APPENDIX 2

The Four Great Schools of TCM in the Jin-Yuan dynastic period

The contemporary practice of traditional Chinese herbal medicine is in large part based upon the theories and practices of the Jin-Yuan masters, together with the works on Warm-febrile diseases *(wen bing)* by Wu You-xing and Ye Tian-shi (mid-17th century) and those on Cold-induced diseases *(shang han)* by Zhang Zhong-jing (circa 150 - 219 CE). The methods of diagnosis as well as prescribing of herbal medicines (i.e. by modification of one or more classical formulas to suit the unique requirements of an individual patient) are mostly derived from these influences.

During the Jin-Yuan dynastic periodⁱ Chinese medicine entered a phase of rapid growth and development, largely due to the achievements of four eminent physicians: Liu Wan-su (a.k.a. Li Shou-zhen), Zhang Cong-zheng (a.k.a. Zhang Zi-he), Li Gao, (a.k.a. Li Dong-yuan) and Zhu Zhen-heng (a.k.a. Zhu Dan-xi)ⁱⁱ. These eminent physicians are often referred to collectively as the 'Jin-Yuan reform doctors'.

Although later scholars classified their contributions into 'Four Great Schools' of TCM, it is more accurate to regard them as major currents of thought in the continuing development of TCM. Each of the protagonists specialized in a particular area of medicine, developing and refining theories relating to the origin, development and treatment of specific types of disorders. They also added to our knowledge of the material medica, by providing detailed analyses of specific herbs and classes of herbs that may be used in certain conditions. In addition, they each continued to develop the seminal ideas of the great TCM Classics (namely, the Nei Jing and Shang Han Lun), so that our present understanding of TCM theory and basic principles is mostly a result of their research and written commentaries. For these reasons, it would be incorrect to restrict the achievements of these eminent physicians and their followers to the principles and practice of the area of medicine represented by their particular 'school'.

While there is ample recorded information regarding their ideas and clinical experience, there is generally little information about the circumstances of their lives, and much of this is contradictory. The following is pieced together from materials available up to 2010. We begin our historical journey with the predecessor to the famous four: Zhang Yuan-shu.

The YI SHUI school, attributed to Zhang Yuan-su (a.k.a. Zhang Jie-gu), 1151-1234

Beginning in the Song dynasty and continuing into the Jin-Yuan dynastic period (roughly from the 11th to 14th centuries), the Chinese government set up

organisations to oversee the collection, manufacture, dispensing and sale of herbal formulas. This work was initiated by the second emperor of the Song dynasty (tai ping xing guo), after whom the renowned 'Formulary of the Tai Ping Welfare Dispensary Bureau' (tai ping hui min he ji ju fang) was named. This was a time of medical conservatism in which the prevailing trend was to hark back to the 'golden era' of Chinese medicine of the Han dynastic period. Patients were mostly treated with standard formulas, much of them ready prepared. Theories of disease causation, which were taken from the Shang Han Lun and the Nei Jing, were interpreted and applied very narrowly.

The politically unstable Jin-Yuan period brought many profound cultural changes, in particular the development of neo-Confucianism, which adopted some of the naturalistic features of Taoism. Medical thinking was also influenced by this movement, away from the conservative and rigid doctrines of the past, and there was considerable impetus toward the development of a new understanding, especially in regard to disease causation and treatment principles. The first of such medical reformers was Zhang Yuan-su (a.k.a. Zhang Jie-gu, circa 1151-1234), who set the stage for the proponents of the four schools.

Zhang broke with tradition by teaching that contemporary diseases should not be treated with ancient, and hence obsolete, formulations. According to his book 'Explanation of Medicine' (*Yi xue qi yuan*) published in 1186, he held that 'the prescriptions of the past are not appropriate for the illnesses of today'; contemporary diseases should be approached differently because the conditions, both social and geographical, were no longer the same. His books provided an explanation of the new methodology for understanding and using herbs and also for designing prescriptions. Although he did not reject the earlier formulas or methods of formulation he emphasized the necessity to make suitable modifications in order to update the earlier approaches in light of the current medical conditions.

In addition to presenting ideas about disease causation, Zhang integrated the principles of acupuncture with the principles of herbal medicine. He incorporated medicinal substances into the five Elements framework, which was the primary organizing principle of acupuncture theory at the time. In particular, he helped to more clearly define the association of the flavor of each herb and its effects on the different internal organs. Zhang also initiated the concept of herbs entering into and influencing the Channels, a description that is still included in modern Chinese herbal texts. This was done in an effort to link the physiological effects of herbs with the concept of pathogens influencing particular Channels, as first recorded in the Nei Jing. This interpretation also links the actions of herbs with the effects induced by acupuncture. Thus, his work expanded and consolidated the relationship between theories of disease causation and treatment methodology. Moreover, his unique contribution was to unify the practices of herbal medicine and acupuncture, two fields that had, up until this time, remained largely separate despite coexisting within the same medical culture.

Medical scholars named his teachings the Yi Shui School, after his native district in Hebei province. Zhang's teachings had a notable influence on all four Jin-Yuan reform doctors, although it was mostly indirect (i.e. through his books), except in the case of Li Gao, the initiator of the Tonifying Earth School, whom Zhang taught personally.

COLD AND COOLING (MEDICINES) SCHOOL (han liang pai), led by Liu Wansu (a.k.a Liu Shou-zhen), 1120-1200

Liu was also a native of Hebei province and a contemporary of Zhang Yuan-su, thirty years his senior. According to one biographer, Liu decided to take up the study of medicine when his mother fell ill and died for lack of treatment. When Liu was 25, he began his study of the medical classics, Nei Jing and Shang Han Lun as was the customary procedure for anyone wishing to become a doctor. Study involved complete memorization of the text, following which one sought a suitable teacher who would explain how the concepts were applied in practice. Liu continued his study while developing his own ideas over the subsequent 30 years. He wrote two books, one a study of the Nei Jing and the other a study of the Shang Han Lun, in which he elaborated his new theories, which had brought him notable success in clinical practice.

In the preface to one of his books he writes:

"When I was twenty-five I directed my aspirations to the Nei Jing. Day and night I never put the book aside. When I was nearly sixty I chanced to meet a celestial man, who gave me a beautiful wine to drink. I had only about a chestnut-hull's full, but my face turned red as though I were drunk. After I awoke my eyes were perceptive and my mind keen; I had been greatly illuminated".

Liu observed the high frequency of fever and inflammation in serious diseases and therefore promoted the idea of using herbs of a cooling nature to treat these conditions. This went against the prevailing views of practitioners at this time, who based their treatments on the formularies of the Song Imperial Bureau of Medicine, which focused mainly on using warming herbs.

Liu's ideas centered on the activities of the five Elements (Wood, Fire, Earth, Metal, Water) and the influence of the six pathogens (Wind, Cold, Summer-Heat, Damp, Dry and Fire) as discussed in the Nei Jing. He taught that all of the six pathogens eventually manifest as pathogenic Fire. The Shang Han Lun, which deals with febrile illnesses due to Cold, explains how the Cold pathogen could transform into Heat, or undergo a process of mutual assimilation with Fire and Heat to develop into a syndrome characterized by Fire. From his studies as well as clinical experience, he concluded that the essential force underlying all of the six pathogens was Fire. Thus, he devised treatment strategies that employed Cooling and Cold natured herbs.

However, far from maintaining a dogmatic approach, Liu's position was that treatment should be designed according to the time and place, taking into

account the influence of the environment, the condition of the patient, and the clinical manifestations of the disease, while remaining aware that pathogenic Fire may be an underlying factor. His unique approach to diagnosis and treatment proved effective in clinical practice and he gained a reputation for his expertise. As a consequence, he attracted students, several of whom went on to become prominent physicians, developing Liu's theories and, in the case of Zhang Zhi-he, establishing a new 'school'. Another consequence of Liu's fame was that he was invited three times by the Jin emperor to practice medicine at the imperial court. However, each time he turned down the offer and chose instead to practice medicine for the people.

Among Liu's famous formulas were Six to One Powder (*liu yi san*), made of talc and licorice in a 6:1 ratio, as well as several variants of this formula. He also devised Siler and Platycodon Formula (*fang feng tong sheng san*), a complex formula for clearing both Interior as well as Exterior Heat, which is extensively used in China and Japan to this day. Liu's approach had much influence on the later concept of Wen Bing (epidemic febrile diseases), which corresponded to (and also preceded) the Western concept of contagious diseases. In addition, his essential ideas were incorporated and expanded upon by the other three Jin-Yuan masters who followed him.

PURGE THE PATHOGEN SCHOOL (gong xie pai), led by Zhang Cong-zheng (a.k.a Zhang Zi-he), 1156-1228

Zhang was strongly influenced by Liu Wan-su's teachings, although it is not clear whether or not he had direct personal contact. According to his writings, he had the utmost respect for Liu and based his clinical practice on Liu's approach. A native of Henan Province, he achieved renown for the efficacy of his treatments. He focused on diseases due to invasion by exogenous pathogens: the six pathogens of heaven (Wind, Cold, Summer-Heat, Damp, Dry, and Fire) and the six pathogens of earth (fog, dew, rain, hail, ice, and mud). He also placed much emphasis on disease due to lifestyle factors, particularly dietary irregularities such as the predominance of one or more of the five flavors (e.g. sour, spicy, sweet).

Removing pathogens (both exogenous and food based) became Zhang's primary focus in treatment. Zhang elaborated on the three traditional approaches to removing pathogens (i.e. sweating, emesis, purgation), by expanding the scope of each therapeutic category. Thus, in order to dispel pathogens through sweating, he made use of moxibustion, acupuncture, massage, steaming, washing and exercise, as well as herbal therapies. The treatment category of emesis was expanded to include all forms of upper body elimination (other than sweating) with therapies that increased or induced salivation, lacrimation, or sneezing. Purgation was expanded to include methods that rid the body of retained fluids (i.e. by diuresis) as well as therapies to expel flatus. He stressed the importance of seasonal and social influences, and the modification of established formulas in accordance with the local conditions. When tonification

was deemed necessary, he preferred relying on dietary therapy rather than herbal medicines.

At around age 65 he was summoned by the emperor to serve in the Imperial Academy of Medicine. However, Zang's character made him out of place in the environment of the imperial court; he had no interest in politics and disliked ritual formalities. Moreover, he loved literature and poetry as well as drinking with his friends. His unique approach to diagnosis and treatment placed him at odds with conventional doctors, who relied mainly on the official formulary. Zhang thought that these formulas placed too much emphasis on tonic herbs and drying aromatic agents. He resigned after four years to return to his hometown in Henan and work as a doctor until his death some seven years later. In his leisure time, he enjoyed discussing medical theory with his friends, which at that time was one of the main ways in which a master physician passed on his teachings. One of these friends, who had also resigned an official position, helped him write his famous work: The (Confucian) Scholar's Duties to the Parents (ru men shi qin).

Although Zhang is not known for any specific herbal formulas, he expanded the use of the materia medica, specifically in regard to the use of herbs that dispel pathogens. His influence is mainly due to his emphasis on certain treatment principles, as well as his criticism of the overuse of tonifying and warming treatments and the tendency to prescribe set formulas without considering the individual presentation and local conditions. In subsequent centuries, Zhang's elimination techniques were freely used by traditional physicians, and were further developed, e.g. by Zhu Zhen-heng, the fourth of the Jin-Yuan masters. However, in contemporary practice, the more extreme forms (e.g. emesis, drastic purgation) have fallen out of favor. It is interesting to note that this aspect of TCM is, in fact, a highly developed branch, which shows many similarities to some of the Western naturopathic therapies that were developed in the early 20th century, as well as some of the techniques of Ayurveda (e.g. the panchakarma therapies).

TONIFYING EARTH SCHOOL (bu tu pai), led by Li Gao, (aka Li Dong-yuan), 1180-1251

In stark contrast to Zhang Zhi-he's approach, Li Dong-Yuan placed great emphasis on tonification therapy, specifically tonifying the Spleen and Stomach (which belong to 'Earth') with warming herbs. This can be explained by the types of disorders that Li saw as well as the local conditions in which he practiced. Li came from a wealthy family in Hubei and was thus able to afford tuition from one of the most famous physicians in the Province: Zhang Yuan-su. Although he had a great interest in medicine, after his studies he became involved in managing the family estate. Then, with the invasion by Mongolian army, he fled from Hubei and during his travels used his medical knowledge to treat the many sick people he encountered - mostly those who were suffering from diseases that arose as a result of war and famine.

As the Jin army advanced South, a serious epidemic broke out within the walled cities, claiming the lives of many thousands of people. The conventional doctors

considered this type of illness to be a *shang han* (i.e. a Cold-induced disorder) and therefore treated their patients accordingly, prescribing Cold-natured herbs to purge Fire when a high fever developed. However, these methods achieved very poor results.

Li came to the conclusion that this type of illness was not a typical *shang han* (Cold-induced disorder). He found that in many such cases, when the body was severely weakened, warming and tonifying treatments were efficacious, in spite of the presence of strong Heat. Moreover, he noted that in these cases the use of Cold natured herbs weakened the internal organs of the Earth Element (i.e. the Spleen and Stomach), and often with dire consequences.

Li noted that the conventional approach with diaphoretic, emetic and laxative methods (to purge the pathogen from the body) resulted very often in an acute turn for the worse, followed by death. Li reasoned that in these cases the febrile illness was primarily due to a deficiency syndrome, brought about through malnutrition, fatigue, anxiety and other endogenous causes. This was a novel idea at the time and one of Li's enduring contributions to TCM.

Li drew a clear distinction between diseases due to injury by exogenous pathogens (wai gan) and diseases due to endogenous causes, which he classified as Internal Injury (nei shang). Li taught that 'exogenous diseases should be treated by purging (or dispelling) the pathogen; Internal Injury, which is due to deficiency, should be tonified. If the doctor fails to recognize the difference between these two and attempts to purge an endogenous disease, the deficiency will be made worse. If the deficiency is made worse (by purging) or if excess is made worse (by tonifying), then the doctor will kill the patient.' These ideas were elaborated in his first major work: 'Treatise on the Differentiation of Endogenous and Exogenous Injuries' (nei wai shang bian huo lun), which was published in 1247 CE

To treat these types of deficiency syndromes he developed the renowned formula Ginseng and Astragalus Combination (bu zhong yi qi tang)ⁱⁱ. Li based his central idea, that disorders mainly originate from damage to the Spleen and Stomach, on the zang-fu syndromes developed by Zhang Yuan-su. As indicated in the Nei Jing, the Qi of the Stomach provides the basis for the maintenance of the whole body, and this association led naturally to Li's main concept. Li believed that the cause of injury to the Spleen and Stomach was threefold: improper food intake (e.g. excess amounts of cold, raw, fatty, or unclean foods; or insufficient food), overstrain, and mental irritation (extremes of emotion that generate Heart Fire, which injures the Spleen). He recognized the syndrome of 'Spleen Qi Sinking', and devised specific treatments to raise the Qi, e.g. Ginseng and Astragalus Combination (bu zhong yi qi tang).

In addition to drawing attention to tonification of the Stomach and Spleen, Li also described syndromes of fever due to Qi or Yang deficiency. This concept was not very well understood in his time, as one would generally expect signs of Cold to

manifest in these clinical scenarios. His second major work: 'Treatise on the Spleen and Stomach' *(pi wei lun)*, published in 1249 CE, elaborates on these and related ideas.

His teaching in regard to Yin Fire syndromes, in which fever and other signs of Heat or Fire can arise from Spleen Qi deficiency goes as follows. In much the same way that the smoldering embers of a fire provide a steady source of heat for cooking the contents of a pot suspended above it, the steady 'smoldering' nature of the minister Fire^{iv} activates the metabolic processes of the body only when it remains subdued in the lower Jiao.

One of the functions of the original Qi (yuan qi)^V is to keep the minister Fire stored in the lower Jiao. However, if the Spleen and Stomach are deficient, they may become unable to produce sufficient Qi to adequately replenish the original Qi, which will then become depleted as it is expended through its normal daily functions. Thus, the original Qi 'collapses' into the lower Jiao and becomes unable to rise up and carry out its functions throughout the body. This causes the minister Fire (also referred to as the 'Yin Fire') to become 'agitated' and rise upward, invading the middle Jiao and/or the upper Jiao, leading to a variety of Heat or Fire syndromes that are centered on the middle or the upper Jiao. This phenomenon is referred to as a 'Yin Fire' syndrome, which is a pathological manifestation of the minister Fire, and is the end result of Spleen Qi or Spleen Yang deficiency.

Another great contribution that Li made to TCM pharmacology and our understanding of the Chinese materia medica has to do with his use of several herbs that are traditionally classified as Exterior releasing herbs (i.e. diaphoretic herbs that expel exogenous Wind). Up until his time, their clinical application was restricted to the treatment of externally contracted conditions. Li focused on their ability to regulate the movement of Qi in the body. These herbs have an 'ascending-floating' direction of action, which means that they move the Qi in an upward and outward direction. Li discovered that by using certain of these herbs in low doses, together with Spleen Qi tonifying herbs (particularly those with an ascending direction of action such as Astragalus *huang qi* and Ginseng *ren shen*) the normal Qi movements of the middle Jiao^{vi}, and hence those of the whole body, may be corrected. This is exemplified in his famous formulas: 'Ginseng and Astragalus Combination' (bu zhong yi qi tang) and 'Yang Ascending and Stomach Nourishing Decoction' (sheng yang yi wei tang).

The main formulas that Li developed for posterity include: 'Ginseng and Astragalus Combination' (bu zhong yi qi tang), 'Yang Ascending and Stomach Nourishing Decoction' (sheng yang yi wei tang), 'Ginseng and Ophiopogon (or Dangshen and Ophiopogon) Formula' (sheng mai san)^{vii} which is widely used in modern Chinese hospitals, and 'Formula to Nourish the Blood with Dang Gui' (dang gui bu xue tang).

NOURISHING YIN SCHOOL (zi yin pai), led by Zhu Zhen-heng (a.k.a. Zhu Dan-xi), 1281-1358

Zhu Zhen-heng was a native of Zhejiang province, where his influence is still very much alive to this day. In effect, he brought together the teachings of the other Jin-Yuan masters and molded TCM theory and practice into its contemporary form. Zhu came from a strongly Confucian background. However, it was not until the age of thirty six that he settled down to devote himself to scholarship and the Confucian ideals of benevolent service to society. Under the tutelage of Xu Wen-yi he became a diligent student, studying the classics assiduously, often through to the early hours. He originally intended to sit for the imperial examination and enter a government career, but decided to serve society by becoming a doctor, most likely because of his disappointment with local medical practitioners. Both his mother as well as his teacher had become severely ill and could not be cured even after prolonged treatment.

After studying the classics (primarily the Nei Jing and the Shang Han Lun), he studied Zhang Zi-he's book but found it to be inconsistent with the classics. He began to seek for a good teacher, and decided on Luo Zhi-di, a famous physician in Hangzhou. Luo was skilled in the methods of the Jin-Yuan masters, Lui, Zhang and Li. However, he was initially reluctant to take on Zhu as a student. Zhu wrote: 'In the summer of 1324, I heard of Luo I went up to visit him. I was rejected and scolded more than five, even seven times. I got nowhere (in establishing a relationship with Luo) for more than three months until he finally favored me with an interview.'

A biographer records that Zhu 'stood at Luo's gateway rain or shine, asking for an interview'. Eventually Luo was convinced of Zhu's sincerity and agreed to teach him. Over the next few years Zhu memorized the classics, including the works of the Jin-Yuan masters, and assisted his teacher in clinic. In this way Luo would explain the practical meaning of the traditional as well as the more contemporary texts. His studies went well, and he became a noted physician within a short time. He was able to successfully treat his mother as well as his old teacher, finally curing them of their chronic illnesses. His clinical skills developed to such a level that he earned the nick-name 'one-dose Zhu' because he could often cure patients with a single dose of herbs.

Zhu studied the other three schools of thought that had developed during the preceding decades, and became highly proficient in their methods. In addition, he applied his own genius to discover a unique pathogenic process of disease causation, adding to the development of TCM. According to Zhu, internal Fire or Heat is the underlying force for physiological as well as pathological change in the body. Zhu reasoned that all of the activities of life (i.e. all movements both internal and external) are brought about through the agency of the minister Fire. The minister Fire is different from the sovereign Fire in the Heart; it is a type of Yang Qi that arises out of Yin and exists in the Liver and Kidney (the two most Yin of the zang-organs). It coordinates with the sovereign Fire to promote the various functions of the internal organs. When normal activity is overreached, or

continued to excess, this results in 'stirring' of the minister Fire, which leads to a) the development of pathological Heat or Fire, and b) damage to the Yin, specifically the Kidney Yin.

According to Zhu, Yang is generally in excess during an illness, and this causes the Yin to become deficient. The activity of Fire in the body is increased due to stirring of the minister Fire, and the resultant excess of Yang tends to consume the Yin. In such cases it is important to apply the treatment principle of 'nourishing the Yin' in addition to 'reducing the Fire'. In this way, both aspects of the disease process are addressed, leading to a more rapid and complete resolution of the disease. This is different to the approach promulgated by Liu or Zhang, which only consists of expelling the pathogenic factor; this also diverges from the approach of Li, which focuses on tonifying the Spleen and Stomach in order to control the minister Fire.

Zhu was a strong advocate of appropriate diet and restraint of sexual activity to preserve the Yin. He taught that by nourishing the Kidney Yin, the minister Fire could be kept under control (i.e. remain in the lower Jiao and not flare up to disturb the functions of the middle Jiao or upper Jiao). He also warned against the indiscriminate use of warm natured and pungent (acrid) flavored herbs for the same reasons. Zhu's famous aphorism sums up this theory: 'Yang tends to excess, while Yin tends to deficiency'.

Zhu also contributed to the further development of Zhang's methods of expelling pathogens. He devised formulas for removing pathogens that included some tonifying herbs, together with the eliminating or purging herbs. In this way, he made use of the treatment principles of protecting the Yin, Blood, body Fluids and the Qi, in order to ameliorate the harsh and potentially depleting effects of the pathogen expelling herbs.

Another interesting aspect of Zhu's approach was his classification of diseases into four basic types: Qi disorders; Blood disorders; Phlegm disorders; and stagnation disorders. Thus, he frequently employed four basic formulas as the starting point for prescriptions in his clinical practice: Four Gentleman Decoction (Formula) (si jun zi tang)^{viii} for Qi disorders; Four Substance Decoction (Formula) (si wu tang)^x for Blood disorders; Two Cured Decoction (Formula) (er chen tang)^x for disorders due to Phlegm; and Pill (Formula) to Overcome Stagnation (yue ju wan)^{xi}, for disorders due to stagnation.

Zhu elaborated on the key TCM concept of stagnation, noting that the common manifestations of a disease process (i.e. some sort of pain or discomfort) are generally due to one (or more) of six different types of stagnation: Qi, Damp, Phlegm, Food, Blood and Heat. He also taught that once the Qi has become stagnant, other types of stagnation may more readily develop, particularly Damp, Food, Heat and Blood stagnation. Moreover, Damp stagnation may lead to the development of Heat or Phlegm and then to Damp-Heat, Phlegm-Damp or Phlegm-Heat complexes. Thus, the various types of stagnation tend to be

mutually engendering, and often the process begins with stagnation of the Qi, which, in many cases, may be traced back to the Liver (i.e. 'Liver constraint, Qi stagnation' syndrome)^{xii}.

Many of the formulas that he developed are in common use to this day. Some of his more popular ones include:

- Major Yin Nourishing Pill *(da bu yin wan)*, which nourishes the Yin and clears deficiency Heat or Fire.
- Tiger's Gate Pill (hu qian wan), which is derived from Major Yin Nourishing Pill by adding Peony, Cynomorium, Os tigris, together with Citrus and dry Ginger to help protect the Stomach and Spleen.
- Citrus and Crataegus Formula (bao he wan), which treats food stagnation
- Pill (Formula) to Overcome Stagnation (yue ju wan), which is a base formula for treating various types of stagnation (i.e. stagnation to due Damp, Fire, Blood stasis, retention of undigested Food and stagnant Qi)

ⁱ The Jin and the Yuan were neighboring nomadic non-Chinese tribes who lived to the north-east of the empire during the Song Dynasty before they developed their own powerful kingdoms. The Jin Dynasty was founded by a Tangut tribe in 1115, who subsequently conquered the northern part of China in 1126. This situation prevailed for more than one-hundred years until a strong Mongol army overthrew the Jin in 1234. The Yuan (a.k.a. Mongols) then defeated the Southern Song in 1279, taking over the whole region to found the vast Yuan Empire. During this time China was totally under foreign rule and historians refer to the period as the Jin-Yuan. The Mongols rose to power under the leadership of Genghis Kahn the 13th century. His successor and third son Ogodei (1227-41), who was given the title 'Great Khan', led the Mongol armies into Europe as far as Poland and Hungary. In 1279, it was the grandson of Genghis Khan, Kublai Khan, who founded the Mongol Dynasty, giving it the Chinese name of Yuan, and established his capital in Beijing. Under Mongol rule, the kingdom proved disjointed and divided. There were nine rulers who held the throne during this short period and as a result power was weakened. Chinese officials were once again able to gain a foothold when in 1368 a rebel Chinese group, the Red Turbans, ended the Yuan Dynasty.

ⁱⁱ Up until the beginning of the 20th Century, a Chinese man generally had one or two alternative names in addition to the family-bestowed (ming) name, which was received at birth. According to Confucian doctrine, after a man became an adult, it was disrespectful for others of the same generation to address him by his given (ming) name. Therefore, the given name was reserved for oneself and one's elders, while a 'style' or courtesy name would be used by adults of the same generation to refer to one another on formal occasions or in writing. There were two common forms of style name, the zi and the hao. The zi name was given to Chinese males at the age of 20, marking their coming of age and was mostly disyllabic, consisting of two characters. It was usually based on the meaning of the given name - the idea being that the zi should express one's moral integrity. The hao name was an alternative courtesy name, usually referred to as the 'pseudonym'. It was commonly three or four characters long. The hao was usually self-selected and it was possible to have more than one. It had no connection with one's given name or style (zi) name, but was often a very personal, sometimes whimsical choice, and amongst the well-educated may embody an allusion to the classical literature or contain a rare character. Another possibility was the use of the name of one's place of residence, e.g. Zhu Zhen-heng adopted Dan-xi, the place of his birth as his hao name. The hao name was often used in the title of a writer's collected works.

The literal meaning of the formula name is 'Decoction (formula) to tonify the Qi of the middle (Jiao)'. The minister Fire is the Yang aspect of the Kidney that provides the motive force for the functions of all of the bodily organ systems as well as generating bodily warmth and sexual potency. As the Kidney resides in the lower part of the body (the 'lower Jiao'), the minister Fire should also remain in this location. Because the Fire of the Kidney Yang is secondary to the Fire represented by the Heart, it is referred to as the 'minister' Fire to distinguish it from the 'sovereign' or 'monarch' Fire of the Heart. Because this type of Fire belongs to the Kidney, which represents the Water phase, it is referred to as 'Yin Fire', i.e. the Fire within Water.

^v The original Qi is derived from the Kidney essence and under normal conditions it rises up from the Kidney in the lower part of the body (the lower Jiao) to promote the transformation of ingested solids and liquids into bodily substances and wastes.

vi In health the Spleen Qi has an ascending action, which holds the organs in place and also sends nutrients to the upper part of the body. The Stomach, on the other hand, has a descending movement, sending the products of digestion downward to the Small Intestine and Large Intestine for further digestion and elimination. Common clinical manifestations of disordered Qi movement in the middle Jiao (i.e. Spleen and Stomach) include vomiting, diarrhea, fatigue and indigestion.

viii The literal meaning of this formula's name is 'Formula to Restore the Pulse'.

Also known as 'Four Major Herbs Combination'

ix Also known as 'Dang-gui Four Combination'

^x Also known as 'Citrus & Pinellia Combination'

xi Also known as 'Ligusticum & Atractylodes Combination'

xii Liver constraint commonly arises due to stress and emotional strain.