "pestilent qi" or "warm epidemic qi" itself [Note 10]. The language of "epidemic disease" is used to legitimize treatment choices and to explain their efficacy. This thought process does not fit neatly into the pattern/disease or the qi dynamic/underlying disease dichotomies that we find in modern textbooks. Underlying treatment in all the different clinical settings was the knowledge that we were dealing with this particular virus and its typical clinical presentation. The "nature of the virus" was described in slightly different terms by physicians working in different climates and clinical settings; however, in all cases, the nature and typical progression of this specific epidemic disease were privileged over other diagnostic categories. Zhang Boli explains this below:

We understand this novel coronavirus as something that can be categorized as an "epidemic" or a "warm epidemic" disease, in terms of the categories of traditional Chinese medicine. Like other epidemic or pestilential diseases recorded throughout

history, this one is transmitted through the mouth and nose. Moreover, the symptoms tell us that it is a damp-heat toxin with stagnation and deficiency. We have concluded that it is a damp-toxin epidemic.

Why is this called damp-toxin epidemic disease? This illness presents with very typical and obvious signs of "damp pathogen." We see the dampness in the characteristics it displays of being hidden and hard to pinpoint, producing sticky secretions that stagnate together, and being a difficult condition that tends to linger. We see the toxin pathogen because it is characterized by rapid change and severe or life-threatening disease. At the same time, it exhibits unusual characteristics. Epidemic disease is defined by the fact that it is widely and easily transmitted and easily combines with foul turbidity. From these descriptions, we can see that it obviously fits into these categories. The damp and toxic characteristics of this disease are particularly pronounced and obvious.

In terms of the location of the disease, it is quite apparent that it is the hand and foot *tai-yin* channels that are involved. The Hand *tai-yin* channel is the lung, so that is clear, and the dampness aspect relates to the foot *tai-yin* spleen channel, so the location is clear [Note 11].

Liu Qingquan explains this further:

Epidemic diseases come about for different reasons than the common cold, or seasonal flu. We cannot understand it as a seasonal disease. Sometimes, changes in the weather are a trigger, but they are not the root; the root is the epidemic pestilence. For example, we most definitely should not take the climatic changes of cold and warmth, wind—cold, wind—warm, or wind—heat as the cause of this disease. Those are merely immediate triggers that induce the disease onset. Severe epidemic toxin pathogens entered people's bodies quickly, causing new diseases like this. This is what we should know about the cause of the disease [Note 12].

Drawing on both the long history of treating epidemics in China recorded in the classical medical literature, which includes over 300 instances from the Han dynasty to the 20th century, and their own experiences with infectious diseases in recent times, the doctors on the National Steering Committee sent to Wuhan express confident that Chinese medicine can be successfully applied to epidemic disease treatment. Whether it was "great pots of decoction" that were given to patients in community centers when triage was not possible, or the modified prescriptions given to mild and moderate cases in the temporary shelter hospitals, or the treatment of patients in the hospital wards and the ICU that required "changing the prescription three times a day" to respond to potentially life-threatening symptoms, all of these fit comfortably into the conceptions of clinical Chinese medicine of the three physicians we focused on. It is striking that often, the same person who is well-trained in reading laboratory reports and has participated extensively in modern research studies, considers the 60-year cycle and the attributes of each year to be significant knowledge that contributes to our understanding of the nature of this virus and how to treat it.

EVALUATING RESULTS FROM THE PERSPECTIVE OF CHINESE MEDICINE

The State Council Information Office held a conference on March 23, 2020. Secretary Yu Yan-hong reported at that conference that more than 4,900 Chinese medicine personnel from all over the country went to support Hubei. This accounted for 13% of the total number of medical personnel assisting Hubei. Among the more than 70,000 patients diagnosed nationwide, 91.5% of them used some form of Chinese medicine. In Hubei province, the proportion was 90.6% [Note 13]. Looking more closely at the situation in Wuhan, patients were triaged as indicated in Table 1.

Zhang Boli discussed the results at the Jiang Xia Temporary Shelter Hospital:

Jiang Xia Temporary Hospital opened officially on February 14, 2020, and closed on March 10, 2020, over the course of which we treated 564 people. 483 recovered and 68 were transferred to designated hospitals (at the final stage) for policy reasons. We kept in touch and followed up with all of these patients, and they all recovered quite quickly. The requirements for discharge were two negative nucleic acid tests and significant resolution of the lung infiltrates as seen on CT scans. The last 68 patients were transferred to hospitals precisely because we were able to free up beds and then treat and discharge patients. Hence, the authorities decided to close the hospital on March 20 and transfer these last patients out. Overall, we had 0 patients develop serious disease, 0 cases re-test positive (after recovery), and 0 cases of infections among medical personnel. These were excellent results [Note 14].

An observational cohort study was conducted on a subset of patients at the Jiang Xia Temporary Hospital. 280 patients were given a formula, *Xuan Fei Bai Du Tang*, which was created by the Steering Group members and this was compared with a group that received biomedical treatment only at another hospital. The formula, shown below, was modified from the classical formulae Ma Xing Shi Gan Tang, Ma Xing Yi Gan Tang, Qian Jing Wei Jing Tang, and Tingli Dazao Xie Fei Tang. The primary evaluative criterion was the number of cases who developed into serious disease. The results are shown in Figure 1.

Xuan Fei Bai Du Fang:

Sheng Ma Huang, Ku Xing Ren, Sheng Shi Gao, Sheng Yi Yi Ren, Cang Zhu, Huo Xing, Qing Hao Cao, Hu Zhang, Ma Bian Cao, Gan Lu Gen, Ting Li Zi, Ju Hong, Sheng Gan Cao

Main actions: Diffusing the lungs and transforming dampness; clearing heat and penetrating (pushing out) pathogens; and draining the lungs and resolving toxins. This is suitable for moderate cases of COVID-19 with damp—toxin constraining the lungs pattern.

A different formula was used in the Wuchang district of Wuhan, and Tong Xiaolin describes the results both anecdotally and through an observational study. The formula "Wuhan Anti-Epidemic Formula 1" was given to 50,000 people.

Table 1 Patient Triage		
Category:	Site Triaged to:	
Confirmed Cases—mild	Temporary shelter hospitals	
Confirmed Cases—serious	Designated hospitals	
Fever (of undetermined origin)	Quarantine Sites	
close contacts (of confirmed cases)	Quarantine Sites	
Suspected cases	Quarantine Sites	
Cases under observation	Quarantine Sites	

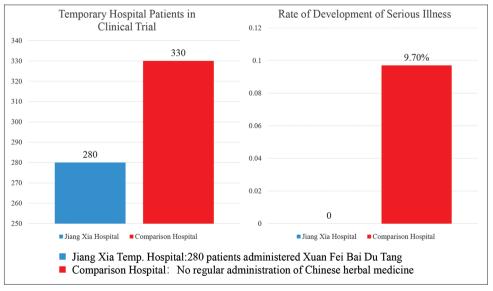


Figure 1: The results of observational cohort study

Local health official described how the number of confirmed cases declined "precipitously" after the first 14 days of the distribution campaign [Note 15]. Dr. Tong supervised an observational study that demonstrated the following:

The "Wuchang model" played a crucial role in community prevention and control. We collected data to better understand what was effective and what was not. An observational study of 721 cases [Note 16] showed significant differences in the rates of the development of serious disease. Of 430 patients with mild COVID-19 who took Cold-Damp Epidemic Formula, none of these patients developed serious disease. However, of the 291 cases in the control group, 6.8% did develop serious disease.

The kind of scientific research that may positively affect the development of the profession and its inclusion in global healthcare systems is just beginning to be published, and we look forward to watching this progression. However, it is equally essential that we look critically at the current models of research and their limitations. The strengths and weakness of Chinese medicine need to be evaluated on their own terms.

IMPLICATION FOR THE DEVELOPMENT OF THE FIELD OF CHINESE MEDICINE IN CHINA AND ABROAD

Seizing the moment, essays and proposals have emerged in recent weeks calling for educational reforms and the inclusion of CM in emergency rooms and intensive care units in more hospitals in China. Although Chinese medicine doctors in China regularly treat patients with cancer, stroke, and heart disease in hospital wards in integrated medicine hospitals, there are still barriers to include herbal medicine, acupuncture, and other methods into the care of acute and critical patients. However, doctors in the countryside and small towns certainly still treat conditions that doctors in urban areas are either unable (because they lack the skills) or unwilling to treat due to concerns about legal and financial issues. These are institutional-level problems.

In the recent COVID-19 epidemic, the contingencies of treating large numbers of patients meant that it was not possible to provide "one prescription for each patient." In fact, four categories of the patients were sometimes given the same formula: mild and moderate confirmed cases, close contacts of confirmed cases, and suspected cases. These large-scale community efforts make efficacy essentially impossible to ascertain if our only standard is the "RCT." However, from the broader perspective of public health and the real-life complexities of clinical strategy, the data from these highly-organized decoction distribution projects, which were often monitored through cellphone Apps, are extremely valuable. Perhaps, more convincing are the case-controlled observational studies that show, just as Deng Tie-Tao described, the very low rates of mild converting to serious cases, and the almost zero infection rates for medical workers in the Chinese medicine temporary shelter hospitals. Fortunately,

increased resources and research experience have meant that this epidemic has and will yield scientific medical reports that offer the type of data that have become the gold standard with the dominance of biomedicine and materialist science.

The experiences in China will certainly be a source of inspiration and reflection for Chinese medicine communities around the world that are still forging their identities and struggling to make a place for themselves within modern healthcare systems.

Herbal Formulas for Reference

The herbal teas below were compiled by the Beijing Administration of Traditional Chinese Medicine (北京市中 医管理局) for home use as a preventative during the outbreak of COVID-19. They are called "herbs that replace tea (代茶 饮)," or simply "herbal teas" in English.

For healthy adults:

- Mai Dong (麦冬 Radix Ophiopogonis) 3 g
- Sang Ye (桑叶 Folium Mori) 3 g
- Ju Hua (菊花 Flos Chrysanthemi) 3 g
- Chen Pi (陈皮 Pericarpium Citri Reticulatae) 2 g.

Steep the herbs above in a teapot of hot water for 10–15 minutes. You can leave them in the pot and keep adding water throughout the day. 2–3 cups per day is adequate.

This combination moistens the lungs to prevent dry cough, dry mouth, or irritability due to an external pathogen invasion. It moistens the intestines to prevent constipation, dispels wind and heat, and helps regulate the digestion. The herbs work synergistically to keep proper moisture in the respiratory tract (which we know is important for fighting pathogens) and help the qi of the lung flowing freely.

For children:

- Jin Yin Hua (金银花 Flos Lonicerae) 3 g
- Lu Gen (芦根 Rhizoma Phragmitis) 6 g
- Chen PI (陈皮 Pericarpium Citri Reticulatae) 2 g.

Steep the herbs above in a teapot of hot water for 10–15 minutes. You can leave them in the pot and keep adding water throughout the day. 1–2 cups per day is adequate, depending on the age of the child.

Take for 6 days at a time. This course can be repeated every 2–3 weeks.

This combination clears heat from both the upper and lower body and is indicated for mild signs of heat, such as mouth sores, irritability, constipation, gas and bloating, or mild skin rashes. It also dispels wind, which is part of a cold or flu pattern in Chinese medicine. The tangerine peel harmonizes the digestive functions and treats nausea, vomiting, or cough by helping the qi descend. The overall strategy is to keep the respiratory and digestion functions working optimally and to prevent any excess heat or dampness from developing.

Wuhan Formula No. 1 for Prevention:

Cang Zhu (苍术 Rhizoma Atractylodis) 3 g, Jin Yin Hua (金银花 Flos Lonicerae) 5 g, Chen Pi (陈皮 Pericarpium Citri Reticulatae) 3 g, Lu Gen (芦根 Rhizoma Phragmitis) 2 g, Sang Ye (桑叶 Folium Mori) 2 g, Sheng Huang Qi (黄芪 Radix Astragali Seu Hedvsari) 10 g

Steep and drink as a tea for 7–10 days.

Explanation:

Cang Zhu dries dampness and transforms turbidity; Jin Yin Hua treats wind—heat, cools the blood, and resolves toxins; Chen Pi regulate qi, transforms phlegm, and treats qi stagnation in the lung; Lu Gen clears heat, treats vexation and agitation, and stops vomiting; Sang Ye treats wind—heat, lung—heat, and liver—fire; Huang Qi supplements qi, stabilizes defensive qi, disinhibits water, and disperses swelling.

Wuhan Anti-Epidemic Formula (Cold-Dampness Formula 1):

Sovereign: Treat the Membrane Source – Jiao Bing Lang (槟榔 Semen Arecae), Wei Cao Guo (草果 Fructus Tsaoko), Hou Po (厚朴 Cortex Magnoliae Officinalis).

Minister: Treat Interior and Exterior – Diffuse lung and disperse cold – Ma Huang (麻黄 Herba Ephedrae), Shi Gao (石膏 Gypsum Fibrosum), Qiang Huo (羌活 Rhizoma et Radix Notopterygii), fresh ginger.

Minister: Build the Spleen and Expel Dampness

Build the spleen – Jiao Shan Zha (山楂 Fructus Crataegi), Jiao Mai Ya (麦芽 Fructus Hordei Germinatus), fresh ginger

Expel dampness – transform dampness: Huo Xiang (藿香 Herba PogoStemonis); dry dampness: Cang Zhu (苍术 Rhizoma Atractylodis), Hou Po (厚朴 Cortex Magnoliae Officinalis); percolate dampness: Sheng Bai Zhu (白术 Rhizoma Atractylodis Macrocephalae), Fu Ling (茯苓 Poria); disinhibit dampness: Ting Li Zi (葶苈子 Semen Lepidii)

Assistant: Treat Collateral (luo) Toxin – Guan Zhong (贯众 Rhizoma Blechni), Xuchangliu, Di Long (地龙 Lumbricus)

Envoy: Enter the Membrane Source – Ting Li Zi (葶苈子 Semen Lepidii) (directly reaches the membrane source and separates and disperses to lead out; drains the lung and calms wheezing; disinhibits water; and disperses swelling)

For Pronounced Fever, Add Modification 1: Ma Huang (麻黄 Herba Ephedrae) 6 g, Lu Gen (芦根Rhizoma Phragmitis) 60 g, Sheng Shi Gao (石膏 Gypsum Fibrosum) 15 g, Chai Hu (柴 胡 Radix Bupleuri) 15 g.

For Severe Cough and Asthma, Add Modification 2: Liao Qiao (连翘 Fructus Forsythiae) 15 g, Bai Bu (百部 Radix Stemonae) 15 g, Ting Li Zi (葶苈子 Semen Lepidii) 15 g, Xian He Cao (仙鹤草 Herba Agrimoniae) 15 g, Zhi (honey-fried) Zi Wan (紫菀 Radix Asteris) 15 g.

For Loss of Appetite, Nausea and Vomiting, or Diarrhea, Add Modification 3: Chao Lai Fu Zi (莱菔子 Semen Raphani) 15 g, Chen Pi (陈皮 Pericarpium Citri Reticulatae) 15 g, Jiang Ban Xia (半夏 Rhizoma Pinelliae) 15 g, Huang Lian (黄连 Rhizoma Coptidis) 6 g, Pao Jiang (炮姜 Rhizoma Zingiberis Preparata) 9 g.

For Shortness of Breath and Fatigue, Add Modification 4: Huang Qi (黄芪 Radix Astragali seu Hedysari) 30 g, Dang Shen (党参 Radix Codonopsis) 15 g, Dan Shen (丹参 Radix Salviae Miltiorrhizae) 15 g, Chao Bai Shu (白术 Rhizoma Atractylodis Macrocephalae) 15 g, Gan Jiang (干姜 Rhizoma Zingiberis) 9 g, Bei Sha Shen (土沙参 Radix Glehniae) 30 g.

Notes

- This poem was translated by Zhao Yanchun and Nina Katz
- 2. Shanghai Institute of Pharmacology and Wuhan Institute of Virology Discover the TCM Prepared-medicine Shuang Huanglian Koufu Ye Can Inhibit the Novel Coronavirus上海药物所、武汉病毒所联合发现中成药双黄连口服液可抑制新型冠状病毒 http://www.chinanews.com/gn/2020/01-31/9074658.shtml. Published Jan. 31, 2020. Accessed on May 15, 2020
- https://m.haiwainet.cn/middle/3544609/2020/0203/ content_31709168_1.html published Feb.2, 2020. Accessed on April 15, 2020
- 4. See, for example: Why Does the myth of Banlangen refuse to die? https://dxy.com/column/2366. Accessed on May 15, 2020
- See, for example: Samuelson DR, Welsh DA, Shellito JE. Regulation of lung immunity and host defense by the intestinal microbiota. Front Microbiol. 2015; 6:1085. Published 2015 Oct 7. doi:10.3389/fmicb.2015.01085
- For a similar but more nuanced explanation, see: "To help Chinese Medicine Boost Immunity, Remember These Four Points" [in Chinese]. Economic Times, May 11, 2020. Accessed on May 13, 2020.
- 7. From Chapter 33, Discussion on Hot Diseases, of the Plain Ouestions.
- 8. Lu, Zhizheng, "Reflections on the Epidemic of Japanese Encephalitis in Shijiazhuang and Establishing the Role of Chinese Medicine in Epidemics," accessed on the official WeChat account of the State Administration of Traditional Chinese Medicine, May 13, 2020.
- 9. Karchmer, Eric. Same as (2) above, pp. 210-211
- 10. Translations of lectures and essays from CM physicians on the frontlines in Wuhan and others are available in book form as a free download on the Passiflora Press website and Amazon. See Shelley Ochs and Thomas Avery Garran (translators and editors), Chinese Medicine and COVID-19: Results and Reflections from China. Passiflora Press, 2020.
- 11. Zhang Boli, see note 11 above.
- 12. Liu Qingquan, see note 11 above.
- 13. See note 10 above.
- 14. Zhang Boli. Note 10
- 15. Tong Xiaolin, note 10

16. The results of this research study have not yet been published. It was jointly conducted by Dr. Tong Xiaolin and his team from Guanganman Chinese Medicine Hospital (China Academy of Chinese Medical Science Affiliated Hospital), Wuchang District Government, Hubei Province Chinese Medicine Hospital, Dr. Liu Bao-yan's team from China Academy of Chinese Medical Science, and Dr. Liu Jan-ping's team from Beijing University of Chinese Medicine.

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Conflicts of interest

There are no conflicts of interest.

Nguyen Van Nghi (阮文义 1909–1999): Pioneer of Traditional Chinese Medicine in the West in the 20th Century

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Abstract

Traditional Chinese medicine in the 20th century, along with acupuncture, took off in France. Nguyen Van Nghi is one of the most important carriers of Chinese medical knowledge outside of China. He is a doctor by Western training, but can read oriental texts; he contributes to the spreading of this knowledge in France and in Europe. He left a rich legacy to French acupuncturists.

Keywords: Nguyen Van Nghi (NVN), traditional Chinese medicine, Western-Eastern, France, acupuncture, translation, inheritance

The practice of Chinese medicine in Europe spread very fast from the beginning of the 20th century to the present. This Chinese know-how attained a global level in a social and cultural context at that time. Among the healing techniques of Chinese medicine, acupuncture was best developed in France: George Soulié de Morant and Nguyen Van Nghi (NVN) were the main players in the evolution of this practice.^[1] The reasons which favored the arrival of acupuncture in France were, on the one hand, the particular interest of French doctors for needle techniques, and on the other hand, the value of the translation into French of the medical texts of these two actors, that is why we must know the importance of their Chinese medical itinerary. For George Soulié de Morant, I'll refer you to the remarkable article by Doctor JC Dubois in the "Chinese Medicine and Culture" magazine in Shanghai. [2] Here, I'll pay a modest tribute to my master, the late Dr. NVN.

BIOGRAPHY

NVN was born in Vietnam in Hanoi on January 11, 1909. This date is important for his destiny; Vietnam was then called French Indochina. French colonization began in 1858 during the reign of Emperor Gia Long. The Western influence was thus made quite naturally from his youth; his vocation of doctor

also came to him naturally by his generous nature, his desire to relieve and to cure. After classical studies in Vietnam with the Jesuits, he continued his training in Hong Kong between 1925 and 1929. In 1931, he arrived in France, enrolled at the University of Montpellier and Marseille, where he obtained his medical degree in 1938.

Conventional doctor

NVN first practiced conventional medicine. Between 1940 and 1958, he lived in Tourves, a small city in the Var (South of France); he worked as a real country doctor. During the Second World War, he treated the local population with the means available during wartime. He distinguished himself by assisting American airmen shot down by the German army on July 12, 1944, in Seillons. Honored as a hero and in recognition of his care, the inhabitants of Tourves paid tribute to him on July 12, 2019, by placing a commemorative plaque and flowers in front of his house [Figure 1].

Doctor acupuncturist

In 1959, NVN moved to Marseille. From that date, he practiced acupuncture exclusively.

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Even though he had been trained in Western medicine, he had always been interested in traditional Chinese medicine (TCM).

The fall of the Nguyen dynasty in 1945, the end of French colonization in 1954, and the advent of the Republic had an important impact on the dissemination of TCM in Viet Nam. Indeed, the official Chinese writing imposed by the Nguyen dynasty ends, and is replaced by *Quoc-ngu*. This writing with Latin alphabet created by Alexander of Rhodes in the 17th century became the official Vietnamese writing. The classical texts written in Chinese language were then translated into the Sino-Vietnamese language practiced by an elite, but anyway accessible to cultivated non-Sinologists. NVN who didn't know Chinese language found his place in the translation of these texts.

As an autodidact in acupuncture, NVN benefited greatly from his relationships with Vietnamese friends who stayed in Viet Nam, most notably a pharmacist named Nguyen Van Than, who was also an executive at the Ministry of Health in the 1950s. Knowing NVN's interest in TCM, Nguyen Van Than sent him works from Chinese Classical texts, now translated into Sino-Vietnamese, and this in agreement with Nguyen Van Huong, the Minister of Health at the time.

Thanks to this material sent from Viet Nam, NVN began to study and translate these texts into French. He founded his work on the original sources of Acupuncture in Chinese medical theory. As a medical practitioner of Western medicine, he knew how to give a scientific basis to the translation of his texts.

As publications in French multiplied, the circulation of an original, traditional knowledge was released freely, and NVN began to have an important impact in France. He became one of the important carriers of Chinese medicine outside of China. He was credited as the founder of a school of traditionalist French acupuncture; traditionalist because it is based on exact data from the Chinese tradition, which does not exclude its scientific aspect from a doctor trained in the West, like NVN bringing together the West and the East.



Figure 1: Flowers and commemorative plaque in front of the house of Nguyen van Nghi on July 12, 2019, in Tourves

While continuing his work as a translator, NVN multiplied his practice in TCM in France and abroad. He founded several associations and schools of acupuncture and Chinese medicine. In 1973, he founded his first acupuncture journal: "The Monthly of the Acupuncturist" which, in 1982, became "The French Journal of Chinese Medicine." In 2000, this review joined the review "Meridians", founded in 1968 by Doctor Didier Fourmont who was the Director until 1997, then succeeded by Doctor Jean-Claude Dubois. From this fusion was born "Acupuncture and Moxibustion", under the direction of Dr. Jean-Marc Stéphan until today, He continues to carry the spirit of NVN, the conception of traditional and scientific medicine.

Like a true pioneer of the cause of TCM, NVN led the translation of classical Chinese texts and their publications, associations, reviews, and teachings, without forgetting his patients, whom he continued to take care for in his practice in Marseille until his death on December 17, 1999.

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As early as 1969, along with Dr. A. Chamfrault, he published *Human Energetic in Chinese Medicine* and the *Anatomical Atlas* by the Charente-Angoulême Printing Office. His collaboration with Dr. Chamfrault lasted only a few years, until his disappearance in 1969, the same year of these publications [Figure 2].

In 1971, his first work *Pathogeny and Pathology Energetic in Chinese Medicine* with the collaboration of Emmanuel Picou. Edition: Imprimerie École Technique Don Bosco-Marseille was published; this publication is followed just by *Energy Topology in Chinese Medicine* in the same publishing house. These two books begin to truly establish NVN in the world of acupuncture [Figure 2].

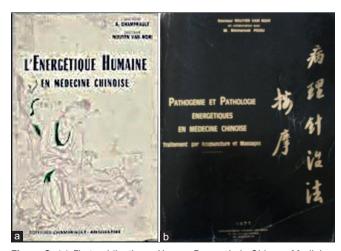


Figure 2: (a) First publications. *Human Energetic in Chinese Medicine*, Charente-Angoulême Printing Office 1969. (b) *Pathogeny and Pathology Energetic in Chinese Medicine*, Edition Imprimerie Ecole Technique Don Bosco-Marseille. 1971

In 1973, he published the first volume of *Huangdi Neijing* Su Wen (《黄帝内经素问》Plain Questions of the Internal Classic of the Yellow Emperor). To compose this classical work of Chinese medical literature, the foundation of TCM, in particular of acupuncture, NVN used the Sino-Vietnamese translation of Dr. Nguyễn Tử Siêu published in 1954. He wrote in his introduction: We worked on Wang Bing(王冰)'s version through a translation into classical Vietnamese (Sino-Vietnamese): Hoang-đế Nội-kinh Tố-vấn, by Nguyễn Tử Siêu. Hông Khanh Hanoi Edition 1954.[3]This publication was most likely sent to him by his friend, the pharmacist Nguyen van Than. The author very closely follows the Chinese text as well as the comments of Ma Yuantai alias Ma Shi (马莳) and Zhang Yin'an (张隐庵). The book was prefaced by Ma Yuantai himself. NVN has enriched these comments with his own reflections, from his experience by using medical language more understandable by his Western peers.

The translation of *Plain Questions of the Internal Classic of the Yellow Emperor* took 18 years; it is made up of four volumes. The first appeared on October 15, 1973, in Marseille SOCEDIM Edition. In 1974, NVN created his own publishing house and from then on, his works were published by Edition NVN. The second volume, written with Dr. Mai Van Dong, in collaboration with his son Dr. Nguyen Viet Bao, appeared in 1975, and was edited in Marseille by his own publishing house. The third volume did not appear until 1988 in collaboration with his son Nguyen Patrick and the last volume in 1991 in collaboration with his daughter Dr. Christine Recours-Nguyen [Figure 3].

In 1974, another work of great importance was published: *Theory and Practice of Analgesia by Acupuncture*, by NVN, Mai van Dong, and Lanza Ulderico. It is a basic treatise by the team having carried out the first anesthesia by acupuncture in the West. It contains basic notions of TCM and a particular study on the analgesic points of the meridians, the mechanisms of action of acupuncture, the technical protocol of analgesia by acupuncture, and finally the indications for different surgical pathologies.

This publication is designed largely from the personal experience of NVN. Since 1971, NVN has been involved in



Figure 3: (a) *Huangti Neijing So Ouenn*. Edition NVN, 1973–1991. (b) Dr. Nguyễn Tử Siêu Hà Nội (1887–1965). (c) Hoàng-đế Nội-kinh Tố- Editions Hông-Khê, 1954

the acupunctural analgesia adventure. In 2002, the journal "Acupuncture and Moxibustion" paid tribute to him for marking his action in this new application of acupuncture in the West. Dr. Johan Nguyen (his son) wrote an article titled *The First Anesthesia by Acupuncture 30 Years Ago*,^[4] he recounted this epic: On October 23, 1971 at the St-Joseph clinic in Marseille, Nguyen Van Nghi performed the first acupuncture anesthesia in the Western world on a wrist cyst operated by Jacques Rami [Figure 4].

This publication was successful with the Western public where its impact resonated throughout the West on TCM and benefited from Richard Nixon's trip to China in February 1972 where the President of the United States directly attended an operation with analgesia by acupuncture [Figure 5]. This begins the era of the worldwide spread of acupuncture and TCM and is the starting point for an exponential growth in clinical and experimental work in scientific and medical journals.

In 1975, he wrote the translation of *Huang Di Ba Shi Yi Nan Jing* (《黄帝八十一难经》 *Classic of Difficult Issues*). For the entire year, he published nine articles in the review "The Monthly of the acupuncturist doctor," nevertheless, the book was published under the title: *Nan King: Difficult Problems of the Acupuncture by Pienn Tsiou* with the collaboration of doctors Nguyen-Recours and Tran-Viet-Dzung, published by the Center for Teaching and Dissemination of Traditional Acupuncture.

In 1981, along with Dr. Mai Van Dong and Dr. Nguyen Christine, he published a foundational book entitled *Semiology and Therapy in Oriental Energetic Medicine* and in the same year with the same collaborators *Pharmacology in oriental energetic medicine*; it is a phytotherapy treatise comprising the generalities of the pharmacopoeia, the analytical study of plants, and their therapeutic use. In 1984, in collaboration with Dr. Nguyen Christine, another fundamental work *Traditional Chinese Medicine* was published. All the three books were published by the NVN publishing house [Figure 6].



Figure 4: (a) *Theory and Practice of Analgesia by Acupuncture*, NVN Edition. (b) Nguyên Van Nghi in the operating room, 1971



Figure 5: Analgesia by acupuncture

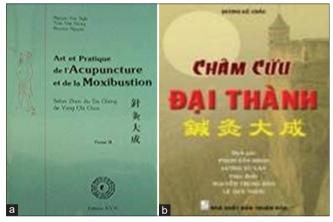


Figure 7: (a) *Art and practice of Acupuncture and Moxibustion*, Edition NVN 1982–1989. (b) *Châm Cứu* Đạ*i Thánh*, traductors Phạm Tấn Khoa and Lương Tú Vân, reprint Ed. Thanh Hoa, 2002

In 1982, he published the first volume of an important work: his translation of *Zhen Jiu Da Cheng* (《针灸大成》*Complete Compendium of Acupuncture and Moxibustion*) by Yang Jizhou (杨继洲 1522–1620), published in China in 1601. Yang Jizhou merges together all the achievements in acupuncture from the time of Huang Di until the 17th century. It is a veritable encyclopedia made up of essential extracts from the *Nei Jing* (《内经》*Internal Classic*), *Nan Jing* (《难经》*Difficulties of Acupuncture*), and collections of old songs whose historical, acupunctural, and literary importance remains extraordinary. He also inserts the rules of hygiene in the art of nourishing life, that is, *Dao Yin Ben Jing* (《导引本经》). NVN titled the

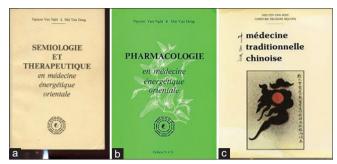


Figure 6: (a) Semiology and Therapy in Oriental Energetic Medicine. (b) Pharmacology in oriental energetic medicine, Traditional Chinese Medicine, Edition NVN, 1981. (c) Traditional Chinese Medicine, Edition NVN. 1984

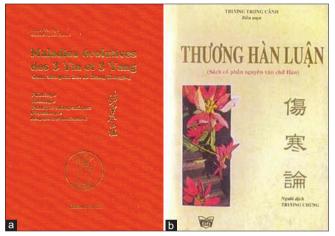


Figure 8: (a) *Mai Jing Classic Pulse of Wang Shu He* (AD 210–285), Edition NVN, 1983. (b) Thương Hàn Luận, traductor Trương Chung Ed. Đông Nai

book: Art and Practice of Acupuncture and Moxibustion. The work was translated with the collaboration of doctors Christine Recours-Nguyen and Trân-Vint-Dzung. The translation was done thanks to an edition in Sino-Vietnamese language from 1963 by the publishing house Peopley the publi Huê City, authored by Phạm Tấn Khoa and Lương Tu Vân, both doctors of TCM. There were several reprints of the book. I present here Edition Thuân-Hoa, Hue city, 2002.

Volume I was published in 1982, volume II in 1985, and volume III in 1989. All the three were published by the NVN Edition [Figure 7].

The translation of the Shang Han Lun (《伤寒论》 Treatise on Cold Damage Diseases) appeared in 1987; it is one of the main, classic books in Chinese medicine written by Zhang Zhongjing (张仲景) (II–III century) called by the West as the Chinese Hippocrates. It is a treatise on cold diseases, the oldest Chinese treatise on the therapy of febrile illnesses, written in collaboration with Dr. Christine Recours-Nguyen. NVN calls it, Progressive diseases of the 3 Yin and 3 Yang according to Zhang Zhong Jing, NVN editions [Figure 8].

In 1993, NVN translated a book on pulsology in collaboration with Drs. Christine Recours-Nguyen and Bui-van-Tho. The book's title was *Mai Jing* (《脉经》*Classic Pulse*) of Wang Shuhe (王叔和AD 210–285) [Figure 9].

From 1994 to 1999, after having translated *Plain Questions of the Internal Classic of the Yellow Emperor*, NVN returned on the translation of *the Internal Classic of the Yellow Emperor*, in effect, by performing its second part the *Ling Shu* (《灵枢》 *Miraculous Pivot*), although this part is written before the *Plain Questions of the Internal Classic of the Yellow Emperor*. [5] The *Huang Di Nei Jing Ling Shu* (《黄帝内经灵枢》 *Miraculous Pivot of the Internal Classic of the Yellow Emperor*) consists of three volumes. The first volume was published in 1994 in collaboration with Drs. Christine Recours-Nguyen and Tran-Viet-Dzung, the 2nd volume in 1995, and the 3rd volume in 1999; all the three were published by the NVN Edition with the same collaborators [Figure 10].

The Sino-Vietnamese texts translated from Chinese come from Hanoi and were shipped to France thanks to Dr. Trân-Quang-Hy, a member of the research institute of oriental medicine.

Here, I'm only citing his most important works, even though his bibliography is impressive given the wealth and depth of his knowledge. It was further enriched in 1970 by numerous articles published in the *New International Journal of Acupuncture*, then quickly in several other French and foreign journals. Between 1970 and the end of the 20th century, his publications marked the landscape of acupuncture in France and in Europe.

THE LEGACY OF NGUYEN VAN NGHI

In my previous article on the heritage of TCM in Viet Nam, I asked the question on this subject: "What is the part of the Chinese heritage in this tradition, what is its own specificity?" There were two giants in Vietnam working about the specificity of traditional Vietnamese medicine: Tue



Figure 9: Mai Jing Classic Pulse of Wang Shu He (AD 210–285 AD), Edition NVN. 1983

Tinh and Lan Ong, whereas, in France, there were also two giants working about the French specificity of TCM: George Soulie de Morant and NVN. If all the four authors sought to adapt this know-how to their world, they all preached their attachment to the Chinese medical tradition by "truthful" translations and by their respect for the original Chinese sources. Tue Tinh would say: To use the remedies of the South to cure the peoples of the South, but he clarified: the disciples of the old masters must venerate their doctrine. The innovations brought by the translations of NVN do not break from the teaching of TCM; these texts translated from Vietnamese describe the Chinese theory as it had been established and formulated in the 1950s, which was taught in Chinese and Vietnamese universities.

George Soulie de Morant spent his life translating the tiny Chinese ideograms with a magnifying glass to share this knowledge, while NVN not only spent his life translating as well, but teaching and tirelessly traveling the world to disseminate this knowledge. As French acupuncturists, we are their heirs and we greatly owe them recognition.

A special issue of the magazine "Méridiens" [Note 18]^[6] paid tribute to NVN. He was unable to attend the World Federation of Acupuncture Society congress which took place in Hanoi in November 1999. He wrote a letter on October 1999, it would be read during the congress. The editorial staff of "Méridiens" then published this letter in a special issue. This letter, written only 2 months before his death, takes on the appearance of a will. I would like to record here some of these lines, which shed light on his work and which leave French acupuncturists with an invaluable heritage.

Concerning the harmony of the two Western and Eastern medicines:

For us, it is essential to tackle two tasks:

• The first is to fully master all of the knowledge of Traditional Chinese Medicine, still, unfortunately, not well-known, by the complete analysis of reference works such as Suwen (《素问》) and Lingshu (《灵枢》);



Figure 10: Huangdi Neijing Ling Shu, Edition NVN, 1994–1999

 The second is to persuade the medical profession that there is no incompatibility but complementarity between Western medicine and Traditional Chinese Medicine.

To support his thesis, he gave us examples of the harmonization of these two medicines. Here is one:

We know that Traditional Chinese Medicine is based on Energy and Western Medicine is based on Matter. At the beginning of the 20th century it was accepted in modern science that Energy creates Matter. Now, in the Lingshu, we read Qi forms Xing. These are two absolutely identical sentences 2,000 years apart!

Matter and Energy, or in other words, Qi-Xing are therefore two fundamental entities, inseparable, found by a totally different way in the West and in the East. Proof that these two medicines can meet.

We are far from R. Kipling's affirmation when he exclaimed: *Oh, East is East, and West is West, and the two will never meet*! NVN alone brought together the frontiers of these two medicines!

He ended his letter with a prophetic note:

We have the intuition that the beginning of this millennium will see the cohesion of these two medicines. This cohesion will lead to the birth of a universal or unitary medicine for the good of all.

For French acupuncture, this 20th century has kept its promise for its unprecedented momentum. The French University has opened its doors to TCM: the teaching of the TCM is done in Paris and in other big cities such as Bordeaux, Montpellier, Strasbourg, Nantes..., In Paris, most prestigious hospitals have an acupuncture consultation, we can cite European Hospital George Pompidou, Cochin Hospital, La Pitie-Salpetriere hospital etc.

NVN's work and heritage greatly influenced the fate of the practice of acupuncture in France. I have paid tribute to him for his impressive work in translating canonical Chinese texts from Vietnamese to French. He had cleared a forest to make it a flower garden for future generations of acupuncturists [Figure 11].

Financial support and sponsorship Nil.



Figure 11: Nguyen Van Nhi (1909–1999)

Conflicts of interest

There are no conflict of interest.

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He (和), A Peace-oriented Philosophy

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Abstract

An account of historical background, definition, and application of he (和) in traditional Chinese medicine is given in this article. It is mutual respect and tolerance that lay a solid foundation for he (和), which has deeply shaped the Chinese culture.

Keywords: Chinese culture, *Huang Di Nei Jing* (《黄帝内经》 *Inner Cannon of Huang Di*), peace-oriented, philosophy, traditional Chinese medicine

HISTORICAL BACKGROUND

Historically, the national character of the Chinese has long been established on a basis of moderation, that is, anything but radical, which, in the past millennia, had a profound and consistent effect on people from all walks of life in this old oriental country. For this reason, 和 (he), as the best embodiment of moderation, has always been the pursuit of average Chinese in their daily life and work, including traditional Chinese medicine (TCM) practice.

While the denotation of the Chinese character he (和) [Figure 1] is very close to peace or harmony in English, its broad connotation is certainly to amaze those who attempt to study traditional Chinese culture. According to Shuo Wen Jie Zi (《说文解字》), a classic Chinese dictionary compiled by Xu Shen (AD 58-AD 147) in the Eastern Han Dynasty (AD 25-AD 220), he (和) means the growing season of grains, which starts in February and ends in August of the lunar calendar, a period coinciding with the middle of a year. (禾,嘉谷也,二月始生,八月而熟, 得时之中,故谓之和。) Shaped by her long history of agricultural production, the Chinese civilization is undoubtedly a civilization of the Agrarian Age, in which Chinese ancestors paid extraordinary attention to the relationship between human and nature. Such relationship can be well interpreted by a Chinese philosophical term Tian Ren He Yi (天人合一), which claims that man is an integral part of nature; in other words, human activities should be subjected to natural laws.[1]

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Through long-term observation in their agriculture production, ancient Chinese inhabitants gradually acquired an adequate knowledge concerning those natural laws by trial and error, based on which they designed a significant lunar calendar to guide their agricultural activities. More importantly, classic Chinese outlooks on life, world, and nature were also built over the same period, with he (和) as the general guidance. A harmonious relationship between human and nature was so important in Chinese culture that some even say that Chinese have had an innate thought of conservation, who firmly believed that immoderate exploitation of natural resources, though can satisfy human being's current needs, could eventually ruin the future of this planet, if such overexploitation could not be halted. Consequently, as a nation heavily dependent on agricultural production, Chinese ancestors held that Tian Dao (天道 the Dao of Heaven or a synonymous expression of natural law in English) should be held in the highest esteem in their life, and any violation of Tian Dao should be condemned and prohibited in their culture.

Logically, a pursuit of peace or harmony between human and nature was formed and became deep-rooted in the minds of ancient Chinese, who gradually fostered a strong conviction that Tian Dao was insurmountable by human forces, because Tian (天a concept that has no appropriate counterpart in

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(汉书·高帝纪上》: 汉王便郦良兵况介王田 广,罢守兵与汉~。" ②古代哲学术语。与 "同"相对。有相反相成之意,即在矛盾对立 诸因素的作用下实现真正的和谐和统一。 《论语·子路》: "君子~而不同,小人同而不 ~。"《左传·昭公二十年》: "晏子对曰: '据亦 同也,焉得为~?'公曰: '~与同异乎?'对曰: '异。~如羹焉,水火醯醢盐梅以烹鱼 肉……君臣亦然,君所谓可而有否焉,臣献其 可,以成其可;君所谓否而有可焉,臣献其 可,以去其否。"此以水火相反而成和羹,比 喻可否相反相成以为和。 ⑧交易。《管子·

Figure 1: Definition of hé (和) in Chinese dictionary

the English language, yet the literal meaning is rather close to sky or heaven) was so powerful and unpredictable that people had no other option but to obey the rules made by the supreme being.

In their efforts to meet the requirements of Tian Dao, ancient Chinese came to realize that he (和) was the optimal strategy to reduce the conflicts between mankind and nature. With the concept of he (和) in their minds, people would never simply go in for material comforts; instead, they thought more about an establishment of amicable relationship with others than the possible interests they could gain to quench their thirst for money. However, what on earth is he (和) in the Chinese culture?

THE INTERPRETATIONS OF HE (和)

Karl Marx once described human essence as "the sum total of social relations," [2] that is to say, societies, eastern, or western, can only operate smoothly on the condition that they have an effective mechanism of relations handling, for we human being live in a web of interconnected relationships, involving family members, schoolmates, workmates, companies, regions, countries, even nature, and the universe. The philosophy of Chinese relationship handling differs substantially from that of westerners in many ways. Perhaps, the most significant difference lies in the fact that the concept of he (和) has come to pervade almost every aspect of the mechanism and serves as the highest guiding principle. Under the principle, even hostile parties with seemingly insolvable conflicts could eventually find something in common and therefore mitigate the potential risk of clash.

The concept of he (和) does not mean that one should act as a yes man all the time or concede without your own principle; instead, what the concept requires is courage, tolerance, and wisdom with great foresight. Today, under the backdrop of rapid globalization, a peaceful world is calling for cultural diversity, which should be established on cultural tolerance.

In some way, the history of Chinese culture is not only a history of self-enrichment but also of cultural tolerance, that is, Chinese ancestors built their glorious and unique civilization by absorbing nutrients from other great cultures.

Buddhism, for instance, was introduced into China during the reign of Han Ming Di (AD 28– AD 75) and spread rapidly among many Chinese of different social classes. Buddhism, though borrowed from ancient India, could coexist peacefully with Confucianism and Taoism, two native beliefs in China, for more than 2000 years and constituted the well-known Chinese trinity of belief framework: Ru(儒 Confucianism), Shi(释Buddhism), and Dao(道 Taoism), which laid a solid foundation for the long-term stability and prosperity of ancient China.

Essentially, the Chinese culture is peace oriented because of the strong influence of he (和), and an effective implementation of he (和) usually means a higher tolerance for disparities because Chinese cherish a deep conviction that a productive and sustainable world depends heavily on the peaceful coexistence of culture diversities(和实生物,同则不继《国语·郑语》), as stressed by Bo Yangfu, a philosopher of Western Zhou Dynasty (1046 B.C.—771 B.C.) who first proposed the concepts of Yin and Yang in China's early history.

All in all, the essential meaning of he (π) is tightly around the peaceful coexistence of heterogeneity. A peaceful coexistence, however, does not mean that heterogenous cultures are at a standstill when they meet; instead, under the guidance of he (π) , there is a brisk exchange of ideas between different cultures. In fact, what he (π) reveals is a state of dynamic balance.

Application of he (和) in Traditional Chinese Medicine

He (和) is also the most important object pursued by TCM practitioners in their therapies or diagnoses, which are based on a delicate balance, an ideal state called as he (和), between Yin and Yang internally or externally. The leading cause of illness, according to the fundamental theories of TCM, is usually triggered by certain potential disruption of such balance. The formation and transformation of all things on the earth, as stressed by *The Inner Cannon of Huang Di*, are inseparable from the interaction between Yin and Yang (阴阳者,天地之道也,万物之纲纪,变化之父母。《黄帝内经·阴阳应象大论》). That is why a TCM doctor should ascertain the cause of an illness by analyzing the mutual effects of Yin and Yang, a commonly accepted foundation for an effective cure (治病必求于本。《黄帝内经·阴阳应象大论》) [Figure 2].

As an agricultural nation, Chinese ancestors tended to be more pragmatic^[3] and therefore developed a philosophy of Yin Yang Wu Xing, which was characterized by the ideas of early dialectical materialism of human being. According to this philosophy, everything on the earth can be classified into five categories: Jin (金metal), Mu (木wood),

黄帝曰: 阴阳者, 天地之道也, 万物之纲纪, 变化之父母, 生杀之本始, 神明之府也, 治病必求于本。故积阳为天, 积阴为地。阴静阳躁, 阳生阴长, 阳杀阴藏。阳化气, 阴成形。寒极生热, 热极生寒。寒气生浊, 热气生清。清气在下, 则生飧泄, 浊气在上, 则生脏胀。此阴阳反作, 病之逆从也。 故清阳为天, 浊阴为地; 地气上为云, 天气下为雨; 雨出地气, 云出天气。故清阳出上窍, 浊阴出下窍, 清阳发腠理, 浊阴走五脏, 清阳实四肢, 浊阴归六腑。

Figure 2: Quotations from The Inner Cannon of Huang Di



Figure 3: A tree that grows freely without control



Figure 4: A traditional Chinese medicine pharmacy

Shui (水water), Huo (火fire), and Tu (土earth), and when something is put into one category, it will be naturally endowed with the properties of the category. Mu (木 wood), for instance, is believed to have a need of free

stretch without any inhibitions (喜调达) [Figure 3], and the liver of human body, according to TCM theories, also has a need of free stretch without any inhibitions just because of this assumption. The main function of the liver is to store blood and keep a physiological balance by means of catharsis (肝藏血, 肝主疏泄。). It is for this reason that a TCM doctor's prescriptions for patients with liver disease are normally focused on the so-called liver soothing (疏肝), that is, to remove the existing restraints on a liver that has a strong need of free stretch without any inhibitions. In fact, almost all TCM prescriptions are encouraged to achieve the common goal: "Yi Ping Wei Qi"[4] (以平为期 to view peace as the ultimate goal) in TCM treatment [Figure 4].

However, the five categories, or Wu Xing in Chinese, are not isolated; instead, they belong to either Yin or Yang and have to work peacefully with each other; otherwise, some kind of health problem may arise. Furthermore, fitness relies on a peaceful state not only inside the human body but also outside. That is why TCM firmly believes that an effective treatment cannot be conducted in a rigid manner. A specific prescription should vary from individual to individual because factors attributing to an illness involve changes in climate, season, local conditions, and even a specific period of time in a day. The chief purpose of TCM treatment is to restore a state of he (和), whether inside or outside a patient.

THE SPIRIT OF HE (和)

In Chinese culture, the spirit of he (和) is undoubtedly peace oriented, whether in dealing with interpersonal relationships or international ones. It is mutual respect and tolerance that lay a solid foundation for he (和), a peace-oriented philosophy. When they described what the world should look like, Chinese ancestors said "He Er Bu Tong"(和而不同 seeking peace but keeping differences). This remark serves as an exact expression of Chinese realistic attitudes toward cultural diversity.

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Taking Mafei Powder (麻沸散) as an Example to Explore the Evidence of the Existence of Ancient Anesthesia

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Abstract

Anesthesia has a long history in China. Ancient doctors have already created a variety of anesthetic formulae for surgery and the most famous one is Mafei powder (麻沸散). However, there are a few literatures about Mafei powder and Mafei powder was not recorded at that time. This article tries to discuss the existence of Mafei powder by summarizing relevant records in ancient books such as *San Guo Zhi* (《三国志》 *Records of The Three Kingdoms*) and *Hou Han Shu* (《后汉书》 *History of the Latter-Han Dynasty*) and analyzing the anatomical, surgical, and pharmaceutical conditions at Hua Tuo's (华佗) time.

Keywords: Historical evidence, Hua Tuo, literary evidence, Mafei powder (麻沸散)

Anesthesiology has a long history in China. As early as in the Warring States period, *Lie Zi Tang Wen* (《列子·汤问》) records that Bian Que (扁鹊) used anesthesia for surgery: "Bian Que asked two patients to drink poison wine and the patients fainted for three days. After that, Bian Que dissected the patient's chest and exchanged their hearts."[1] (扁鹊遂饮二人毒酒,迷死三日,剖胸探心,易而置之。) In the above record, Bian Que used "poison wine" as anesthetic to the patient for surgery.

Our ancestors have already discovered that some traditional Chinese medicines had the effects of anesthesia and analgesia. They used these medicines into anesthetic prescriptions and the most famous is Mafei powder. It is said that Hua Tuo's son, Fei Er (沸儿), died of eating Man Tuo Luo Hua (曼陀罗花Mandala flower) by mistake. In order to commemorate his son, Hua Tuo named the anesthetic formula "Mafei Powder."

Although the name of Mafei powder is well known, the literature about Mafei powder is fragmentary and has not been systematically summarized. This article tries to discuss the existence of Mafei powder by summarizing relevant records in ancient books such as San Guo Zhi(《三国志》 Records of The Three Kingdoms) and Hou Han Shu(《后汉书》History of the Latter-Han Dynasty) and analyzing the anatomical, surgical, and pharmaceutical conditions at Hua Tuo's time.

DOCUMENTARY RECORDS

Researching relevant ancient books, the records of Mafei powder are mainly found in San Guo Zhi and Hou Han Shu. Mafei powder is first recorded in San Guo Zhi Hua Tuo Zhuan (《三国志·华佗传》Records of The Three Kingdoms [Figure 1]. The biography of Hua Tuo), by Chen Shou (陈寿), a historian of Western Jin dynasty (西晋). This book records: "If lesions were inside the body and could not be treated with acupuncture and medicine, Hua Tuo would let patients take Mafei Powder. A moment later, the patients looked like drunk and unconscious. Then Hua Tuo performed an operation and removed lesions" [2] (若病结积在内,针药所不能及,当须刳割者,便饮其麻沸散,须臾便如醉死无所知,因破取。).

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In this record, Hua Tuo treated diseases by surgery in which acupuncture and medicine could not work.

Hou Han Shu Fang Shu Lie Zhuan (《后汉书·方术列传》 History of the Latter-Han Dynasty technology), written by Fan Ye (范晔), a historian of Liu Song period in the Nan dynasty (南朝刘宋时期), also contains relevant records of Mafei powder. This book records: "If lesions were inside the body and could not be treated with acupuncture and medicine, Hua Tuo would let patient take Mafei Powder and alcohol. A moment later, the patient looked like drunk and unconscious. Then Hua Tuo performed an operation and removed lesions"[3] (若疾发结于内, 针药所不能及者, 乃令先以酒服麻沸 散, 既醉无所觉, 因刳破腹背, 抽割积聚。). Compared with the records in San Guo Zhi, this description of Hua Tuo's surgical treatment used alcohol as an auxiliary anesthetic. In Lie Zi Tang Wen, there has been a record of using alcohol to relieve pain and perform operations with alcohol anesthesia. Modern pharmacological studies have also shown that ethanol can directly activate the inward-rectifying potassium channel controlled by G protein gate, thus inhibiting nerve excitability and producing analgesic effect.^[4,5]

HISTORICAL BACKGROUND

During the period of Hua Tuo's time (the late Eastern Han dynasty, between AD 141 and 208),^[6] anatomy, surgery, and traditional Chinese medicine have developed to a certain extent. Hua Tuo's time had the conditions for the production of anesthetic prescription basically.^[7-9]

Anatomical conditions

Before the Eastern Han dynasty (东汉), Chinese anatomy had developed to a very high level. The shape of the character "xin" (心 heart) in Jia Gu Wen (甲骨文 the inscriptions on bones or tortoise shells) of the Shang dynasty (商朝) found in Yin Ruins (殷墟) is very similar to the shape of a physical heart. [10] In the Western Han dynasty (西汉), the book *Ling Shu Wei Chang* (《灵枢·肠胃》 *Miraculous Pivot·Intestines and Stomach*) details the size and shape of each organ of the



Figure 1: Hua Tuo (华佗)

digestive tract: "The length from lip to teeth is about nine centimeters (九分) and the width is about eight centimeters (两寸半); The depth from teeth to epiglottis is about eleven centimeters (三寸半) and the cubage is half a liter (五合)……"[11] (唇至齿,长九分,广二寸半;齿以后至会厌,深三寸半,大容五合……). The ratio of esophagus to intestine in this record (1:36) is almost identical to that in Spalteholz's *Anatomy of the Human Body* (1:37).^[12]

Later, Huangdi Neijing (《黄帝内经》The Inner Canon of Huang Di) and Nan Jing (《难经》 Canon On 81 Difficult Issues) supplemented the shape and weight of the five zang organs (五脏). Nan Jing Si Shi Er Nan (《难经·四十二 难》Canon On 81 Difficult Issues·40-s Difficulty) recorded: "The liver weights two jin and four liang (两斤四两). There are three liver lobes on the left, four on the right and seven in all..... The lung weights three catty and two tael (= f = =两). There are eight lung lobes in all; There are two kidneys and they weight one catty and one tael (一斤一两)"[13] (肝重 二斤四两,左三叶,右四叶,凡七叶。……肺重三斤三两, 凡八叶。肾有两枚, 重一斤一两。). The weight and shape of the five zang organs described here are roughly in accordance with the modern anatomy. In the following section, we take the heart as an example to compare the anatomical description of the heart in the ancient documents before the Eastern Han dynasty (东汉) with the anatomical description of the heart in modern medicine [Table 1].[14,15]

It can be seen that the ancient medical experts in the era of Hua Tuo had a profound understanding of human anatomy and established a relatively complete system of ancient anatomy in China, which created an essential condition for the development of surgery and anesthetic prescription.

Surgical conditions

Table 1: Anatomical description of the heart in modern medicine and before the Eastern Han dynasty

medicine and before the Eastern Han dynasty			
	Before the Eastern Han dynasty	Modern medicine	
The shape of the heart	THE PARTY OF THE P	100 100 100 100 100 100 100 100 100 100	
The weight of the heart	"The heart weights twelve tael" (about 196 g)	The weight of Chinese adult male heart is about 234-334 g and that of adult female heart is about 209-307 g	

Cover a bamboo tube with bladder and insert the bamboo tube into the rectum. Then Blow into the bladder to squeeze out Pin Zhi and cut off Pin Zhi"[17] (杀狗,取其脬,以穿龠,入直中,吹之,引出,徐以刀割去其巢。). This surgical treatment for Pin Zhi is similar to the modern Western medicine's cork-assisted hemorrhoidectomy. [18]

Huang Di Nei Jing, a book in the Western Han dynasty, records 17 surgical diseases. This book gives a detailed description of the treatment and prognosis of Tuo Ju (脱疽 gangrene): "The site of Tuo Ju is toe. If the color is swarthy, the patient will die. If the color is not swarthy, the patient can be cured"[11] (发于足趾,名脱痈,其状赤黑,死不治;不赤黑.不死。不衰,急斩之,不则死矣。). This is the earliest record of the use of surgical amputation to treat gangrene.

Shi Ji Bian Que Cang Gong Lie Zhuan (《史记·扁鹊仓公 列传》Records of History· Biography of Bian Oue and Cang Gong) documented: "I heard that in ancient times, there was a doctor called Yu Fu (俞跗) who could treat disease with operation instead of decoction and wine (汤液醴酒), stone needle and stretching (镵石挢引), massage and moxibustion (案扤毒熨)"(臣闻上古之时, 医有俞跗, 治病不以汤液醴 酒, 镵石挢引, 案扤毒熨。). In this record, the surgery performed by Yu Fu is also very standard in the eyes of modern medicine, including Ge Pi Jie Ji (割皮解肌 opening the skin and muscle), Jue Mai Jie Jin (決脉结筋 Vascular Ligation), and Die Huang Zhua Mu (揲荒爪幕 Peritoneum Separation).[19] Such a surgery cannot be performed without experience. In addition, Hua Tuo lived in the late years of the Eastern Han dynasty, with frequent wars and vwounds, which provided necessary conditions for the development of surgery.

Through the analysis of the related records of surgical operations in ancient books and the social conditions at the end of the Eastern Han dynasty, it can be inferred that surgery had developed before the Eastern Han dynasty. The development of surgery inevitably led to the emergence of anesthetic prescription.

Pharmaceutical conditions

Ancient doctors have found some traditional Chinese medicine, such as Wang Bu Liu Xing (王不留行 the Seed of Cowherb), Lang Dang Zi (莨菪子 Hyoscyamus niger L.), and Yang Zhi Zhu (羊踯躅 Rhododendron molle [Blume] G. Don), which have obvious analgesic effect of anesthesia. Sheng Nong Ben Cao Jing (《神农本草经》Sheng Nong's herbal classic) records various traditional Chinese medicines with anesthetic and analgesic effects. For example, Wang Bu Liu Xing can limit bleeding and relieve pain^[20] (主金疮止血, 逐痛出刺); Lang Dang Zi can relieve toothache and muscle pain^[20] (主齿痛出虫, 肉痹拘急); and Yang Zhi Zhu can relieve skin pain^[20] (主贼风在皮肤中淫淫痛). Jin Gui Yao Lue (《金匮要略》Synopsis of Golden Chamber), written by Zhang Zhongjing (张仲景) at Hua Tuo's time, records five prescriptions with Wu Tou (乌头Aconite) as the main ingredient for pain relief.^[21]

Modern pharmacological studies have also proved that the ingredients in these traditional Chinese medicines have anesthetic effects. For example, scopolamine and atropine contained in Lang Dang Zi are choline receptor blockers, which can inhibit the central nervous system and have good anesthetic effect. [22,23] Aconitine contained in Wu Tou has good analgesic effect. It can be used externally to paralyze peripheral nerve endings. [24,25] The discovery and use of these Chinese medicine laid a solid foundation for the production of anesthetic formulations.

CONCLUSION

By systematically combining the literature and analyzing the historical background of Hua Tuo's period, it can be found that Mafei powder had certain conditions for its emergence in the late Eastern Han dynasty (东汉末年). The anesthetic prescription represented by Mafei powder played an important role in ancient China. For example, Lin Daoren (蔺道人) in the Tang dynasty (唐代) used Zheng Gu Yao (整骨药) to anesthetize bone injuries in his book Xian Shou Li Shang Xu Duan Mi Fang (《仙授理伤续断秘方》); Bian Oue Xin Shu (《扁鹊心书》 Bian Que Heart Book), a book written by Dou Cai (塞材) in the Song dynasty (宋代), records the general anesthesia prescription Shui Sheng San (睡圣散);^[26] In Yuan dynasty (元代), Wei Yilin (危亦林) created Cao Wu powder (草乌散), an anesthetic formulation for fracture, recorded in Shi Yi De Xiao Fang (《世医得效方》Effective Formulae Handed Down for Generations).[27] In the continuous exploration of anesthetic formulations, ancient doctors gradually establish some standards for the use of anesthetics. For example, Dou Cai emphasized that the dose of taking Shui Sheng San should be distinguished between adult and child: "The adult takes three Qian (三钱 15 grams) at a time and the child takes one Qian (一钱 5 grams) at a time" (每服三钱, 小儿只一钱); Wei Yilin also emphasized that patients should take different doses of anesthetics according to specific conditions such as different ages and constitutions.

Anesthesia plays an important role in the field of traditional Chinese medicine, but it also has shortcomings such as incomplete anesthesia, incomplete mechanism of action, and cannot meet the surgical requirements at present. Therefore, modern anesthesia technology and ancient anesthesia technology should be integrated in order to reduce the amount of anesthetics and side effects.^[28] Mafeisan and a large number of ancient anesthetic prescriptions are the medical treasures of China. We must make textual research on these prescriptions and understand their historical backgrounds so as to have a correct understanding and research on these ancient prescriptions.

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Conflicts of interest

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Envision "Disability": "Abnormal People" and "The Wizards" in Early Ancient Times

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Abstract

As a natural phenomenon, people with disabilities were not stigmatized from the very beginning. In antiquity, some parts of their body being "different from those of normal persons," they were considered to have a special ability to communicate with heaven, earth, and the Gods. As a result, people with disabilities were able to hold the position of "wizard," which had a high status and important influence. However, with the division of labor in the human society, people with disabilities gradually lost the prerogative in labor production due to the limitation of their ability to work, which affected their social status and led to the social discrimination and "stigmatization" toward them gradually. Before this transformation happened, people's envision on people with disabilities, including a variety of images, was indicative of the social consciousness at that time.

Keywords: Disability, madness, medical history, wizards

Disability is a natural and universal phenomenon in the history of human beings, where people have a less choice but to accept especially in ancient times. The phenomenon of "stigmatization" on people with disabilities does not arise from their physical difference, but is the by-product of the division of labor in the society, as well as the enhancement of human labor capacity and the enrichment of labor form to a certain extent, which was followed by the change of people's cognition with regard to the mystery of body – what is the essence of human body? In the nascent view about early ancestors, some people's bodies had the ability to communicate with heaven and ghost. For example, the body state of insane people with disheveled hair was regarded as a strange phenomenon, "different from normal people", which has shown the special function that "heaven" or "god" endowed. Exactly, this state is similar to the ancient witches and wizards. There have been some researches that focus on the relationship between the "sorcerer", "witch", and people with disabilities. Some scholars have conducted some fundamental analysis on the identity and characteristics of ancient Chinese wizards, which is helpful for us to imagine about the historical world of "The wizard".[1] In addition, scholars have discussed the characteristics of the lunatic which were different from the normal people in the pre-Qin period (before 220 BC).[2]

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In the following section, I want to discuss the changing social status of disabled people in ancient times, and the emergence of the "stigmatized" for the disabled, on the basis of precedent researches, from the angle of two relations between "the mad" and "the wizard". And, I would also like to discuss the "imagination about the body" on "disability" within the initial belief of ancient people.

"DIFFERENT FROM NORMAL PEOPLE" AND "THE WIZARD"

Disability is a natural phenomenon in human development and evolution. Throughout human history, however, people with disabilities do not belong to the "vulnerable groups" and would be discriminated and stigmatized. [11] In the early history of China, people with disabilities often played a special role in social participation and enjoyed a relatively high position in the society because of their characteristics of being "different from normal people". For example, the crazy state of people

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with mental illness is regarded as special function by people. These people can engage in sorcery and become "sorcerers," so that they have a special social status and influence in the early society where people generally believe in ghosts and Gods.

Among the historical materials of the Shang dynasty (1600 BC–1046 BC), there are records of "crazy" people as "the wizard." Oracle bone has the word "Ruo"(若) in it, for example:

辛卯□□贞: 我祀宾、若?

Xin Mao □□ Zhen, I sacrifice Bin and Ruo.

辛卯卜 融贞: 祀宾、若?[3]

Xin Mao □□ Zhen, sacrifice Bin and Ruo.

The glyph of the "Ruo"(若), is like a person's body shaking drastically, arms waving in the air, and hair sticking up. Mr. Zhang Guangzhi (1931–2001) speculated that "si bin"(祀宾) and "Ruo" were two respective divinations, representing two rituals. If this judgment was correct, "then 'Bin' and 'Ruo' were particularly important in the witchcraft of the Shang dynasty". He further explained that the word "Ruo" in the oracle bones and bronze inscriptions is like a man kneeling or standing and raising his hands at the same time, with his hair divided into three locks. Luo Zhenyu (1866–1940) interpreted the meaning of the word "Ruo" which "is like a person raising his hand and kneeling, like a person obeying when answering other people's questions, so 'Ruo' should be interpreted as obedience". But, I want to ask a question: why compliant people's hair is shaking? It makes me confused. If we refer to the ceremonial figures in the patterns on the bronze vessels of the Eastern Zhou dynasty [Figure 1], the word "Ruo" is more like a person kneeling or standing with two hands shaking, and the headwear also swings violently, as if he was holding a ritual. That is what the sorcerer was doing. [4] Chen Mengjia, a famous modern historian, in his article "A Study on Wang Ruo Yue", said that "Wang Ruo Yue" in bronze inscriptions may also have something to do with it.^[5] In addition, the word "Ruo"若 [Figure 2][6] resembles the figure of a person who swings his arms and shakes his body violently.

Some scholars believe that the ancient Chinese wizard has been closely related to "The HU wizard" (胡巫 the wizard in the northern grassland minority areas). "Shaman" is just one kind of "Hu Wu". Shamans, who speak Gutong, are considered as a group of agitated and crazy people. "Shamando is composed of people who wish to be witches after physical disability, mental derangement, and illness, especially women. Nervousness, madness, and dedication are the attributes of such a man." "The 'difference' is just not the normal case", said Liu Xi (刘熙), a scholar at the end of the Eastern Han dynasty, in Shi Ming (《释名》 The Interpretation of the Name). Thus, it can be seen that in the Shang and Zhou dynasties, most wizards were the people with mental disabilities and other characteristics that were "different from normal people". Therefore, these mentally



Figure 1: Ceremonial figures in the patterns on the bronze vessel

disabled people naturally had special social status and social influence in the society.

Hence, how do the lunatics, in the beliefs of the people of the early countries, relate to the profession of the witch? In Li Ji (《礼记》 The Book of Rites), a pre-Qin dynasty Confucian classic, it was recorded that during the pre-Qin dynasty, "the wizard" burned himself as a sacrifice to pray for rain. In this story, facing the long drought, the wizards ("fool women" 愚妇人) would burn to sacrifice themselves to the death to pray for the rain. However, according to the research from Shizhao Yangping (柿沼阳平), the "fool woman" who was a sacrifice did not have the meaning of disability.[8] Then, why should we choose the "fool woman" who is not really with the characteristics of disability to be the "witch"? The reason should be that the state reflected in "the fool woman" 's body, in the early popular belief in the form of a sense, has some mysterious and unique function. This was the naive understanding of "body" and "madness" by early ancestors.

In the early ancient people's thoughts, there were many "imagination" about the "body", such as the exotic world in Shan Hai Jing (《山海经》The Book of Mountains and Seas), including the imagination of the exotic body. For example, when the Analects recorded Guan Zhong's merits, Confucius (迁子) said, "If there were no Guan Zhong (管仲), we would have been still disheveled and dressed in barbarian clothes". It means living like a wild man. This is the description of the appearance of somebody who is "different from normal people" to explain the evolution of civilization. In this, it also includes people's understanding of the relationship between body, social form, and its running state. "Madness" is one of the manifestations of this "physical imagination". It is just that



Figure 2: The word Ruo (若)

this "madness" may sometimes be an expression of a certain mental temperament, rather than an actual one.

For example, "fool" can be the evaluation of people's spiritual quality. Xun Zi (荀子), a book written during the pre-Qin period, mentions that "it is foolish to regard the right as wrong and the wrong as right." Later, in the Qing dynasty, Wang Xianqian (1843-1917) explained, "it is foolish to confuse the right with the wrong".[9] Another example is the form of "craziness," which can also indicate the expression of people's mental state in a nondisability context. As recorded in Lun Yu (《论语》 Analects of Confucius), Lu Jieyu, a recluse in the state of Chu during the Spring and Autumn periods, was called "crazy Jieyu",[10] which was an expression of the temperament and character of WeiZi who pretended to be crazy but did not become an official. There are many similar cases. For example, historian Sima Qian in the Han dynasty in his book, Shi Ji (《史记》 Historical Records), someone with disheveled hair pretended to be crazy, and then became a slave.[11] For another example, in the historical book of the Han dynasty, it was recorded that "Kuai Tong (蒯通) pretended to be crazy and worked as a wizard to avoid disaster".[12] "Craziness" is similar to "stupid woman" in its expression, which links people's mental qualities with their physical conditions. In this period of history, the expression of such words does not mean discrimination and is not a "stigmatization" for people with disabilities.

In the Confucian classics of the pre-Qin dynasty, it also explains the transformation of the mental state of this "crazy". In *the Analects*, Confucius mentioned about "the ancient people have three diseases", that is, the three virtues possessed by the ancient people, which had gradually disappeared in later generations. Modern scholar Yang Bojun translated it as: "the crazy people in ancient times speak out freely, and now the crazy people are free and loose. The ancient virtue reserved by people also had some principles that cannot be violated, but now just angry and unreasonable. The fool used to be forthright, but now the fool is just a fraud". [13] Here, "crazy" has a diversity of expressions, showing the comparative

mental state, as well as the connection of the state relationship between "body" and "spirit". "The spirit is a thing, and the soul is changing, so we can know the situation of the ghost and God."^[14] "Crazy" people can easily be associated with some mysterious force.

This association between "body" and "spirit" is the cognition of the state "different from normal people". Only by showing some unique inner temperament can it have nongeneral special effects in public communication and people's beliefs. One of the most representatives of these phenomena is the presence of mental disorders, or "lunatics", in early societies, as "witches" who held positions of high status and great influence. American scholar Young Katharine once explained the significance of "body" in the process of "writing culture and history" in the book "Folklore in the Body" on the basis of the basic theoretical framework of "body carving". "Culture is written on the body, and our beliefs about the body, our perceptions about the body, and the characteristics that give it, whether original or symbolic, are constructed by our culture. The body is always being invented". Of course, this theory was first proposed by Michel Foucault.[15] The social consciousness that this "body" carries is one of the foundations of early social beliefs.

"PEOPLE WITH DISABILITIES" AND "WIZARD" The historical world of "the wizards"

"The Wizard" is an important carrier of early folk beliefs. Here, we need to explain the word "witch" first. "Wizard" can be regarded as the abbreviation of "wizard" and "python". *Zhou Li* (《周礼》 The Rites of Zhou) is a book about the etiquette of the Zhou dynasty, and it says, "whoever helps god is to be in charge of three great things: man, ghost and god." Jia Gongyan, a scholar who lived around the middle of the 7th century, explained: "wizards of men are called python (巫) and wizards of women are called witch (觋)".[16] The wizard can include male and female, but "python" can only be described as male. Therefore, we can unify the name of "python" and "witch" as "witch."[17]

In the early Chinese society, the idea of ghosts and gods was a very important social consciousness, which had a key influence on the national politics and people's life at that time. Li Ji (《 礼记》 *The Book of Rites*) says:

- Under the Xia dynasty, it was the way to give honor to the nature conferred on men; they served the manes of the departed, and respected spiritual beings, keeping them at a distance, while they brought the people near, and made them loyal.
- Under the Yin dynasty, they honored spiritual beings and led the people on to serve them; they put first the service of their manes and last the usages of ceremony; first punishments, and then rewards; giving honor (to the people), but not showing affection for them.
- Under the Zhou dynasty, they honored the ceremonial usages and set a high value on bestowing (favors); they served the manes and respected spiritual beings, yet

keeping them at a distance; they brought the people near, and made them loyal; in rewarding and punishing, they used the various distinctions and arrangements of rank, showing affection (for the people), but not giving them honor.^[18]

With the refinement of social division of labor, there emerged the idea of separation of human and God. In the ideology of the rulers, the rethinking about the real world led them to change the political strategy. At this time, officials were set up to manage people and Gods, thus achieving the political goal of "Juedi Tiantong" (let the people fall to the earth, let the Gods rise to the sky).

The earliest historical work mentioned above, *Shang Shu* (《尚书》*Classic of History*), said: "Then he commissioned Zhong (重) and Li (黎) to make an end of the communications between earth and heaven; the descents (of spirits) ceased." Sun Xingyan (1753–1818), a scholar in Qing dynasty, interpreted this:

 The emperor ordered "Zhong" to be in charge of God's affairs, and "Li" to be in charge of civil affairs, separating the previous system and each doing his own duty, which separated people from God's world.^[19]

The king ordered "Zhong" to be in charge of the God of heaven, and "Li" to be in charge of civil affairs, separating the old system to its own function, which separated people from God's world. Modern scholar Yuan Ke (袁珂) thinks: "according to legend, at some time in ancient times, such a 'world of ghosts and gods' is connected with the world of people, and no doubt anyone can communicate with ghosts and gods." So, what is the medium that connects the two after the separate administration of the state over the world of man and God? And what are the characteristics of this medium? From the historical materials of the pre-Qin period, we can see that the group of "wizard" played an important role in the communication of heaven and earth and human and God.

In ancient Chinese society, "shamans" were generally regarded as people with very high social status. They had an important influence in the daily life as well as in the political and religious affairs of the country. Especially in the Shang dynasty, from national politics to people's daily life, the work of wizards was very popular, so the "witch" naturally enjoyed a special and high status in the society. Modern scholar Chen Mengjia put forward the opinion that "the king is not only the political leader, but also the leader of all wizards" based on the textual research of the Shang dynasty.^[20] Zhang Guangzhi, a famous anthropologist at Harvard University, also emphasized: "That wizard had important position in the Shang dynasty royal family, is a recognized fact in the Shang dynasty history research," "Shang dynasty not only had a wizard, but the wizard occupied a very high place in the society",[21] thus revealing the fact that the "wizard" was in the special position in the Shang dynasty society. Even if there are some scholars who think that we should not overestimate the wizard in the position and role of Shang dynasty society, others still insist on your point of view: Shang dynasty wizard has a unique and critical role because many unearthed literatures and the literatures handed down from ancient times present the images of wizards in the Shang dynasty.

The Shang dynasty was so obsessed with witchcraft that it caused its rulers to become obsessed with it and eventually led to the decline of the state. However, the following Zhou dynasty, although reflected on the practice of the Shang dynasty, still did not completely ban the witchcraft. Hong Fan of Shang Shu (& 尚书·洪范》) is an important document about the political reform between the Shang and Zhou dynasties. According to the historical records of the Song Weizi family written by Sima Oian, the article *Hong Fan* recorded that King Wu of the Zhou dynasty had visited Ji Zi (箕子) in the 13th year (the 2nd year after he defeated the Shang dynasty, 1044 BC). The strategy of "principles (of its method in doing so) that should be set forth in due order" presented by Ji Zi included the methods of "examination of doubts" and "various verifications",[22] the methods and principles for the interpretation of witchcraft and the signs of witchcraft. The state attaches so much importance to witchcraft that it is natural for the witches to have a high position in the society of the state. However, "wizards have a lower status since the Shang dynasty". 3 The Zhou dynasty was no longer so obsessed with witchcraft as the Shang dynasty, and witchcraft was no longer valued as much as the Shang dynasty. For example, in the book Zhou Li (《周礼》 Rites of Zhou), which reflects the official system of the Zhou dynasty, the officials who manage witchcraft are only ranked in the positions of middle officials.[23]

Before the Han dynasty, the group of wizards probably included the witch officials in the state government and the folk sorcerers who used "witchcraft" as their prowess. At that time, people also believed that these wizards had the special ability to communicate with ghosts and Gods. In the book *Guo Yu* (《 国语》*National Language*), which described the history of the Spring and Autumn periods, an official of the state of Chu in the Spring and Autumn periods is quoted as saying: "Those who are spiritual, attentive, and respectful of justice, are often wise enough to let heaven and earth do their part. Their sages and wisdom stand out; their bright eyes give them insight; their acute hearing gives them direction". [24] These all emphasize the special function and important social influence of "the wizard".

Several "Disabilities" and "The Wizard"

In fact, in early ancient societies, people who were disabled as witches had not only "crazy" disabilities, but also many other types of disabilities. Like *Xun Zi* (《荀子》*Xuncius*), a Confucian classic: "hunchbacked sorcerers, lame sorcerers, they are responsible for witchcraft". [25] Here, people with disabilities and wizards are directly related: the physical characteristics of disabled people become important professional requirements of "wizards". The phenomenon of "humpback", "cripple", "chicken breast", and other types of disabilities occurred at the same time with "wizards", which

also indicated that the disabled of these types were relatively common among "wizards".

In the 1970s, a relic of the Wei Shi family in the middle period of the western Zhou Dynasty, the "wall plate," was unearthed in the Zhuang Bai Brigade, Fu feng, Shaanxi province. There is a long inscription on it. Contemporary scholar Tang Lan (1901-1979) studied this and found that the inscription contained the word "Wang (尪)". In addition, Mr. Tang explained, "Wang (九) was written as Wang (尪) in ancient Chinese. Always called Wu (巫), respectively, said a woman called Wu (巫), a man called Wang (尪). The book of Historical records ·Fen Shan Shu (《史记·封禅书》): "the owner of the witchcraft ancestral hall of the Oin dynasty. Wu Bao, Zu Lei, etc.," and the historian Sima Zhen of the Tang dynasty, he said in his book So Yin: "Wu Bao, Zu Lei, are the names of the two deities." the state of Qin Dynasty was established on the territory of the Western Zhou Dynasty."[26] Here is the character that was shown directly equivalent to the "wizard." This makes it possible to observe the special correlation between the "witch" and "disability."

In pre-Qin dynasty oracle-bone inscriptions, "immolation" was often responsible for praying for rain, that is, in the times of drought, the activity of burning people to offer sacrifices to the God of heaven in order to pray for rain. There are many such records in pre-Oin historical materials, such as Mo Zi (《墨子》 Mocius) and Lv Shi Chun Qiu (《吕氏春秋》 The Spring and Autumn of Lv Buwei) Even Tang, the first king of the Shang dynasty, wanted to burn himself to death to pray for rain. "The Zuo's Spring and Autumn Period, 21 years of Lord Xi" records: It was dry in this summer, and the man wanted to burn the Hunchback Wizard. Here are a few examples in which "Wu" and "Hunchback Wizard" were used together. However, the "Wu" and "Hunchback(尪) Wizard" here isn't quite what we normally understand. In Lv Shi Spring and Autumn, explained, Wang (尪) is interpreted as the dwarf.[27] Mr. Qiu Xigui explains further: Wang's body is bulbous, belly bulge, the body appears particularly thick and short.^[28] That's what chicken breast means. According to Mr. Li Ling, "Wu" (巫) is often a hunchbacked old woman, whereas "Wang" (尪) is short, with a protruding chest and a cripple facing up. "Wang" is a disabled person with polio, including men, so "crippled wang (尪)" is also known as "python".[29]

In the book *Zhou Li*, which records the etiquette rules of the Zhou dynasty, "in the large-scale sacrificial activities held in the country, the king will also participate, and the blind will climb on the high sacrificial platform and play the elegant sacrificial music". That is to say, in the national high-level sacrificial activities, the blind undertook the main task of playing music, which can be seen as its important influence in national politics and culture.

Cases of disabled persons holding important positions in early ancient countries are relatively common, which also reflects their higher social status in early period where productivity and social division of labor are not yet developed. For example,

"The Classic of Rites", another classic about etiquette culture, records: "For the same reason, there are the officials of prayer in the ancestral temple; the three ducal ministers in the court; and the three classes of old men in the college. In front of the king there were the sorcerers, and behind him the recorders; the diviners by the tortoise-shell and by the stalks, the blind musicians and their helpers were all on his left and right. He himself was in the center. His mind had nothing to do, but to maintain what was entirely correct".[30] The "Gu You (瞽侑)" here refers to the blind, who, along with wizards and officials in charge of historical books, are often located around the emperor. Judged from their position in the palace, the blind and the sorcerer stood on either side of the king. From this, it can be inferred that they should be similar in their work and status. In this way, we can further guess that they all have special status.

THE UNDERSTANDING OF "PEOPLE WITH DISABILITY" IN EARLY ANCIENT TIMES

The "stigmatization" of "disability" and the emergence of social discrimination is a process, and it is not a social phenomenon accompanied by the fact of human physical disabilities. For example, the "body" image of "saint" was full of rich imagination. Through Righteousness of The White Tiger Hall, a Confucian classic written in the Eastern Han dynasty (AD 79), said: "All saints have an unusual appearance: Yu (禹) has three ears. Gao Tao (皋陶) has a horse's mouth..... Tang (汤) has three arms......Zhou Gong's hunchback. The reason why saints grow so unique is that they are as inspired as immortals, which is probably because they were born from heaven."[31] The "abnormal appearance" of a saint is the specific imagination and description of a certain spiritual character and physical form. Qu Yuan (屈原 c. 340-c. 278 BC), a poet of the Warring States period, wrote in his poetry anthology of Chu: "there are tall men in the east, one kilometer's high". "Tall people" are not real, but poets use an exaggerated way to describe people they are not familiar with. In fact, it is the "physical imagination" of people for certain regions.

Shan Hai Jing (《山海经》The Classic of Mountains and Seas) is a collection of myths known as the "encyclopedia of the ancient world", covering many aspects such as mythology, geography, religion, history, folklore, flora and fauna, medicine, and astronomy. There are a lot of images of "exotic people abroad". "Alien" first appeared in "The Classic Areas Overseas" section. The so-called "alien" is very similar to the "abnormal person" mentioned above, so the "normal person" is naturally what the writer of the text thinks. What they considered "strange" was the loss or redundancy of features and body parts or a body that combined with the animal's body shape.

In fact, nowadays, these phenomena seem to be a kind of physical disability, but for the early ancient people, these are their "physical imagination" toward the people in a strange world. Through explaining *The Classic of Mountains and*

Seas, Guo Pu, a scholar of the East Jin dynasty (AD 276–AD 324), said: "People think that a thing/person is 'abnormal', but they don't know the cause of the abnormal. Why? Things are not 'exceptional' in themselves, just because humans distinct about the nature of things subjectively. It's not that things have changed." [32] This is to emphasize that the oral and textual "alien" images are the simple "body imagination" of the ancient early people for "exotic" people.

Yuan Ke, a famous mythologist in modern China, divided these "aliens" in The Classic of Mountains and Seas into two categories: "abnormal endowment" and "abnormal body shape". And, in many cases, people with abnormal bodies have unusual gifts, whereas people with extraordinary gifts have abnormal body shapes. [33] There are many descriptions of "abnormal endowment" in *The Classic of Mountains and Seas*, such as:

- The kingdom of *jiexiong* (结胸) lies to its southwest. Its people are all pigeon chested (The Classic Areas Overseas: the South)
- The kingdom of *guanxiong* (贯胸) lies to its east. Its people all have see-through holes in their chests (*The Classic Areas Overseas: the South*)
- The kingdom of *jiaojing* (交胫) lies to its east. Its people all have their legs crossed (The Classic Areas Overseas: the South)
- The kingdom of *sanshou* (三首) lies to its east. Its people all have one body with three heads *(The Classic Areas Overseas: the South)*
- The kingdom of *Yibi* (一臂) lies to its north. Its people all have only one arm, one eye, and one nostril (*The Classic Areas Overseas: the West*)
- The kingdom of *Qigong* (奇肽) lies to its north. Its people all have one arm and three eyes (*The Classic Areas Overseas: the West*)
- There is the kingdom of Little people (小人) (*The Classic of the Great Wilderness: the East*).

"Intersecting shin bone", two legs are mutually coiled inward, Mr. Gao You explained: "intersecting feet of intersecting people", is suspected today as polio or limb spasm. "Three heads," "three bodies," "odd brachial", and so on, all refer to the body or incomplete or redundant deformity. "Little people" refers to the short stature; Mr. Yuan Ke thought that the titles of these "little people" were all the pronunciations of "Zhu Ru 侏儒", in fact, all referring to short people.

A description of "abnormal body shape" such as:

- The kingdom of *Yuminyu* (羽民) lies to its southeast. Its people all have long heads and feathers on their bodies (*The Classic Areas Overseas: the South*).
- The kingdom of *Huantou* (讙头) lies to its south. Its people all have a human face, a bird's wings, and a bird's beak (*The Classic Areas Overseas: the South*).
- The kingdom of *Xuanyuan* (轩辕) lies to the edge of Mount *Qiongshan*......Its people all have a human face,

a snake's body, and a tail which is surrounded on their heads (the Classic Areas Overseas: The West).

There are also physical deformities. *ZhuangZi-ZeYang*, a Taoist classic, says "There is the creature called a snail;...... On the left horn of the snail there is a kingdom which is called Provocation, and on the right horn another which is called Stupidity". [34] It is also the expression of a specific image of a person or group by the abnormal form of the body. And, these imagined "aliens" were aided by physical phenomena, later described as "disabilities". As Foucault once pointed out, "all these absurd images are actually the academic factors that constitute some mysterious mystery." [35] In this primitive "body imagination", people's understanding of the image of "body" is further expanded, and starts from a simple "alien" imagination, gradually adding the image of morality and quality.

CONCLUSION

The "stigmatization" and discrimination phenomenon of "disability" is not primary, but a process of "being constructed". In the early ancient society, the productivity was relatively low and the social division of labor was not yet detailed. Some "crazy" people, because of their special physical and mental state, were often considered to have some special functions of communication among heaven, earth, ghosts, and gods. Therefore, with such a kind of "endowment", they were able to hold the special and important social position of "witch" in the era when "witchcraft" was popular. This process reflects the simple "body imagination" of the early social groups. At the same time, some other types of disabled people, due to their special "physical" status, play important roles at the social and national levels. With the increase of people's understanding of their own bodies, the continuous development of social productivity, and the refinement of social division of labor, people's imagination of the body began to add more moral judgment factors. Driven by these factors, these physical differences gradually become an "abnormal" phenomenon, and people's understanding of "alien" began to be mixed with discriminatory accusations and stigmatization. It must bestated. It must be stated, of course, that with the emergence of "discrimination" against people with disabilities, it actually presupposes that people with disabilities have begun to become a social group, with which the state regulates and rescues them.^[36] This is very worthy of our dialectical thinking. The analysis of this development process is of great significance for us to rethink the process of "Being cast as disable" and their social status and influence in early ancient countries.

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End Notes

 American sociologist Erving Goffman explained "stigma" in 1963, and making the word an academic concept. He explicitly equates stigma with a trait that makes an

- individual different from the average person (e.g., body dysmorphia, mental illness, and deviant behavior).
- 2. As for the significance and influence of "JueDi TianTong," some scholars regard it as the separation of civil and religious affairs. For example, Mr. Zhang Guangzhi's hypothesis of "the origin of two civilizations" holds that Chinese civilization is "shamanistic civilization," one of the world's two ancient civilization systems, and it is a kind of "continuous civilization," that is, the civilization era has great continuity with the barbarism era. Li Ling challenged this view, pointing out that the main thrust of the story of "Juedi Tiantong" is not to explain the origin of witchcraft, but to explain the origin of the official, especially the historical officer.
- 3. For example, Rao Zongyi (1917–2018) argues that many scholars overestimate the political status and cultural contribution of wizards in the ancient Chinese society.

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On "Pestilences" in an Ancient Vietnamese Medical Book, Nan Yao Shen Xiao (《南药神效》 Miraculous Vietnamese Medicine)

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Abstract

Nan Yao Shen Xiao (《南药神效》 Miraculous Vietnamese Medicine) is "an ancient Vietnamese medical book in Chinese language" that is extant in Vietnam and plays an important part in Vietnamese medical development history. In the chapter of "Pestilences," the characteristics, prevention, and treatment of pestilences were described in detail. By comparing Miraculous Vietnamese Medicine with Chinese medical books including Ben Cao Gang Mu (《本草纲目》 Compendium of Materia Medica), it can be seen that the prevention and treatment of pestilences were profoundly influenced by Chinese medical books. The folk-proven prescriptions in Compendium of Materia Medica, Zhou Hou Bei Ji Fang (《肘后备急方》 Handbook of Prescriptions for Emergency), Bei Ji Qian Jin Yao Fang (《备急千金要方》 Important Prescriptions Worth a Thousand Gold for Emergency), and other Chinese medical books were included directly or after adaptation (slight modification in dosage and usage) in Miraculous Vietnamese Medicine. This form of "foreign acceptance" witnessed the history of medical culture communication between China and Vietnam, expanded the application scope of Chinese medicine in prevention and treatment of pestilences in a foreign land, promoted the overseas spread of folk-proven prescriptions in Chinese medicine to treat pestilences, and played a major part in treatment and prevention of disease in ancient Vietnam.

Keywords: Nan Yao Shen Xiao (《南药神效》 Miraculous Vietnamese Medicine), pestilences, Vietnamese medicine

Vietnamese culture is an important part of the Han Chinese cultural sphere, and Vietnamese medicine is deeply influenced by Chinese medicine. Chinese medical books extant in Vietnam are the "eyes in foreign lands" to Chinese medicine, showcased Chinese medicine in "eyes in foreign lands," and responded to the development and progress in medicine. Ancient literature on traditional medicine in Vietnam is a valuable source of traditional medicine to be understood urgently.

Nan Yao Shen Xiao (《南药神效》 Miraculous Vietnamese Medicine) [Figure 1] is "an ancient medical book in Chinese language" that is extant in the National Library of Vietnam and Vietnam Han'an Research Institute. It played an important part in Vietnamese medical development history and its formation witnessed the history of medical and cultural communication between China and Vietnam. The chapter of "Pestilences" in Volume 1 described the prevention and treatment of pestilences and made a great contribution to prevention and treatment of such

diseases in Vietnam then. Through comparison of the prescriptions for pestilences in *Miraculous Vietnamese Medicine* with those in Chinese medical books, the history of foreign acceptance of Chinese medicine can be better presented to explain the relationship between Chinese medicine and traditional Vietnamese medicine and understand and study the long history of Chinese medicine culture in a broader context.

OVERVIEW OF **MIRACULOUS VIETNAMESE MEDICINE**

Miraculous Vietnamese Medicine was written by Ruan Bojing (阮伯靖), also known as "Chan master Huijing (慧靖禅师)"), a representative doctor in Chen Dynasty in Vietnam and was an important medical book in the

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Chinese language supplemented by physicians of later generations. According to Mayanagi Makoto, a Japanese scholar, Chan master Huijing was sent on a mission to China (Ming Dynasty) in 1385 and later died in the country, so it can be inferred that the medical books by Huijing including *Miraculous Vietnamese Medicine* were written before 1385. However, since printing techniques in China were spread to Vietnam in a later time, the prosperity of Vietnamese engraving and printing occurred in Zhengtong years in Ming Dynasty (明正统) or Li Dynasty in Vietnam (越南黎朝). In addition, as Vietnam is located in the tropics with a damp climate and suffers from damage by insects, ancient books are difficult to preserve and spread. Huijing before 1385 has not been found.

According to the analysis on the versions extant in National Library of Vietnam (越南国家图书馆) and Vietnam Han'an Research Institute (越南汉喃研究院), the extant Miraculous Vietnamese Medicine is different from the original work by Huijing before 1385 since it was completed with supplementation by doctors of later generations on the basis of the original book. Despite that the original Miraculous Vietnamese Medicine by Huijing was lost to history, the supplemented version can still embody Huijing's academic ideology of "treatment of Vietnamese with Vietnamese medicine," Note 1 plays a major part in the construction of Vietnamese medical system and reveals the characteristics of Vietnam-oriented Chinese medicine.

The *Miraculous Vietnamese Medicine* (No. R18) preserved in the National Library of Vietnam was used in the present study. It is in half pages, 11 lines in each page, and 26 characters in each line. It has the library collection stamp of "THUVIEN/QUOCGIA" (National Library) and the characters of "On an auspicious day in August in the seventh year under the reign of emperor Khai Dinh of the South Empire, newly engraved based on the original book/*Miraculous Southern Medicine*/1922 in Western calendar/Liuwentang collection for public good" (大



Figure 1: Nan Yao Shen Xiao (《南药神效》Miraculous Vietnamese Medicine)

南启定七年八月吉日幸遇良医家有原板得新刻/南药神效/西历壹仟玖佰贰拾贰年/柳文堂公益藏板) around the title page. *Miraculous Vietnamese Medicine* was written in the Chinese language, suggesting the influence of Chinese medical books on etiology, pathogenesis, and syndrome differentiation methods described in this book.^[4]

According to the table of contents of *Miraculous Vietnamese Medicine*, this book included a volume in the header and 10 volumes in the body part [Figure 2], 11 volumes in total. In the body part, there were 10 medical specialties, including "diseases of direct attack" in Volume 1, "qi diseases" in Volume 2, "blood diseases" in Volume 3, "pain diseases" in Volume 4, "painless diseases" in Volume 5, "diseases of the orifices of the body" in Volume 6, "internal injury" in Volume 7, "gynaecology" in Volume 8, "paediatrics" in Volume 9, and "surgery" in Volume 10. In Volume 1, diagnosis and treatment of 14 diseases were described, including wind stroke, cold stroke, summer heat stroke, pestilences, and miasma. In the chapter of "Pestilences," the characteristics, prevention, and treatment of such diseases were described in detail.

PREVENTION OF PESTILENCES

In the chapter of "Pestilences" in Volume 1 in *Miraculous Vietnamese Medicine*, it wrote that "In a pestilence, everyone in the neighborhood is sick. It is generally a seasonal epidemic, and people get infected due to deficient vital qi. The disease invades the body through respiration. The patients have swelling and reddish head and face, discomfort in throat, dry tongue and mouth, fear of cold and high fever, phlegm-drool congestion and so on. All kinds of pestilences show these symptoms and medicinals hot in property should be used with caution to treat high fever." It specified the etiology, pathogenesis, and treatment principles of pestilences and believed that pestilences occurred due to deficient vital qi in the human body and seasonal epidemic that invaded the body through respiration, and medicinals hot in property should not be used in the wrong way.

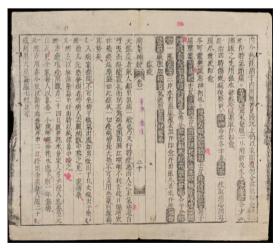


Figure 2: Inside Pages of Miraculous Vietnamese Medicine

In prevention, nine methods were described in detail in Miraculous Vietnamese Medicine to prevent pestilences. For instance, "For patients infected initially, heat their clothes in a steamer," "Put sesame oil in nostrils and induce sneezing by twisting a paper strip in the nostrils," "Collect the tender leaves of Siberian cocklebur on the Dragon Boat Festival (the fifth day of the fifth lunar month) from 11 a.m. to 1 p.m., air dry and put aside. In case of infection, grind the dry leaves into a fine powder, mix with water and take the liquid," "Collect purslane on the sixth day of the sixth lunar month, air dry and put aside. Make congee using the herb on the New Year's Day, flavor with salt and vinegar and serve for the whole family," "Soak frankincense in water from a well firstly in the early morning, give a piece of frankincense to everyone in the family and take it along with the water," "Wrap rice beans in a piece of new cloth and soak in well water for 2 days. Everyone in the family take 20 beans," and "Burn moxa on four corners of the sickbed, one stick per corner" etc. [6] The ways to use drugs for pestilence prevention in the book included oral administration, nasal inhalation, as well as smoking, wearing, and hanging. They were simple and effective methods to prevent pestilences in Vietnam.

Through comparison of Miraculous Vietnamese Medicine of Vietnam with Ben Cao Gang Mu (《本草纲目》Compendium of Materia Medica) of China in Ming Dynasty, it can be seen that the methods used to prevent pestilences in the former were influenced quite a lot by the latter. The methods described in Miraculous Vietnamese Medicine, including using tender leaves of Siberian cocklebur, purslane, frankincense, and rice beans, as well as steaming clothes of the patients and moxibustion, were all recorded in Chinese medical books. For instance, in Volume 38 of Compendium of Materia Medica, it was warned that "In seasonal epidemic, take clothes of the patient initially infected and heat in a steamer. Through doing this, the rest of the family will not be infected." Compendium of Materia Medica, by quoting Zhou Hou Bei Ji Fang (《肘后备 急方》Handbook of Prescriptions for Emergency), wrote that "To ward off prevalent epidemic pathogens, wrap a Dou (2 L) of soy beans in a piece of new cloth, put in a well for a night and remove. Take 7 beans a time." By quoting Bei Ji Qian Jin Yao Fang (《备急千金要方》Important Prescriptions Worth a Thousand Gold for Emergency), Compendium of Materia Medica stated that "To prevent pestilences: collect tender leaves of Siberian cocklebur at 11 a.m. to 1 p.m. on the fifth day of the fifth lunar month, air dry and put aside. Immediately before using, grind the dry leaves into fine powder, mix two Qian (6.25 g) of the powder with cold water and take the liquid. Or, decoct the dry leaves and serve the decoction for the whole family [Table 1]."[7]

Through the comparison above, it can be concluded that the methods to prevent pestilences in *Compendium of Materia Medica* had a great impact on the prevention and treatment of pestilences in Vietnam. In the Vietnamese medical book *Miraculous Vietnamese Medicine*, the methods in *Compendium of Materia Medica* were quoted directly to prevent and treat

pestilences. This form of "foreign acceptance" witnessed the history of medical culture communication, expanded the application scope of Chinese medicine in the prevention of pestilences in a foreign land, and enhanced the influence of pestilence prevention thought of Chinese medicine in Han culture sphere.

TREATMENT OF PESTILENCES

There were 12 detailed prescriptions to treat pestilences in the chapter of "Pestilences" in Volume 1 of *Miraculous Vietnamese Medicine* [Table 2]. Through analysis and textual research on the prescriptions, it can be seen that the book borrowed folk-proven prescriptions directly or after adaptation (slight modification in dosage and usage) from Chinese medical books, mainly *Zhou Hou Bei Ji Fang* (《时后备急方》*Handbook of Prescriptions for Emergency*), *Song Feng Shuo Yi* (《松峰说疫》*On Epidemics by Song Feng*), and *Bei Ji Qian Jin Yao Fang* (《备急千金要方》*Important Prescriptions Worth a Thousand Gold for Emergency*). This form of "foreign acceptance" promoted the overseas spread of folk-proven prescriptions in Chinese medicine to treat pestilences.

Through analysis and textual research on the prescriptions treating pestilences in Miraculous Vietnamese Medicine in Table 2, it can be seen that the treatment of pestilences in the book was deeply influenced by Chinese medical books and the prescriptions included could be found in traditional Chinese remedy books. For instance, "Pound the pine needles to a pulp and mix with liquor" in Miraculous Vietnamese Medicine to treat and prevent pestilences was written in Important Prescriptions Worth a Thousand Gold for Emergency as early as in Tang Dynasty (唐代) of China: "Take pine needles and cut into very small pieces and mix with liquor. Take 3 g of the mixture a time, three times a day to ward off pestilences for the future 5 years." Treatment of warm malaria with minimum and sweet wormwood herb in Miraculous Vietnamese Medicine was also recorded in a Chinese medical book titled On Epidemics by Song Feng: "Take 5 Qian (16.625 g) of minium (stir-baked) and 2 Liang (62.5 g) of sweet wormwood herb (soaked in child's urine and then dried in the sun) and grind into powder. Take 2 Qian (6.25 g) of the powder a time, with liquor when the patient shows more chills than fever and with tea when the patient shows more fever than chills" and the prescription was named "Danhao Drink (丹蒿饮)". Treatment of epidemic hot toxin syndrome with pork foot and scallion white in Miraculous Vietnamese Medicine was described as early as in Handbook of Prescriptions for Emergency of China: "To treat epidemic hot toxin syndrome that causes hands and feet to almost break off, take a pork foot of a sow and remove the hairs. Take a handful of scallion white. Decoct the pork foot and scallion white in a Dou (2 L) of water. Remove the dregs and flavor the decoction with a pinch of salt." It can be seen that the methods to treat pestilences in *Miraculous Vietnamese Medicine* were profoundly influenced by Chinese medicine. The folk-proved prescriptions that were simple and convenient

Table 1: "Pestilence prevention" in Nan Yao Shen Xiao (《南药神效》 Miraculous Vietnamese Medicine) and Ben Cao Gang Mu (《本草纲目》 Compendium of Materia Medica)

	Miraculous Southern Medicine (Vietnam)	Compendium of Materia Medica (China)
Steaming clothes of patients	For patients infected initially, heat their clothes in a steamer to protect the rest of the family from infection	In seasonal epidemic, take clothes of the patient initially infected and heat in a steamer. Through doing this, the rest of the family will not be infected (Volume 38 in <i>Compendium of Materia Medica</i>)
Frankincense	To prevent pestilences, take water from a well in the early morning on the 24th day of the 12th lunar month and soak an appropriate amount of frankincense in the water. Just before dawn on the New Year's Day, give a piece of frankincense to everyone in the family and take it along with the water so that they can stay healthy for the whole year	To ward off pestilences, just before dawn on the 24 th day of the 12 th lunar month, soak frankincense in water that is taken from a well firstly in the early morning. Before dawn on the New Year's Day, warm up the water, give a piece of frankincense to everyone in the family and take three sips of water so that the family can be protected from pestilences for the whole year (Volume 34 in <i>Compendium of Materia Medica</i>)
Rice beans	Take rice beans, wrap in a piece of new cloth, soak in well water for two days and remove. Everyone in the family take 20 beans immediately. Or use black soybeans, 7 beans a person	On the 7 th day of the lunar month, put rice beans in a bag made of new cloth and soak the bag in a well. Remove 3 days later. Males take 7 beans and females take 14 beans, and they can stay healthy for the whole year (<i>Compendium of Materia Medica</i> as quoting <i>Handbook of Prescriptions for Emergency</i>)
Moxibustion	Method to prevent pestilences: Burn moxa on four corners of the sickbed, one stick per corner	To prevent infection, it is effective to burn moxa on four corners of the sickbed secretly, one stick per corner (Compendium of Materia Medica as quoting Handbook of Prescriptions for Emergency)
Horse toenail	Ward off pestilences: Saw the horse toenail to obtain the powder. Put the powder in a sachet made of red silk and wear the sachet	Powder of red horse toenail prevents warm malaria (Volume 50 in Compendium of Materia Medica)
Bricks of ancient tombs	Take a brick of ancient tombs and tie to the front door on the 1st day of the 1st lunar month to prevent pestilences all year around	On the 1 st day of the 1 st lunar month, take a brick of ancient tombs, and hang on the front door to prevent pestilences all year around (Volume 7 in <i>Compendium of Materia Medica</i>)
Sesame oil	Put sesame oil in nostrils and induce sneezing by twisting a paper strip in the nostrils	Enduring nose bleeding: Dip a paper strip in sesame oil and put in nostrils to induce sneezing and bleeding is stopped immediately (<i>Compendium of Materia Medica</i> as quoting <i>Formulary of Universal Relief</i>)
Leaves of Siberian cocklebur	Collect the tender leaves of Siberian cocklebur on the Dragon Boat Festival (5th day of the 5th lunar month) from 11 a.m. to 1 p.m., air dry and put aside. In case of infection, grind the dry leaves into fine powder, mix with water and take the liquid	To prevent pestilences: Collect tender leaves of Siberian cocklebur at 11 a.m. to 1 p.m. on the 5 th day of the 5 th lunar month, air dry and put aside. Immediately before using, grind the dry leaves into fine powder, mix two Qian (6.25 g) of the powder with cold water, and take the liquid or decoct the dry leaves and serve the decoction for the whole family (<i>Compendium of Materia Medica</i> as quoting <i>Important Prescriptions Worth a Thousand Gold for Emergency</i>)
Purslane	Collect purslane on the 6 th day of the 6 th lunar month, air dry and put aside. Make congee using the herb on the New Year's Day, flavor with salt and vinegar and serve for the whole family	On the 6 th day of the 6 th lunar month, collect purslane and dry in the sun. Cook the herb on the New Year's Day, flavor with salt and vinegar and eat to prevent epidemic pestilential qi (Volume 27 in <i>Compendium of Materia Medica</i>)

in Chinese remedy books were included in the book, and these methods provided variable approaches for preventing and treating pestilences in Vietnam.

CONCLUSION

Ever since the Song and Yuan Dynasties (宋元时期), with the invention of compass and the development of navigation techniques, China's foreign trade had been prosperous, with frequent trade with neighboring countries, including Vietnam. There had been frequent communication of Chinese medicine between China and Vietnam (an independent country was established after the Song Dynasty of China in Vietnam) during that time. As the Chinese government then accepted tributes including "medicinal spices" from Vietnam, it often gave in return to Vietnam gifts more valuable than the tributes, among which there were medical books. In Song, Yuan, and Ming Dynasties (

宋元明), there were frequent contacts between Chinese and Vietnamese medical practitioners, making a great contribution to the communication of Chinese medicine between the countries. The Chinese government sent frequently Chinese doctors on a medical mission to Vietnam, promoting the spread of the Chinese art of healing and medical system to Vietnam. Under the influence of Chinese medicine and doctors, a number of famous local doctors presented themselves in the country, including Chan Master Huijing. As one of the ancient medical books that are important in Han culture sphere, *Miraculous Vietnamese Medicine* witnessed the accumulation of Chinese medicine in Vietnam to prevent and treat pestilences, worthy of a thorough investigation.

Translator: Shuna Zhang (张淑娜)

Note

Note 1. Treatment of Vietnamese with Vietnamese medicine: China was in the North in eyes of Vietnamese, and accordingly

Table 2: Prescriptions to treat pestilences in <i>Nan Yao Shen Xiao</i> (《南药神效》 <i>Miraculous Vietnamese Medicine</i>)			
Indication	Ingredients	Preparation and usage	
Treat headache and fever at the early stage of seasonal epidemic	Scallion white and polished round-grained rice	Take 20 scallion whites with fibrous roots, make congee together with the rice and flavor with a little bit of vinegar. Take the congee, and put on warm clothes to induce sweat	
The same as above	Garlic	Take a half Jin (250 g) of garlics and pound to obtain a Ge (20 ml) of juice. The symptoms disappear after taking the juice no more than two times	
Treat pestilences with high fever in the head just for 1 day	Rusty copper coins	Take 157 coins and decoct in a bowl of water. Take the decoction to remove pathogenic qi from the body. In case of failure, take the decoction again	
The same as above	Mugwort leaves	Take a handful of dry leaves and decoct in a bowl of water to obtain a half bowl of decoction	
Treat pestilences and common cold	Perilla stem, Cyperus root, dried tangerine peel, and liquorice root	Take 4 Fen (1.25 g) each of Perilla stems and Cyperus roots, 1 Fen (0.3125 g) each of dried tangerine peels and liquorice roots and three slices of ginger, and decoct. Take the decoction when it is warm, three times a day and the symptoms disappear	
Treat pestilences	Peach twig	Take peach twigs looking east and decoct in water. Take the decoction	
The same as above	Pine needle	Pound the pine needles to a pulp and mix with liquor. Take a small cup of liquor a time, 3 times a day to prevent pestilences for 5 years	
Treat enduring warm malaria	Minimum, sweet wormwood herb and child's urine	Take 5 Qian (16.625 g) of minimum and 2 Liang (62.5 g) each of sweet wormwood herb and child's urine, and grind into fine powder. Take 2 Qian (6.25 g) of the powder a time	
Treat warm disease with fever and swelling and pain in cheeks	Green soy beans	Take a Ge (20 ml) of green soy beans, grind into very fine powder and mix with vinegar to obtain a thick mixture. Apply the mixture to the affected parts. Moisten with vinegar when the mixture is dry. Use it once daily until symptoms disappear	
Treat epidemic hot toxin syndrome that causes hands and feet to almost break off	Pork foot of a sow and scallion white	Take a pork foot and remove the hairs and toenails. Take a handful of scallion white and a bowl of water. Boil the pork foot and scallion white in water and flavor with a pinch of salt. Soak the sore spots	
Treat pestilences with swelling	Black soy beans and liquorice	Take a Ge (20 ml) of black soy beans, and a Cun of liquorice root, and decoct in	

a bowl of water. Take the decoction

Vietnam itself was in the "heelfm", so Chinese herbal medicines from China were known as "sownines medicines" in Vietnam, and the local crude drugs in Vietnam were known as "sownames medicine." In opinion of Huijing, it was damp and hot in Vietnam, so people mostly suffered from damp-heat diseases, and medication was different between the North (China) and the South (Vietnam). Therefore, he put forth the principle of "finciplen of Vietnamese with Vietnamese medicine."

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Conflicts of interest

There are no conflicts of interest.

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Analysis of the Application of "Jing (精)" in Ben Cao Gang Mu (《本草纲目》Compendium of Materia Medica)

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Abstract

Taking the Ben Cao Gang Mu (《本草纲目》Compendium of Materia Medica) (Jinling edition金陵本) as the research object and "Jing" as the search term, this article summarizes the quantity of medicinals containing "Jing" in Ben Cao Gang Mu, analyzes the connotation and application of "Jing" in traditional Chinese medicine, and finds that the application of "Jing" in medicine does not deviate from the original meaning of "Jing," but endows it with the concepts of medicine and pharmacy, and expands the application scope of "Jing." This study is helpful to understand and use spermicide more reasonably.

Keywords: Ben Cao Gang Mu(《本草纲目》Compendium of Materia Medica), Jing (精), data retrieval, Jinling edition, literature research, traditional Chinese medicine

"Jing (精)" is a phonogram. Its left part is "Mi" and the right part is "Qing." "Shuo Wen Jie Zi" explains that "Jing" refers to "selection" with the similar definition of "Mi(Rice in Chinese)" and similar pronunciation of "Qing." [1] In the text, it can be used as a noun, a verb, an adjective, an adverb, and literally, it means precious and rare. "Jing" also appears in traditional Chinese medicine. This paper analyzes the connotation and application of "Jing" by searching for the medicinals containing "Jing" in the Ben Cao Gang Mu(《本草纲目》 Compendium of Materia Medica).

DATE AND METHODS

Date sources

This article searched specific medicinals from the fifth volume of the category of waters of *Compendium of Materia Medica* through taking the electronic version of *Compendium of Materia Medica*, which is included in the TCM resource website, [2] and adopting computer retrieval with search term of "Jing."

Date screening

To avoid overinclusion of the relevant terms, the screening is conducted independently and in parallel by three evaluators. A term may be included or screened only if two or more of the three evaluators agree.

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Research objects and scope

The 5th volume of Category of Waters to the 52nd volume of Category of Humans of *Compendium of Materia Medica* (Jinling edition) published by Shanghai Scientific and Technical Publishers has been taken as the research object.^[3] Medicines from each category of the *Compendium of Materia Medica* were divided into the following 3 categories.

- 1. Plants: Five categories of traditional Chinese medicine from category of herbs, category of grain, category of vegetable, category of fruits, category of woods, etc.
- 2. Ores: Come from category of metals and stones
- Animals: six categories of traditional Chinese medicine from category of worms, category of scales, category of testacea, category of fowls, category of wild animals, category of humans, etc.

Medicine inclusion, classification and exclusion criteria Medicine inclusion criteria

1. Medicines commonly used in clinic at present.

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- 2. The understanding of medicine function is basically the same in ancient times and today.
- A medicine that clearly contains "Jing" and has a clear orientation.

Medicine definition and classification criteria

Depending on the presence of "Jing" in the medicine, the application of "Jing" in the medicine is divided into the following 5 categories:

- The "Jing" of the medicine source: reflects the source of the medicine.
- 2. The "Jing" of medicine name: a medicine name contains "Jing," including alias.
- 3. The "Jing" of medicine properties: reflects the nature, character, and performance of the medicine.
- 4. The "Jing" of medicine efficacy: reflects the efficacy and function of the medicine.
- 5. The "Jing" of medicine using: reflects the use of the medicine, including the main medical certificate, symptoms, and other applications. For some medicines containing "Jing" with unclear boundry between efficacy and application, they are classified as medicine using.

Medicine exclusion criteria

- 1. Medicines that do not meet the above standards.
- 2. Medicines that are no longer used or have rare sources in modern society.
- 3. Medicines contain "Jing," but the "Jing" is not related to the source, performance, character, and function of the medicine
- 4. Each class contains less than 5 kinds of medicines.

Medicine extraction

From the 5th volume of category of waters to category of human of the *Compendium of Materia Medica* in the TCM Resource website, 601 provisions have been searched. According to the inclusion and exclusion criteria of medicines, there are 152 medicines that finally meet the criteria.

Data normalization processing

Data specification filling

Considering the error of electronic books, all the original texts were handed over to three Chinese medicine professionals. They took the *Compendium of Materia Medica* (Jinling edition) published by Shanghai Scientific and Technical Publishers as a reference, checked the original text. The contents that are obviously different from the paper books shall be subject to the paper books.

Standardization of traditional Chinese medicine names

According to the contents of Chinese Pharmacopoeia (2015 edition),^[4] Chinese Materia Medica,^[5] and The Dictionary of Medicinal Plant,^[6] the name, property, and using parts of traditional Chinese medicine were standardized. For example, "Wei Rui" was changed into "Yu Shi" (Polygonatum odoratum), "Ci Shi (慈石)" was changed to another name with different words of the same voice "Ci Shi (磁石)." When

the content is inconsistent, the Chinese Pharmacopoeia shall prevail. When the contents that are not included in the Chinese Pharmacopoeia, the Chinese Materia Medica shall prevail. The contents not included in the above two are subject to The Dictionary of Medicinal Plant.

RESEARCH RESULTS

Application of medicines containing "Jing" in the Compendium of Materia Medica

According to research statistics, 468 kinds of medicines were selected from 1892 traditional Chinese medicine in the Compendium of Materia Medica, accounting for 24.7%. Among them, there are 152 medicines contain "Jing," accounting for 8.03% of the total medicines in the Compendium of Materia Medica, and 32.5% of the shortlisted medicines. 152 kinds of medicines are distributed in the aspects of medicine source, medicine name, medicine property, medicine efficacy and medicine using. There are not only medicines containing "Jing" on one aspect but also medicines containing "Jing" in more than two aspects. Among them, the number of medicine source, medicine name and medicine property are similar, which is related to the common use of the three. And the most concentrated distributions are in the medicine efficacy and medicine using [Figure 1].

Distribution scope of medicines containing "Jing" in the Compendium of Materia Medica

Medicines containing "Jing" are distributed in many columns of compendium of Materia Medica, including explanation of names, previous explanations, explication, indication, and prescriptions: there are 119 kinds in single distribution and 33 kinds in compound distribution. Most of single distribution are under the indications [Figure 2].

Kind and category distribution of medicines containing "Jing" in the Compendium of Materia Medica

In the Compendium of Materia Medica, 152 kinds of medicines containing "Jing" include plant medicine, animal medicine, and ore medicine, which are distributed in all categories except the category of waters, the category of fire, the category of earth, the category of humans, and the category of utensils. Among them, plant medicine accounts for the vast majority, followed by ore medicine, animal medicine accounts for less [Figure 3]. Combined with the analysis of the proportion of the shortlisted medicines, the highest proportion of the medicines containing "Jing" was the category of metals and stones, accounting for 51.22%, followed by the category of vegetable, accounting for 44.44%, and the category of scales, accounting for 42.68%, [Figure 4].

ANALYSIS AND DISCUSSION

Distribution of medicines containing "Jing" in the Compendium of Materia Medica

In the *Compendium of Materia Medica*, there are Explanation of Names, Previous Explanations, Quality and Taste, Corrections, Preparation, Indications, Explication and Prescriptions of each

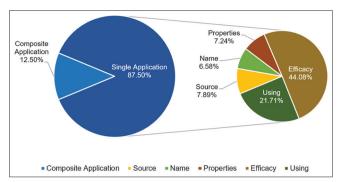


Figure 1: Application of medicines containing "Jing" in the Compendium of Materia Medica

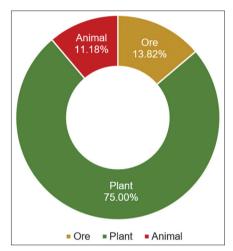


Figure 3: Kind distribution of medicines containing "Jing" in the Compendium of Materia Medica

medicine. The results of this study showed that the medicines containing "Jing" in the *Compendium of Materia Medica* are mainly distributed in Explanation of names, previous explanations, indications, explication and prescriptions, of which the indications is the most. This is related to the expression of "Jing" in medicine, and the prescription is another manifestation of the medicine function. In addition, explanation of names, previous explanations, and explication also contained some contents of medicines which reflect the medicine functions. It can be seen that the application of "Jing" in medicine is mainly focused on function.

Types and distribution of medicines containing "Jing"

In terms of medicine varieties, medicines containing "Jing" are involved in ore medicines, plant medicines and animal medicines, and plant medicines are the majority. However, in the *Compendium of Materia Medica*, there are 125 kinds of medicines except for the appendix of ore medicines, of which the proportion of medicines containing "Jing" is 16.8%, which is higher than that of other categories of medicines containing "Jing." This kind of medicine has a long period of formation. The ancients believed that it was formed by the essence of the universe, which is the most consistent with the meaning of "Jing. Therefore, in the Qin and Han Dynasties, Wei and Jin

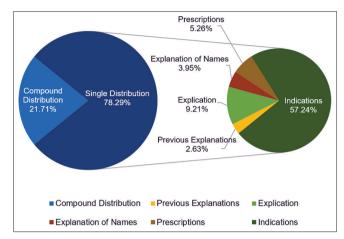


Figure 2: Distribution scope of medicines containing "Jing" in the *Compendium of Materia Medica*

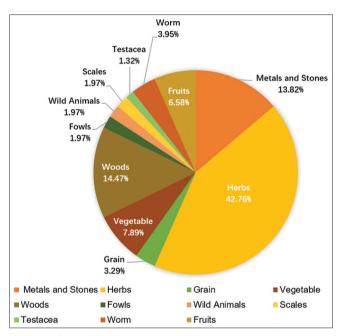


Figure 4: Category distribution of medicines containing "Jing" in the *Compendium of Materia Medica*

Dynasties and Northern and Southern Dynasties, there was a popular fashion of taking stone medicine and doing alchemy health preservation. From the development of metal and stone medicines, it can be found that the cognition of this kind of medicines, since the beginning of Sheng Nong's Materia Medica, has been more thorough and comprehensive. There is no great development in the later works of Materia Medica, from which we can also understand the connotation of "Jing" in medicine. The plant medicines containing "Jing" are mainly concentrated in roots and fruits, 72 kinds of 114 medicines, accounting for 63.16%. Rhizomes can fully absorb the essence of nutrition in the growing environment, and seeds and fruits are the essence of plants, which also reflects the application of "Jing" in medicine. In addition, in animal medicines, the medicines containing "Jing" mainly concentrated in Lu Rong(鹿茸cornu parvum cervi), Huang Ming Jiao (黄明

胶oxhide gelatin), Ge Jie (蛤蚧gecko), Zi He Che (紫河车 placenta hominis), etc., These medicines usually have the efficacy of replenishing essence.

The application and distribution of medicines containing "Jing"

The meaning of "Jing" can be fully reflected in the application of traditional Chinese medicine, including its source, name, property, efficacy, and application in medicine.

"Jing" of medicine source, "Jing" of medicine name, "Jing" of medicine property

The application of "Jing" in these three aspects, the connotation of "Jing" is consistent or interlinked, which is reflected in the following four points:

Explain medicine sources with "Jing"

"Jing" is often used to reflect the source and formation of medicines. For example, the explanation of calcitum (凝水 石) points out that it is "the essence of salt," also known as the salt essence. It clearly explains that *Calcitum* is formed by the condensation of salt in nature. For some medicines from precious sources, the ancients did not know about the formation process or it was difficult for them to cultivate these medicines, so they thought that these medicines might come from the "essence" of animals and plants. For example, Fu Ling (茯苓 *Poria*) is parasitic on the pine root after the tree is felled. The ancients believed that Poria was formed by the essence Qi of pines (松树). Rou Cong Rong (肉苁蓉 Cistanches Herba) is parasitic on the Suo Suo (梭梭Haloxylon) tree in the desert. Tao Hongjing (陶弘景) is quoted in the book as saying that it was born from the essence of wild horses. In addition, for the formation of Hu Po (琥珀amber), the ancients believed that it was formed by the tiger spirit after death, which highlighted the value of it.

In addition, some herbs with strong vitality, such as Hua Jiao (花椒Zanthoxylum bungeanum Maxim), Wu Jia Pi (五加皮Radix Acanthopanacis Senticos), Sang (桑Morus alba L.), etc., are considered to have vitality and are symbols of vitality. The ancients used the essence of vast stars to explain their sources. For example, Zanthoxylum bungeanum Maxim is the essence of Alioth (玉衡星), Radix Acanthopanacis Senticos is the essence of Wu Che Star (五年星), Morus alba L. is the essence of Ji Star (箕星). This can highlight their value and status.

Highlight the value of medicines named after "Jing"

The meaning of "Jing" in medicines is also reflected in the name of medicines, such as Xuan Jing Shi (玄精石 Gypsum), Huang Jing (黄精 Rhizoma Polygonati), Tian Ming Jing (天名精 Carpesium Abrotanoides). This also includes the aliases of some medicines, such as "Tu Jing (The essence of earth)" of Ren Shen (人参Radix Panacis Ginsen), "Di Jing (The essence of earth)" of He Shou Wu (何首乌Raidx Polygoni Multiflori), "Tian Jing (The essence of sky)" of Gou Qi (枸杞 Fructus Lycii Chinesis), "Shan Jing (The essence of mountain)" of Cang Zhu (苍术Rhizoma Atractylodis), etc., These medicines with the word "Jing" generally have a long growth cycle, at

least a few years, or even decades, hundreds of years. They can fully absorb the essence of the sky, earth and mountains in the natural environment, so they get such names.

Highlight the characteristics of medicines with "Jing"

"Jing" can also be matched with medicinal properties. For example, Calcitum is condensed by the Yin essence of alkali, so it is also called Yin Jing Stone, emphasizing its Yin nature. For Liu Huang (硫磺Sulphur) and Lu Sha (極砂Sal Ammoniacu), there is a saying that "Sulphur is the essence of Yang, which is formed by the essence of pure Yang flint. Bei Ting Sha (Another name of Sal Ammoniacu) is formed by the essence of pure Yin stone. They contain the essence of Yang toxin, can melt metals and stones, purify the body, nourish the Yang, and combine the strength with the sulfur." All of these highlight the Yang nature of Sulphur and Sal Ammoniacu. Therefore, the combination of "Jing" and "cold and heat properties of medicines" can highlight the nature of it.

"Jing" of medicine efficacy

The "Jing" of medicine efficacy mainly reflects the efficacy of the medicine. The main indication and application of medicines in ancient herbal literature were mixed together. The application of "Jing" in medicine efficacy can be summarized as the following four points.

Effect on spirit

The spirit in Chinese medicine is exactly the reflection of the essence of function and the essence of substance in the look. There are two main characteristics of the effect of medicines on the spirit. The first is some plant medicinal materials, which can make people full of spirit by nourishing, such as Ren Shen (人参 Panax ginseng C. A. Mey.), Nv Zhen Zi (女贞子Fructus Ligustri Lucidi), Ling Zhi (灵芝Ganodorma lucidum), etc., The second is mainly part of the Metal and Stone medicine which has a heavy texture and can calm people's mind, such as Kong Qing (空青), Zhu Sha (朱砂Cinnabaris), etc., In addition, it is suggested that Bu Gu Zhi (补骨脂Psoralea corylifolia Linn.) has the function of astringent spirit, which may be related to warming the kidney, stopping diarrhea and preventing the loss of essence Qi.

Effect on essence

The nature of essence Qi is more inclined to the essence of human body function. In the Compendium of Materia Medica, the definition of "Yi Jing Qi" is relatively wide, which can be understood as the meaning of "benefiting essence Qi." Therefore, the medicines in the book for "benefiting essence Qi" are mainly embodied in three aspects. The first one is a kind of medicine with direct tonifying of essence Qi, such as Qian Shi (芡实Euryale ferox), Zi Zhi (紫芝Ganoderma sinense), Yang Qi Shi (阳起石Actinolitum), Yuan Can (原蚕 Silkworms), Di Gu Pi (地骨皮Cortex Lycii), etc., This part is close to modern medical knowledge. The second is that although some medicines do not have a direct tonic effect, they can indirectly achieve the effect of benefiting essence Qi by eliminating pathogenic factors, such as Li Shui (alleviate water retention) of Hua Shi (滑石Talcum) and Shi Wei (石

韦Pyrrosia lingua), Qu Feng (relieve rheumatic pains, colds, etc.) of Di Fu (地肤Kochia scoparia (L.) Schrad.) and Jing Jie (荆芥Nepeta cataria L.), Tong Bian (free movement of the bowels) of Jue Ming (决明Cassia tora Linn.) and Xuan Ming Fen (玄明粉Thenardite), etc., In addition, some medicines have neither the effect of nourishing essence Qi nor the ability of expelling pathogenic factors and protecting essence Qi, but they can firmly absorb and astringe essence Qi and prevent the loss of essence Qi, which is another embodiment of essence Qi, such as Mu Li (牡蛎ostrea gigas thunberg) and Jin Ying Zi (金櫻子Rosa laevigata Michx.).

Effect on blood essence and marrow essence

The blood essence and marrow essence belong to the essence of the human body, which is related to human growth and development, aging, life span. In the Compendium of Materia Medica, the understanding of replenishing blood essence and marrow essence is basically consistent with the current understanding and application of these medicines, mainly reflected in some medicines with strong smell of flesh and blood, such as cornu cervi pantotrichum, Hai Piao Xiao (海螵蛸Sepiae Endoconcha), Gekko gecko, etc., some plant medicines with greasy texture, such as Shu Di (熟地 Rehmanniae Radix), Fallopia multiflora, etc., and some medicines with Yin and Yang supplement, such as Ba Ji Tian(巴戟天Morinda officinalis How), Suo Yang(锁阳Cynomorium songaricum Rupr), Rou Cong Rong(肉苁蓉Cistanche deserticola Ma), Shan Zhu Yu(山茱萸Cornus officinalis Sieb. et Zucc), etc.

In addition, some drugs achieve other effects by tonifying essence, such as essence benefiting and will strengthening of Yuan Zhi (远志Polygala tenuifolia Willd), essence benefiting and eyes brightening of Chong Wei(茺蔚Leonurus japonicus Houtt), essence benefiting and bones strengthening of Gou Ji (狗脊Cibotium barometz (L.) J. Sm), etc., Some drugs also put forward the concept of tonifying essence from the perspective of Yin and Yang, such as Yin strengthening and essence benefiting of Juan Bai(卷柏Selaginella tamariscina), Shi Hu (石斛Dendrobium nobile Lindl), Mai Dong(麦冬Ophiopogon japonicus), Xuan Shen(玄参Scrophulariae Radix), Che Qian (车前Plantago asiatica L.), and Yang strengthening of Chen Xiang(沉香Aquilaria agallocha), Xue Jie(血竭Daemonorops draco Bl), etc.

Side effects on "Jing"

Among the 152 drugs containing "Jing," four drugs have the effect of damaging essence and consuming essence. For example, Hu Huang Lian (胡黄连Radix picrorrhizae) is "cold, pork, which makes people leak essence." Mu Er(木 耳Edible Fungus) is "born of rotten wood with Yin Qi, so it can damage essence and kidney." Mustard (芥), "damage people's eyes, get people angry, and hurt people's essence if eat more." Taking Yu Xing Cao(鱼腥草Heartleaf Houttuynia Herb) for a long time will weaken people, damage Yang Qi and eliminate marrow essence. All of them point out their side effects on the damage of essence and the consumption

of essence, which can also reflect the value of essence and the importance of protecting essence and nourishing essence.

"Jing" of medicine using

It is difficult to separate the "Jing" of medicine efficacy and the "Jing" of medicine using, which mainly reflects the main treatment and other applications of medicine. It is mainly applied in the following three aspects.

Indications of spermatorrhea and oligospermia

There are many reasons for spermatorrhea and oligospermia, but they are mainly related to the weakness of the kidney and the invasion of spermatophore by pathogenic factors. The treatment of this kind of disease mainly focuses on three aspects: astringent, tonifying deficiency and strengthening the body, and eliminating pathogenic factors, especially the former two aspects. The medicines for the treatment of spermatorrhea and oligospermia are mainly some tonic medicines, such as Shi Zhong Ru (石钟乳 Stalactite), Poria, Sulphur, Actinolite, Cistanche deserticola Ma, etc., Secondly, there are some astringent medicines, such as Fu Pen Zi (覆盆 子Rubus idaeus L.), Shi Liu (石榴Punica granatum L.), ostrea gigas tnunb, Chun Pi (椿皮Cortex Ailanthi), etc., However, there are few medicines to eliminate pathogenic factors, such as Ze Xie (泽泻Alisma plantago-aquatica Linn.), He Ye (荷 叶Folium Nelumbinis), Ban Xia (半夏Pinellia ternata), etc., This is basically consistent with the current understanding and application of these medicines.

Kill the "Gui Jing Wu"

At present, it is difficult to research and express the exact meaning of "Gui Jing Wu". However, it can be determined that the ancients used it to express some difficult diseases, strange diseases and difficult diseases, which cannot be explained by the commonly known etiology. The ancients thought that these diseases were caused by some or some evil spirits, and possessed by ghosts and gods, and the general medicines could not work. Therefore, the medicines that can treat this kind of disease have the effect of dispelling ghosts and spirits and killing Gui Jing Wu. These medicines are mainly used to dispel evils and poison, calm nerves, such as amber, Tian Ma (天麻Cinnabaris, rhizoma gastrodiae), Dai Zhe Shi (代赭石Haematitum), Tao Ren (桃仁Persicae Semen), She Xiang(麝香*Moschus*), etc., At present, although the function of these medicines does not mention killing Gu Jing Wu, they do have significant functions of removing pathogenic factors and detoxification, and calming nerves.

In addition, some medicines containing "Jing" are not used to treat diseases, but for inedia. For example, Huang Jing (黄精 Polygonatum sibiricum), "Shizhen said: it is the most important medicine for taking, so it is listed in the top of the Category of Herbs. According to the immortal, they thought of it as a kind of Ganoderma which contains the essence of earth, so it is called Huang Jing." Cang Zhu (苍术Atractylodis Rhizoma) is also used for inedia. Shizhen said it was the essence of mountains. People who take it for inedia can live a long life and be immortal. Hence, it is called Shan Jing or Xian Zhu.

CONCLUSIONS

"Jing" is widely used in traditional Chinese culture. The original meaning of "Jing" is to select the best rice from rice. In the application of Chinese, no matter what part of speech, commendatory, or derogatory, its connotation is inseparable from its original meaning. Therefore, there are many words containing "Jing," such as Jing Shen Bao Man (精神饱满), Duan Xiao Jing Han (短小精悍), Jing Pi Li Jie (精疲 力竭), Jing Geng Xi Zuo(精耕细作), Jing Yi Qiu Jing (精益求精), Jv Jing Hui Shen (聚精会神), Dan Jing Jie Lv, (殚精竭虑) Gui Ling Jing Guai (鬼灵精怪), Xiu Lian Cheng Jing (修炼成精), etc., In traditional Chinese medicine, "Jing" (essence) is the first of the three treasures of the human body, essence, Qi and spirit, including the essence of reproduction, the essence of water and gran, the essence of viscera, etc., It is widely used in physiological pathology, dialectical treatment, prevention and other aspects of the human body, reflecting and highlighting the value of "Jing."

The application of "Jing" in traditional Chinese medicine is not separated from its original meaning. The medicines related to "Jing" either have a sinister growth environment, a long growth cycle and a scarce drug source, or have distinctive and irreplaceable characteristics, or have powerful and specific effects, or have critical symptoms. All of them reflect the connotation of "Jing." Therefore, this study is helpful to understand and use medicines containing "Jing" more reasonably in clinical practice.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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The Li Lineage of Traditional Chinese Medicine

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Abstract

Chinese medicine cannot be separated from Chinese culture and history. Professor Li Ding's path floridly embodies that, and so is worthy not just of admiration, but also of studious exploration. Aside from still, after well over half a century there, serving as a doctoral supervisor professor at the Shanghai University of Traditional Chinese Medicine (SHUTCM), and being one of the university's founders, he continues to contribute long after having been formally declared "A representative inheritor for China intangible cultural heritage – Acupuncture and Moxibustion." This is the second article in a three-part series on Professor. Li Ding. The first part focuses on "The Lineage of Gu Yi Tang," and that storied our family history we will continue discussing now, with this second installment: "The Lineage of Chinese Studies," which introduces professor Li's Chinese cultural studies. The forthcoming third part: "The Lineage of Dao Sheng Tang" will discuss professor Li's inheritance of Chinese medicine specifically. These three articles will bring our readers a rich and colorful Chinese scroll painting, which not only focus on acupuncture and general Chinese medicine, but also touch ancient Chinese history, culture, Taoism, and even more.

Keywords: Acupuncture and moxibustion, Chinese studies, intangible cultural heritage, Li Ding, lineage, traditional Chinese medicine

BRIEF INTRODUCTION TO PROF. LI DING

Li Ding [Figure 1] was born in 1929, on December 18th, in Gu Yi Tang, Houren village, Yongkang County, Zhejiang Province. Prof. Li's style name (also known as courtesy name [Chinese: 字; Pinyin: Zi]) is Yang Yuan (Chinese: 养 $\overline{\pi}$, literally means to nourish the Yuan-primordial gi) and his pseudonym (Pseudonym: Chinese: 号; Pinyin: Hao.) is Yang Yuan (Chinese: 养园, literally means to cultivate a garden). He is the founder and tenured professor, doctoral supervisor at Shanghai University of Traditional Chinese Medicine (SHUTCM), a Representative inheritor for China intangible cultural heritage—acupuncture and moxibustion. Prof. Li also serves the Expert committee of Shanghai academy of Chinese medicine. In addition, he is a distinct Traditional Chinese medicine (TCM) Physician in Shanghai and also in China, a consultant of the World Federation of Acupuncture - Moxibustion Societies, a well-known TCM and acupuncture educator across the country and a State council expert for special allowance since 1992.

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PART 2. THE LINEAGE OF CHINESE STUDIES

Traditional Chinese culture and TCM are rooted in each other and inseparable. The study of Chinese culture, language, literature, philosophy, and history is known as *Guo Xue*, literally "national studies" or Chinese studies. Prof. Li Ding is regarded as a great master of *Guo Xue* in the field of TCM. There were two streams feeding into his lineage of Chinese studies as follows:

THE LI FAMILY LINEAGE OF CHINESE STUDIES

As the first part of this article^[1] mentioned that Prof. Li Ding came from a TCM family, he spent his childhood learning traditional Chinese culture and medicine from his father, my grandfather, a Taoism scholar, and Confucian TCM doctor Li Chengzhi [Figure 2].

Li Chengzhi is a student of Mr. Xu Lifu (徐理夫), who was a famous scholar in ancient Chinese culture. In the 1940s. Mr.

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Li Chengzhi organized workshops for young students to learn Chinese culture in the Li's family temple [Figures 3 and 4].

During the later years of anti-Japanese war, thanks to Lifu's recommendation, my grandfather Li Chengzhi worked as an editor in *Shanghai Mingshan Publishing House*, which was sponsored by Zhang Zaiyang (1873–1945), the former governor of Zhejiang Province [Figure 5].

After retirement from his political career, Zhang Zaiyang turned to charity and the study of Taoism. In addition to devoting himself to the publishing work, Chengzhi learned Taoism and qi-gong from Zaiyang [Figure 6].^[2]

As an editor, Chengzhi published some Confucian, Buddhist, and Taoist classics and related prints, such as the famous Nei Jing Tu (《内经图》 Inner Landscape)." It is a surreal bucolic landscape painting that alludes to the organ-systems and represents the physiology of human metabolism. When TCM is at its best, culture, literature, and health care are not divorced, imagination and analysis are not estranged, and human achievements are holistic and wholesome [Figure 7].



Figure 1: Professor Li Ding (李鼎)



Figure 3: The Guo Xue workshop at the Li's family temple (built in 1506)

Li Ding studied under his father Chengzhi from a very young age, and this strict homeschooling laid a solid foundation in Chinese studies. Li Ding quickly became like Chengzhi, especially proficient in ancient Chinese poetry and calligraphy [Figures 8 and 9].

LI DING'S LINEAGE OF CHINESE STUDIES BEYOND THE FAMILY

Dr. Liu Minshu (1897-1960) and Dr. Yang Shaoyi (1888-1948)

Just before the end of the Anti-Japanese War, Li Ding and his father Chengzhi moved to Shanghai. In 1945, Li Ding started to learn Chinese medicine from two great Sichuanese TCM doctors: Liu Minshu (1897–1960) and Yang Shaoyi (1888–1948) [Figures 10 and 11].

Both physicians were students of a great master of ancient Chinese studies: Liao Ping (1852–1932) [Figure 12].

Liao Ping (1852-1932)

After being born in Sichuan province in 1852, Liao Ping studied Chinese classics throughout his life, made academic

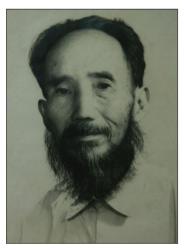


Figure 2: Prof. Li's Father Li Chengzhi (李成之 1909-1987)



Figure 4: Chengzhi's teaching material: Kang *Xi Zi Dian* (《康熙字典》 *Kangxi Dictionary*)



Figure 5: The Governor of Zhejiang Province and Li Chengzhi's Mentor: Zhang Zaiyang (张载阳 1873–1945)



Figure 7: The Nei Jing Tu (《内经图》Inner Landscape) published by Ming Shan Publishing House^[3]

contributions that surpassed his predecessors, and built up a theoretical system of classics that integrated ancient and modern theories of Chinese studies with their Western counterparts. He played an important role in shaping several modern Chinese academic fields.

Zhang Zhidong (1837–1909) and Wang Kaiyun (1833–1916)

Liao Ping's teachers were Zhang Zhidong [Figure 13] and Wang Kaiyun [Figure 14], both of them were great masters of the Confucian classics.



Figure 6: Li Chengzhi's Taoist Collection: *Wu Xing Qiong Yuan* (《悟性穷原》)

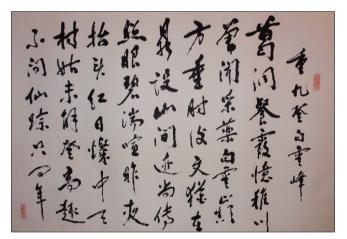


Figure 8: A classical Chinese poem composition: Li Chengzhi Calligraphy: Li Ding

Zhang Zhidong (1837–1909)

Along with Zeng Guofan (曾国藩 1811–1872), Li Hongzhang (李鸿章 1823–1901), and Zuo Zongtang (左宗棠 1812–1885), Minister Zhang Zhidong (张之洞) was one of the "Four Famous Reformist Ministers in the Late Qing Dynasty (1636–1912)." He was a leader of the Westernization Movement, advocating a national policy of "Traditional Chinese values aided with modern Western management and technology."

Zhang Zhidong sang high praises of Liao Ping's knowledge in Confucian classics and accepted him as his apprentice, and, in 1876, enrolled him in the famous academy of classics (尊经书院), which Zhang Zhidong had founded 2 years earlier [Figure 15].^[4]

Wang Kaiyun (1833–1916)

Three years after Liao Ping's arrival, Zhang Zhidong recruited Wang Kaiyun came to preside over the academy of classics (from 1879 to 1887). Their perspectives on the Confucian classics played an important role in guiding the formation of Ping's worldview.

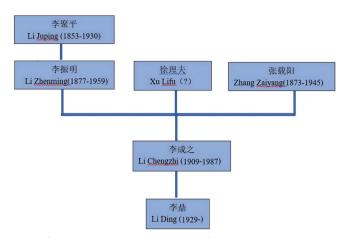


Figure 9: The Lineage chart of Li family's Chinese studies



Figure 11: The Teacher of Li Ding: Dr. Yang Shaoyi (杨绍伊 1888-1948)



Figure 13: Master Liao's teacher Zhang Zhidong (张之洞 1837-1909)

Also, due to his Confucian erudition, Kaiyun also served as an advisor to Zeng Guofan, who was another one of the "Four Famous Reformist Ministers of the Late Qing Dynasty," alongside Zhidong. Zeng Guofan was a shaper of late-19th-century Chinese public policy, advancing the Tongzhi Restoration (1862–1874) period of the self-strengthening



Figure 10: The Teacher of Li Ding: Dr. Liu Minshu (刘民叔 1897-1960)



Figure 12: The teacher of Drs. Liu and Yang: Liao Ping (廖平 1852–1932)



Figure 14: Master Liao's teacher Wang Kaiyun (王闿运 1833-1916)

movement (1861–1895), which set China onto the path of modernization.

From this overview of his lineage tree of Chinese studies [Figures 9 and 16], we can see that Li Ding has never been just a high-level Chinese medical practitioner, his Chinese

medical education is entwined with a broad cultural education. Going back a few generations, we see a lively mix of TCM physicians and Confucian scholars, each of whom contributed to advancing the modernizing march of China, whether by improving the health of individuals, or by improving public health and civic vitality via politically and socially engaged application of the evolving Confucian tradition to the problems of their days. This also vividly reflects a saying from Fan Zhongyan (范仲淹 989–1052) [Figure 17] in the Song Dynasty (960–1279): "Nor to be a good prime minister, then to be a good doctor". His another well-known saying: "Be the first to bear the world's hardship, and the last to enjoy its comfort" inspired Chinese people for a thousand years.

In summary, Professor Li Ding's inheritance of Chinese studies originated from the Li family, sublimated from apprentice studies, and eventually reflected Chinese Confucian tradition.

PROF. LI'S POETRY AND CALLIGRAPHY

Just as, in the collective past of his father and masters, we see a mix of medicine, classics, and civic engagement. Deeply



Figure 14: Academy of classics (尊经书院)



Figure 17: Fan Zhongyan (范仲淹 989-1052)

rooted in Chinese culture, TCM draws synergistically from both the natural sciences and the humanities. Practically, all of the ancient renowned Chinese physicians were polymaths, commanding a mastery of *Guo Xue* as well as of clinical practice. Professor Li Ding is no exception. Drawing from both his father and the lineage of Chinese studies beyond the family, Li Ding was immersed in traditional Chinese culture from infancy, and so he is quite well-read and excels in calligraphy and writing. Over the last 50 years, he has composed more than a hundred poems and myriad calligraphic writings, some of which now grace the campus of the SHUTCM [Figures 18 and 19].

A quote from Da Xue (《大学》The Great Learning): "The way of the great learning involves manifesting

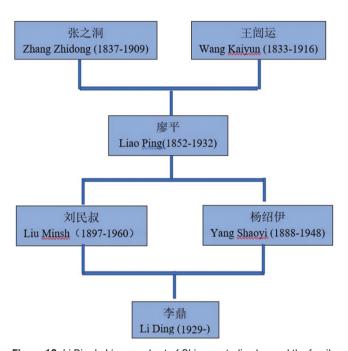


Figure 16: Li Ding's Lineage chart of Chinese studies beyond the family



Figure 18: The Shanghai University of Traditional Chinese Medicine Motto, composed by Prof. Li Ding: "Diligence, benevolence, realism, innovation"



Figure 19: Li Ding's Calligraphy, on display at the International Education College of Shanghai University of Traditional Chinese Medicine



Figure 21: Prof. Li Ding's commemorative calligraphy for the 60th anniversary of Shanghai University of Traditional Chinese Medicine

virtue, loving the people, and abiding by the highest good [Figure 19]."

Prof. Li Ding's poetry had been collected, and published by the SHUTCM Press in 2009, entitled *Xing Yuan Shi Pa* (《杏苑诗葩》 *The Brightest Flowers in an Apricot Garden*) [Figures 20 and 21].

A quote from (the eminent defender of public health against the opiate crisis that led to the First Opium War) the Qing reformist minister Lin Zexu (林则徐 1785–1850) [Figure 22]: "Just as all rivers run into sea, its greatness contains everything. A thousand all cliffs stand here, it's firm without desire".

Translator: Chouping Han (韩丑萍)

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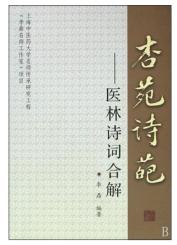


Figure 20: Li Ding's Poetry Xing Yuan Shi Pa (《杏苑诗葩》 The Brightest Flowers in an Apricot Garden)



Figure 22: Lin Zexu (林则徐 1785-1850)

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Appreciation of One Prescription by Jin Zijiu (金子久)

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Abstract

Jin Zijiu (金子久), taught by his father Jin Zhishi (金芝石), is a famous doctor in the late Qing Dynasty and the early Republican period (1840– 1928). With remarkable medical skills and high medical ethics, Jin Zijiu has lots of students and is especially good at treating warm diseases. By analyzing one prescription of Jin Zijiu preserved in Shanghai Museum of Traditional Chinese Medicine (上海中医药博物馆), this article explains his academic thought and clinical experience and shows his superb literary and artistic accomplishment.

Keywords: Academic thought, Jin Zijiu (金子久), Chinese medicine, medical record, literature research, Shanghai Museum of Traditional Chinese Medicine (上海中医药博物馆), prescription

BRIEF INTRODUCTION TO JIN ZIJIU AND HIS MAIN **ACADEMIC THOUGHTS**

Jin Zijiu (1870–1921) is a famous doctor in the late Oing Dynasty and the early Republican period (1840–1928), whose another first name is Youheng. His ancestral home is in Hangzhou, Zhejiang Province. Later, he moved to Dama in Deqing County, Zhejiang Province (now in Dama Town, Tongxiang City, Zhejiang Province). Therefore, the later generations often called him Dama Jin Zijiu. Since the Southern Song Dynasty (1127–1279), the Jin family had been practicing medicine for generations. Jin Zijiu is intelligent and diligent and had learned medicine from his father Jin Zhishi since childhood. When he was 16 years old, he was able to practice medicine in the countryside. When he was 20, his parents passed away one after another. To overcome the loss and pain, he worked harder than before. After several years, he was famous for his accurate syndrome differentiation and remarkable curative effect. In 1915, Jin Zijiu provided medical service for patients regularly in Hunan Charity located in Dongjiadu of Shanghai, regardless of their identity. For orphans and widows, he gave them free treatment and subsidized medical expenses until the patients recover. In his later years, Jin Zijiu provided medical service in "Wensong Hall" in his hometown Dama, which was crowded with patients

Jin Zijiu devoted his whole life to clinical diagnosis and treatment and had no time to write many books. Only three books were handed down: Jin Zijiu Yi An (《金子久医 案》The Medical Records of Jin Zijiu), He Huan Yi Feng (《和缓遗风》Being like He and Huan), and Wensong Tang Yi An (《问松堂医案》The Medical Records in Wensong Hall). There are four volumes in The Medical Records of Jin Zijiu (separate edition).^[3] Being like He and Huan was

and visitors. His remarkable medical skills and high medical

ethics attracted more than 150 people to learn medicine from

him. His students and inheritors were mainly in Jiangsu,

Zheijang, Shanghai, Anhui, Hubei, Guangdong, and other

places. He taught the students that "it is the duty of doctors to

treat patients, which should not be constrained by place and

time. If there is a patient in need, doctors should go to make

diagnosis and give treatment. Don't ask other things before the

treatment finished." "As a doctor, we should study hard and be

good at thinking, instead of being limited to certain theories or

methods or ridiculing your peers. If we have more experience

now, we will have less mistakes in future." These words give

a glimpse of his attitude to being a doctor [Figure 1].[1,2]

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recorded in San San Yi Shu (《三三医书》Double Three

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and Three Medical Collection) by Qiu Qingyuan. [4] In 1923, The Medical Records in Wensong Hall was published in the Journal of Traditional Chinese Medicine issued in Shanghai. [5] A large number of medical records and prescriptions of Jin Zijiu are still in existence, which are well deserved to be studied and appreciated by later generations. By sorting out and generalizing his medical records, predecessors summarized the academic thoughts and clinical experience of Jin Zijiu: (1) attaching importance to yin-yang theory and five-phase theory, and guiding the syndrome differentiation and treatment with the two theories in clinic; (2) paying attention to the concept of holism, seeking for the unity of the heaven and humanity, and giving prescription according to the conditions of patients, time, and place; (3) taking a comprehensive analysis of four examinations in the diagnosis and treatment of diseases, especially the pulse condition; (4) making good use of zang-fu theory, especially focusing on the physiological functions of the kidney (the root of innate endowment) and spleen (the root of acquired endowment), and emphasizing the academic thought of nursing the innate endowment and acquired endowment; (5) paying attention to the ascent and descent of qi movement and taking flexible methods in clinical treatment; and (6) having a preference for the materia medica with clear property and ancient prescription in the treatment, attaching importance to the processing of materia medica, and absorbing folk prescriptions and empirical prescriptions [Figures 2-5].^[6]

ONE PRESCRIPTION BY JIN ZIJIU

Many prescriptions by Jin Zijiu are handed down. This article selects one of them collected by Shanghai Museum of Traditional Chinese Medicine for appreciation:

By diagnosis, the pulse is wiry, slippery, and feeble. A wiry pulse implies the excess of liver qi, and slippery pulse indicates phlegm. As for the tongue texture, there are slight stasis in the tongue, white and scanty coating in the root of the tongue, and peeled coating in the front part. The liver pertains to wood, which is characterized by resolution. If there is no

Figure 1: The statue of Jin Zijiu

water to moisten the liver, it will be dry, which will result in eye problems like blurred vision. In addition, pathogenic wind-dampness invades the liver meridian result in limb soreness. Wood pathogen counter-restricting metal leads to cough with choking, and the downward flow of dampness results in red urine. It can be treated by subduing liver yang, dispelling wind, and draining dampness.

Raw Shi Jue Ming (石决明 Concha Haliotidis) 50g, Bai Xing Ren (白杏仁 Armeniacae Semen Amarum) 9.38g, Zuo Qin Jiao (左秦艽 Radix Gentianae Macrophyllae) 6.25g, Ming Tian Ma (明天麻 Rhizoma Gastrodiae) 4.69g (stir-bake with adjuvant), Xian Ban Xia (仙半夏 Rhizoma Pinelliae) 4.69g, Si Gua Luo (丝瓜络 Retinervus Luffae Fructus) 9.38g, Fen Dan Pi (粉丹皮 Moutan Cortex) 4.69g, Fried Zhu Ru (竹茹 Caulis Bambusae in Taenia) 6.25g, Fried Chu Ju (滁菊 Chrysanthemi Flos) 4.69g, Yun Fu Ling (云茯苓 Poria) 12.5g, Sang Ya (桑芽 Fructus Mori Germinatus) 15.63g, etc.

At the bottom left corner, there is a seal with the words "collected in Shanghai Museum of Traditional Chinese Medicine" [Figure 6].^[7]

In the case, the patient has the following symptoms: blurred vision, cough with choking, red urine, sour limbs, slight stasis in the tongue, white and slimy fur in the root of tongue and peeling fur in the front part, and string-like, slippery and feeble pulse. In Linzheng Zhinan Yi'an "Gan Feng" (《临 证指南医案 • 肝风》 Case Records as a Guide to Clinical Practice "Liver Wind"), there is the record that "liver is a viscus of wind and wood and there is ministerial fire attached. It is yin in property and yang in function. In addition, liver is a resolute zang organ and governs movement and rise. It depends on kidney to nourish and blood to moisten."[8] Jin points out that "In five elements, fire restrains metal. Lung pertains to metal and metal engenders water. Therefore, if the lung disease lasts for a long time, the kidney will be affected. If the kidney-water is not sufficient, the liver-wood will not be nourished, and then the kidney-fire is easy to ascend and



Figure 2: Jin Zijiu Yi An (《金子久医案》The Medical Records of Jin Zijiu)



Figure 3: The contents of The Medical Records of Jin Zijiu



Figure 5: The Journal of Traditional Chinese Medicine (《中医杂志》)

the ministerial fire attached to the liver will be predominant, which is the source of lung injury, and also the germination of depletion syndrome." For this patient, as liver-wood cannot be nourished and the ministerial fire attached to the liver ascends to torment lung-metal, there is the symptom of cough with choking. That is, "wood restricts metal to sound." Moreover, as liver opens at the eyes and liver fire flames upward, there is the symptom of blurred vision. In addition, pathogenic wind-dampness invades the vessels and collaterals. The syndrome of stasis obstructing the vessels and collaterals is manifested as having an ache in limbs. The stasis in the tongue indicates blood stasis. A wiry pulse implies the excess of liver qi, and over time, the stagnant qi will transform into fire. A slippery pulse indicates internal phlegm-dampness and dampness-heat complex, which flow downward to the bladder and then result in red urine. A white and scanty coating in the root of the tongue and peeling fur in the front part show that the phlegm-dampness has not been resolved and there is the damage of qi and yin in the stomach, which suggest that the patient has a long duration of disease. By comprehensive analysis of four examinations, it can be diagnosed as the pattern

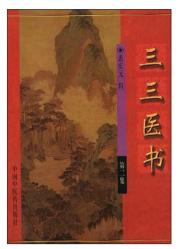


Figure 4: San San Yi Shu (《三三医书》Double Three and Three Medical Collection)



Figure 6: The seal of Shanghai Museum of Traditional Chinese Medicine

of ascendant hyperactivity of liver yang and wind-phlegm and dampness obstruction, which can be treated by pacifying liver, subduing yang, dispelling wind, and draining dampness. In this prescription, Tian Ma (天麻 Rhizoma Gastrodiae) act on liver meridian. Tian Ma has the function of repressing and pacifying liver yang. The combination of Tian Ma, Ban Xia (半夏 *Rhizoma Pinelliae*) and Fu Ling (茯苓 *Poria*) can dispel wind-phlegm. The combination of Tian Ma, Qin Jiao (秦艽 Radix Gentianae Macrophyllae) and Si Gua Luo (丝瓜 络 Retinervus Luffae Fructus) can relieve the discomfort in joints caused by wind-dampness. The dosage of Si Gua Luo should be large. Shi Jue Ming (石决明 Concha Haliotidis) can clear away fire and soften wood. The combination of Shi Jue Ming and Chao Chu Ju (炒滁菊 Chrysanthemi Flos) can clear the liver and improve vision. In addition, Chao Chu Ju has the function of repressing and pacifying liver yang. Xian Ban Xia (恒半夏 Rhizoma Pinelliae) can regulate qi and resolve phlegm, which is the main herbal medicine for dampness-phlegm syndrome. The combination of Xian Ban Xia and Fu Ling (茯苓 Poria) is effective for cough with choking. The combination of Xian Ban Xia and Bai Xing Ren (白杏仁 Armeniacae Semen Amarum) can warm and resolve cold-phlegm. Moreover, the combination of Xian Ban Xia and Chao Zhu Ru (炒竹茹 Caulis Bambusae in Taenia) has the function of clearing and resolving heat phlegm. It can be inferred that the patient's syndrome of having phlegm is caused by cold-heat complex. Fu Ling (茯苓 Poria) has the function of inducing diuresis to drain dampness and fortifying the spleen to tranquilize, which is effective for treating the syndrome of water-dampness retention. Bai Xing Ren (白杏 仁 Armeniacae Semen Amarum), together with Sang Ya (桑 芽 Fructus Mori Germinatus) can relieve the cough caused by wood-fire tormenting metal. Fen Dan Pi (粉丹皮 Moutan Cortex) has the function of clearing heat, cooling blood, activating blood, and dissipating stasis, which is effective for relieving the stasis and obstruction of vessel and collaterals.

This case embodies Jin Zijiu's medical thoughts of using the interaction among five elements (engendering, restraining, overwhelming, rebellion) to guide syndrome differentiation, as well as attaching importance to meridian entry and taking flexible methods in clinical practice. From this prescription, we can see that Jin not only has profound medical attainments but also has deep knowledge of literature. The medical cases were written in cursive style and freely flowing style, which is pleasant to eyes. Moreover, the comments were written in the pattern of parallel prose, which makes it easy to be read. Qin

Bowei once gave a comment that "with profound knowledge, he is a quite well-known doctor. His comments were generally written in the pattern of parallel prose with thousands of words, which was unique in that time".^[6]

Translator: Lin Su (苏琳)

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