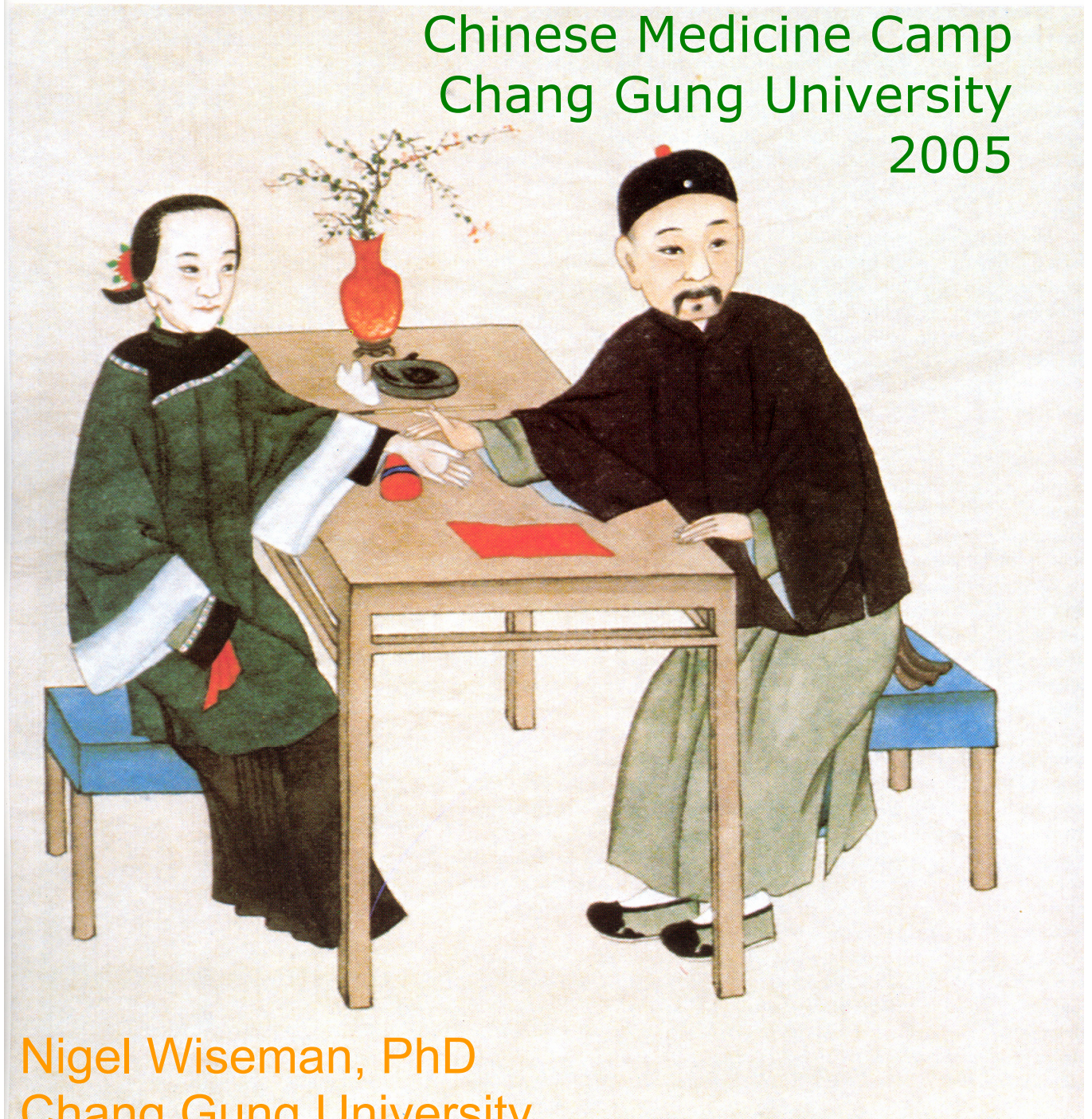


**Revised
Edition**

Introduction to Chinese Medicine

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1. Aims

This brief introduction aims to give you a general idea of the scope and content of Chinese medicine. It describes the basic features of Chinese medicine, drawing attention to how they developed in history, as well as to how and why they differ from the modern biomedical understanding. In this way, we hope to overcome some of the difficulties Westerners—and even modern Chinese—often have when studying Chinese medicine.

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2. Basic Features

Explaining things by natural laws: In the earliest times, the Chinese, as most human communities, often attributed major illness to evil spirits or angry ancestors. As Chinese medicine began to take shape, the notion grew that the body was composed of different organs, that each organ performed different functions to ensure our health, and that disease was a breakdown of these functions for a variety of reasons. This revolutionary notion rested on the observation that the universe and the human body conform to certain natural laws, rather than to the pleasure or wrath of spirits, demons and ancestors. By uncovering those laws, early Chinese physicians were able not only to understand the body and its functions, but also to grasp how disease arises and how it can be prevented and treated.

Similarities to modern Western medicine: The idea of explaining health and sickness by natural laws arose in ancient Greece at roughly the same time as in China. Thus, there are strong similarities between the medical traditions of both East and West. It is not surprising, therefore, that many aspects of Chinese medicine bear a striking resemblance to Western medicine. For example, Chinese medicine, like Western medicine, posits that the lungs constantly expand and contract like a bellows to absorb air necessary for maintaining life. It observes that the digestive tract absorbs nutrients from food and that the kidney is responsible for urine production. It also posits that disease can be caused by pathogens (metaphorically called “evils”) entering the body

from outside or by the breakdown of functions within the body. Diagnosis also follows a similar basic approach, determining the nature of the illness from observable indicators of pathological change. These similarities exist because physicians have tried to explain health and sickness in terms of observable phenomena. This approach holds that phenomena have natural causes and that functions have physical substrata.



Fig. 1. The bottle gourd, a Chinese symbol of medicine

Differences: Despite these similarities, the Chinese description of human physiological and pathological processes differs markedly from that of biomedicine. It holds, for example, that the spleen is the organ chiefly responsible for extracting nutrients from food, whereas Western medicine considers it to be part of the lymph system. Chinese medicine understands the liver to be responsible for storing blood and ensuring the smooth flow of the vital substance qi around the body, rather than, as modern medicine does, to be the body’s chemical factory.

Furthermore, premodern Chinese physicians never understood the role of bacteria and viruses as a cause of disease. They attributed certain diseases to environmental conditions, such as wind, heat, cold, and dampness, but they never developed the technology to observe the microorganisms that Western medicine recognizes as the cause of many diseases. To make sense of these differences, we must understand the cognitive modes influencing the development of medicine in the East and West.

The analytical approach: The attempt to explain physiological and pathological phenomena in terms of physical substrata depends on analysis. In the physiological realm, this requires identifying particular organs and ascribing functions to them. Both Chinese and Western medicine have applied this analytical approach in ascribing functions to organs of the body. However, Western medicine has pursued the analytical approach further. It has divided the organism into smaller and

smaller parts. It has separated organs into their component parts, and explained specific aspects of organ functions in terms of those parts. This detailed analysis only became possible by developing technology to observe objects and phenomena invisible to the naked eye. With the invention of the microscope and the development of biochemistry, Western medicine has been able to uncover a vast amount of detail about how the human body works. In Chinese medicine, the analytical approach never developed beyond the naked-eye observation of phenomena. The kidney, for example, is the kidney; it is not broken down into tubules, medulla, pelvis, etc.

The macroscopic approach: Instead of analyzing everything into ever smaller parts, early Chinese physicians applied the concept of *qi* and the systems of correspondence—*yīn-yáng* and the five phases—that had been developed in the realm of cosmology. This allowed them to learn about the human body and the processes of health and sickness by making inferences from observations of the universe. The system of correspondences prompted the assumption that the laws of the macrocosm applied to the microcosm of the body. This is often referred to as the “macroscopic focus,” as distinct from the microscopic focus of modern medicine. This focus accounts for much of the holistic nature of Chinese medicine, which also sets it apart from Western medicine. The concept of the macroscopic approach will become clearer to you after you have read the following four sections.

3. Qi: Basic Element and Driving Force

What is qi? The word *qi* is pronounced “chee” as in “cheese.” People in the West who are unfamiliar with the East Asian world tend to think of *qi* as a “mysterious Oriental concept.” Nevertheless, for the Chinese, Japanese, and Koreans even today, *qi* is an everyday word meaning gas, vapor, steam, or intangible force. In Chinese, steam is called *zhēng qì* 蒸气 (evaporating *qi*), weather is called *tiān qì* 天气 (heaven/sky *qi*), physical strength is called *lì qì* 力气 (strength *qi*), and “getting angry” or “blowing one’s lid” is called *shēng qì* 生气 (producing *qi*).

The original meaning of “qi”: The original meaning of the word “*qi*” was mist, vapor, or clouds. Over two thousand years ago, Chinese cosmologists observed how vapor gathered to form the thick clouds that produced rain. They also noted how mist and clouds were dispersed by the warmth of the sun. Matter that was vacillating on the borderline between liquid and gas prompted them to posit that a diffuse, highly active substance called “*qi*” was the primal substance of the whole universe. This vaporous substance was not only capable of forming clouds and rain, but could also concentrate in various ways to produce all the tangible substances of the material world. Thus *qi* in different forms explained the mate-

rial aspect of the world. It also accounted for all activity within it by transforming in endless cycles of change according to the natural laws of the macrocosm. It was therefore both the material basis as well as the propelling force of change in the universe.

Qi in physiology: The physicians of early China applied the concept of *qi* to understand the human body and its activities. They not only considered gases such as inhaled air and alimentary canal flatus as *qi*; they also posited that a highly diffuse and intangible *qi* capable of pervading solid matter was responsible for producing, propelling, and transforming substances within the body, notably blood and fluids. They explained all the activities of each body organ as being powered by its own particular *qi*. Westerners tend to think of *qi* as merely the invisible force that animates life and fuels activity without realizing that in the Chinese conception matter itself is simply a denser form of *qi*.

The dynamic activity of the diffuse form of *qi* explained, for example, the constant expanding and contraction the lungs, the beating of the heart, the movement of food along the digestive tract, the flow of blood through the vessels. The pervasive nature of the active substance *qi* precluded the need to develop mechanical explanations. No pump or valves were needed to explain the movement of blood through the vessels. No peristaltic action of smooth muscles was needed to explain the movement of food down the digestive tract. *Qi* explained all activity.

Qi in pathology: *Qi* is susceptible to pathological changes. One is “insufficiency of *qi*” (or “*qi* vacuity”). This results from various factors, such as inadequate diet, enduring illness, or the general wear and tear of life. It manifests in fatigue and lack of strength. Because *qi* propels the blood, insufficiency of *qi* reduces the movement of blood, making the facial complexion and tongue paler than normal.

Another pathology of *qi* is called “*qi* stagnation,” which means reduced movement and activity. *Qi* stagnation can be caused by numerous factors such as clogging from excess food or phlegm, or the constraining effect of emotional depression and frustration. *Qi* stagnation is characterized by sensations of fullness, distention, and pain of unfixated location.

The pathways of qi: Most readers will have heard of the “meridians of Chinese medicine.” The word “meridian” has now largely been replaced in professional Chinese medicine by the word “channel.” The channels form a system of pathways through which the diffuse, active, pervasive *qi* circulates around the body, rather like the waterways and roads that form the transportation system of a vast empire.

What is qì? Qì is the basic substance of the universe. In its primal form, it is a diffuse, highly active substance. This condenses to form matter.

Qì is often confusingly equated with the Western notion of energy. However, the Chinese concept makes no distinction between energy and matter. Both are just different forms of the substance qì.

Qì as diffuse, active substance is, according to Nathan Sivin, “what makes things happen in stuff,” “stuff that makes things happen,” and at the same time “stuff in which things happen.”

4. Yīn-Yáng and the Five Phases: Systems of Correspondence:

The doctrines of yīn-yáng and the five phases make sense of the universe by identifying correspondences between different things. They are the product of “correlative thinking,” that is, a kind of thinking that spots similarities and connections between the many different aspects of our world. While the yīn-yáng system sees a basic duality in the world, the five-phase system sees a fivefold division.

4.1. Yīn-Yáng

The original meaning of the terms “yīn” and “yáng”: “Yīn” and “yáng” originally referred to topographical inclines. “Yīn” was relativistically defined as the north face of a mountain or the south bank of a river. “Yáng” was defined as the south face of a mountain or the north bank of a river.

What are “yīn” and “yáng”? Cosmologists borrowed the terms to symbolize two categories of myriad paired objects and phenomena that relate to each other in similar ways. Dark is to light as night is to day, as the moon is to the sun, as female is to male, as down is to up, as in is to out, as stasis is to motion.

The yīn-yáng system is not just a primitive system for categorizing things. Yīn-yáng pairs are related in a number of ways. They are rooted in each other, which means that they are interdependent. Thus, there is no up without down, no inside without outside, no man without woman. Some yīn-yáng objects and phenomena have a mutually restraining relationship. For example, cold restrains heat; stillness can restrain movement.

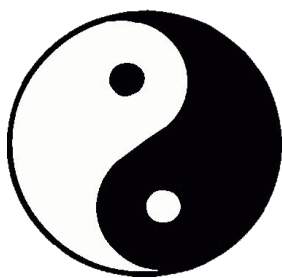


Fig 2. Tàì Jí Diagram

Yīn and yáng objects and phenomena are each potentially further divisible into yīn and yáng components. For instance, although motion is yáng in distinction to stillness, which is yīn, it can be subdivided into yīn and yáng forms. Because “in” and “down” are yīn, while “out” and “up” are yáng, inward motion and downward motion are relatively yīn, while outward motion and upward motion are relatively yáng. This is traditionally expressed as follows: downward motion and inward motion are the yīn within yáng, while upward motion and outward motion are the yáng within yáng. In the tǎi jí diagram used to symbolize yīn and yáng (see Fig. 2), the two dots represent yīn within yáng and yáng within yīn.

Fallacies concerning yīn and yáng: Western students often have difficulty understanding yīn and yáng because they confuse them with evil and good. In our culture, light and darkness have connotations of good and evil and therefore relate to each other in a clear hierarchy of value. Such connotations do not apply in the yīn-yáng system. Yīn and yáng are interdependent, so one cannot be preferable to the other.

Table 1. Yīn and Yáng in Nature

Yīn	Yáng
Dark	Light
Down	Up
Night	Day
Autumn, winter	Spring, summer
Earth	Heaven
Cold	Heat
Heaviness	Lightness
Moon	Sun
Stillness	Motion
Downward motion	Upward motion
Female	Male
Water	Fire

Another common fallacy lies in the belief that yīn and yáng (and every other aspect of Chinese medicine) originate from Daoism. The concepts of yīn and yáng were devised by cosmologists and protoscientific thinkers who had no affiliation to any particular social philosophy. The supremacy of yīn and the female over yáng and the male is one of the better-known notions of early Daoist philosophy. However, this does not reflect a Daoist preoccupation with yīn-yáng cosmology, but rather its general emphasis on balance and on the importance of things that are undervalued in human society.

Yīn and yáng in the human body: Yīn and yáng are applied to medicine in numerous ways. For example, they classify parts of the body. The upper body is yáng, while the lower body is yīn. The exterior is yáng, while the interior is yīn. The back and shoulders are yáng, while the chest and abdomen are yīn.

In these ascriptions, we once again find the relativity of yīn and yáng inherent in their original topographical definitions and in the cosmological applications. For example, the shoulders and back are yáng relative to the chest and abdomen, which are yīn. However, because the chest is in a higher position than the abdomen, it is relatively yáng. Because the abdomen is in a lower position, it is relatively yīn. The chest is therefore the yáng within yīn, while the abdomen is the yīn within yīn.

Yīn	Yáng
Lower body	Upper body
Chest & abdomen	Shoulders & back
Interior	Exterior
Viscera	Bowels
Fluids (“yīn humor”)	Qì (“yáng qì”)

Back & Shoulders		Chest & Abdomen	
Back (lower)	Shoulders (higher)	Chest (higher)	Abdomen (lower)
Yīn within yáng	Yáng within yáng	Yáng within yīn	Yīn within yīn

The same relativity is also seen in the internal organs. Because the interior is yīn, the internal organs are naturally classified as yīn. Nevertheless, distinction is made between two classes of internal organs: the viscera (*zàng* 脏), which are yīn, and the bowels (*fǔ* 腑), which are yáng. The viscera are the liver, heart, spleen, lung, and kidney, which mostly deal with internal products of the body (qì and blood); the bowels include the stomach, small intestine, large intestine, gallbladder, and bladder, which largely deal with food and waste, matter entering the body from outside and being passed out from it. Hence, although the bowels and viscera are yīn, they can be subdivided into yīn and yáng: the inwardly oriented viscera are the yīn within yīn, while the outwardly oriented bowels are the yáng within yīn.

Furthermore, the viscera—the liver, heart, spleen, lung, and kidney—each have substantial/static and functional/active aspects. These are categorized as yīn and yáng respectively. Heart yīn, for example, is the substantial aspect of the heart as well as the tendency toward quiescence and a slow heart beat (and slow pulse). Heart yáng is the active aspect of the heart with a tendency toward a rapid heart beat (and rapid pulse). Thus, yīn and yáng cut across our modern distinctions of substance and function.

Tangible and inert vs. diffuse and active: Arguably the greatest contribution of yīn-yáng to medicine is the notion of overall physiological balance. As we said before, qì has two aspects—a tangible inert form and a diffuse active form. These are classified according to the yīn-yáng doctrine as yīn qì and yáng qì respectively. In the body, yīn qì refers to the solid material as well as the liquid substances (body fluids and blood), while yáng qì is the force that powers all movement and transformative activity, as well as providing warmth.

Yīn and yáng are mutually dependent and mutually restraining. Hence yīn qì (solid and liquids) and yáng qì

(the principle of activity) were considered to be mutually dependent and mutually restraining.

Yīn and yáng in constitutions: When a person is healthy, these yīn and yáng aspects of the body are “in harmony”—or, to use a more familiar metaphor, “in balance.” Very often, there are slight constitutional imbalances. People with more yáng than yīn tend to be thin and wiry with a dark, sometimes oily or dry complexion; they tend to be active; and they can eat a lot without getting fat. People with more yīn than yáng tend to be fat and flabby; they are active, easily get tired and feel cold; and even though they may not eat too much, still tend to be overweight.

The two types are vulnerable to different kinds of illness. People with more yáng than yīn are vulnerable to yang evils (summerheat, fire, dryness) and prone to heat condition. People with more yīn than yáng are vulnerable to yīn evils (cold, dampness) and prone to cold conditions.

Note that the interest in constitution is an example of the holistic approach that typifies Chinese medicine.

Yīn and yáng in pathology: When a person is healthy, the yīn and yáng aspects of the body are “in harmony”—or, to use a more familiar modern metaphor, “in balance.” In illness, yīn-yáng are in disharmony. Disease is attributed to many different causes, but is almost invariably linked to a disturbance of the body’s normal yīn-yáng relationship. This may take different forms, depending on the nature and location of the disease. Generally speaking, however, when the balance between yáng qì and yīn humor is upset, it leads to changes in the degree of body heat, in physical activity, and in the state of the fluids.

Cold/yīn: When the body becomes colder than normal, activity decreases: the patient tends to lie in a curled-up posture to preserve heat; the movement of blood slows down, so that the face becomes pale and the pulse be-

Table 4. Yīn-Yáng Disharmony

Table 4. Yīn-Yáng Disharmony		
Yīn-Yáng	Yīn conditions (yīn stronger than normal/yáng weaker than normal)	Yáng conditions (yáng stronger than normal/yīn weaker than normal)
Heat	Palpable or subjectively felt cold	Palpable or subjectively felt heat
Physical & Physiological Activity	Lying in a curled-up posture Slow pulse	Throwing off clothing; stretched out limbs Insomnia, heart palpitations, agitation Rapid pulse
Fluids	No thirst Copious clear urine Sloppy stool	Thirst Scant reddish urine Dry stool, constipation

comes slower. At the same time, sweating ceases in order to preserve bodily warmth, and fluids are more copious: the mouth is moist; the tongue fur (tongue coating) is covered with liquid; and urine tends to become clearer and more copious.

Heat/yáng: When the body becomes hotter than normal, it emits heat that can be felt objectively by palpation or subjectively by the patient. At the same time, activity increases: the patient may tend to throw off clothing and bedclothes and stretch out the limbs; the face may become flushed; the pulse may become more rapid. Furthermore, the surplus heat is shed through sweating; fluids are depleted, so the mouth, throat, and tongue fur may become dry; the stool may become dry and bound (i.e., the patient becomes constipated), and urine may concentrate and become reddish and scant.

Yīn-yáng surfeits and deficits: An imbalance of yīn and yáng can arise in either of two ways. Either one side becomes stronger than the other, or one side becomes weaker than the other side. We call these yīn or yáng surfeits and deficits.

Surfeits arise when external evils enter the body. “External evils,” which will be explained in greater detail in due course, are environmental factors such as wind, cold, summerheat, dampness, dryness, and fire (heat). They are each classified as yīn or yáng (cold and dampness are yīn; wind, summerheat, dryness, and fire are yáng). Their entry into the body can cause a surfeit of yīn or yáng within the organism, which in turn causes illness. In summer, for example, “summerheat evil” can enter the body and cause a surfeit of yáng that is characterized by heat signs, increased activity, and damage to fluids. In cooler parts of the year, cold often enters the body from

the environment and creates a surfeit of yīn, characterized by cold signs, decreased activity, and clear copious fluids.

Deficits arise through wear and tear due to such factors as illness and overwork. A deficit of yīn gives rise to a yīn-yáng disharmony in which the yáng side of the body is relatively stronger than the yīn side. This kind of disharmony is also characterized by heat signs, increased activity, and depletion of yīn-fluids. However, the signs differ from those of a yáng surfeit in being much milder. A yáng surfeit, for example, often manifests in a high fever, while a deficit of yīn is characterized by a tidal fever, one that erupts in the later part of the day and abates by the next morning. A yīn surfeit created by external cold evil gives rise to pronounced cold sensations and, in some cases, cold pain in the abdomen that is relieved by warmth; a yáng deficit gives rise to milder cold sensations like a mild subjective feeling of cold (called “fear of cold”) and cold extremities.

Vacuity and repletion: When discussing pathologies due to yīn-yáng surfeits and deficits, we use the terms “repletion” (实 *shí*) and “vacuity” (虚 *xū*). These terms are more holistic in nature because they describe the state of the body as a whole as it is affected by yīn-yáng surfeits and deficits. If a heat condition arises through a surfeit of yáng (e.g., summerheat or fire), it is called “repletion heat;” if it arises through a deficit of yīn, it is called “vacuity heat.” Similarly, a cold condition arising through a surfeit of yīn (as by invasion of cold evil) is called “repletion cold;” while a cold condition arising through a deficit of yáng is called “vacuity cold.”

Connotations of yīn and yáng: When speaking of yīn-yáng disharmony, yīn means the physical aspect of the body, blood, and fluids. Yáng means the active qì of the body, which propels, retains, and transforms the blood and fluids, keeping the whole body warm. In actual practice, “qì” is generally used to connote propelling, retaining, and transforming activity, while “yáng” also implies a warming action.

4.2. Five Phases

What are the five phases? The five phases are a system of correspondence similar to yīn and yáng, but operating on the basis of five categories. The five phases are symbolized by the terms wood, fire, earth, metal, and water.

The phases are symbols for the qualities and activities associated with them.

- **Wood** symbolizes the substance wood as well as the living wood, i.e., trees and in general (the Chinese character *mù* 木 is a pictorial representation of a tree). Wood stretches upward and outward as it grows; hence the wood phase signifies flexibility and expansive movement. Note that “wood” means not only the substance wood, but also trees and plant life in general. The Chinese character *mù* 木 is a pictorial representation of a tree.

- **Fire** flames upward as it consumes its fuel. It symbolizes intense heat.
- **Earth** is the producer of all things, notably food.
- **Metal** is used to make cutting tools and weapons and is associated with creative and destructive qualities.
- **Water** moistens the earth and flows downward to the lowest places where it finally becomes still.

Five phase classification: Throughout Chinese history, numerous aspects of the natural world have been classified according to the five phases (see Table 5). The most important of these are the seasons. The expansiveness of wood is associated with spring; the heat and upward movement of fire with summer; the productivity of earth with harvest time in late summer (or “long summer” as it is called in Chinese); the creative/destructive qualities of metal with the purifying frosts of autumn; and the quiescence of water with stillness of winter. The natural correspondences between seasons, points on the compass, and times of day allows the five-phase system to serve as a general framework for understanding nature.

Five phase cycles: A significant contribution of the five phases to the early Chinese understanding of the natural

world lies in the fact that they were seen to operate in recognizable, regular, and therefore predictable cycles. Specifically, the five phases interact in two ways. In the

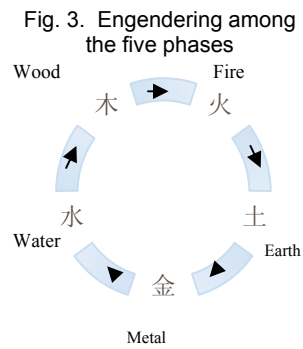


Fig. 3. Engendering among the five phases. Correlative thinking therefore became a theory for interpreting and predicting the never-ending transformations of qi that occurred in all aspects of the universe.

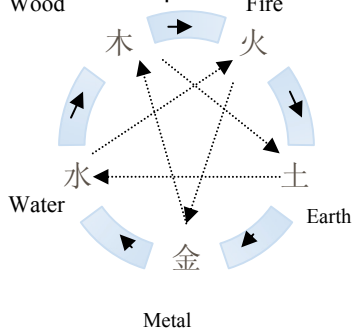
cycle of engendering, water engenders wood, which engenders fire, which engenders earth, which engenders metal, and so forth. In the cycle of restraining, water restrains fire, which restrains metal, which restrains wood, which restrains earth, which restrains water, and so forth (see

Table 5. Associations of the Five Phases

Phase	Season	Weather	Time	Position	Action	Color	Viscus
木 Wood	Spring	Wind	Dawn	East	Birth	Green-blue	Liver
火 Fire	Summer	Summerheat	Noon	South	Growth	Red	Heart
土 Earth	Long summer	Dampness	Afternoon	Center	Transformation	Yellow	Spleen
金 Metal	Autumn	Dryness	Sunset	West	Contraction	White	Lung
水 Water	Winter	Cold	Midnight	North	Storage	Black	Kidney

Five phases in medicine: When Chinese physicians applied the doctrine of the five phases in medicine, it increased their knowledge

Fig. 4. Restraining among the five phases.



developed a model of the body’s internal workings based on

about the body by providing a framework to conceptualize the direct relationship between the macrocosm and the microcosm of the human body.

It is undoubtedly no coincidence that early Chinese physicians developed a model of the body’s internal workings based on

five functional systems. They selected the liver, heart, spleen, lung, and kidney as “the five viscera,” considered to be of paramount importance because they control all the other organs and body parts.

Ascription of the viscera to the five phases: The coupling of each viscus with a phase was a difficult task that involved matching the functions of the viscera to the qualities of the five phases based partly on empirical observation of pathology, physiology, and therapy, partly on intuition, but also to a large extent on theoretical stretches of the mind that are often difficult or impossible for us to follow. Early physicians made various attempts before they settled on a definitive scheme in which the liver was coupled with wood, the heart with fire, the spleen with earth, the lung with metal, and the kidney with water.

Framework for observation: As we will see in section 6 (Bowels and Viscera: The Chief Internal Organs), it was not a simple process of matching *known* functions, since five-phase theory was apparently highly influential in determining what the functions of the five viscera were.

What happened in the process was that functions matching the five phases were found, but given the lack of means for investigating the architecture of the viscera in detail and relating it to function, some of the couplings that occurred have been contradicted by anatomically based biomedicine. For example, the expansive qualities of wood were matched with a function of ensuring the smooth flow of qì around the body and this was ascribed to liver; hence the liver was associated with wood. Modern medicine has ascribed entirely different functions to liver on the basis of anatomical research, thus contradicting the Chinese theory. Nevertheless, the function Chinese physicians ascribed to the liver is nevertheless *real* in that when it breaks down and gives rise to illness, it can be effectively restored by Chinese medical interventions. We will see more examples of this when we come to discuss the bowels and viscera.

The understanding of the function of the five viscera in general represents a combination of anatomical knowledge and promptings from the five phases. Were it not for the five phases, China's physiological model would have evolved very differently.

The five phases were not only applied in categorizing the internal organs according to functional characteristics. Five-phase cycles (of engendering, restraining, and other interactions) were further applied to understand relationships between the viscera, the transmission of disease from one viscus to another, the prediction of courses of disease, and therapeutic interventions. These have played a role in guiding the experimentation of Chinese physicians over the centuries. However, they failed to win the acclaim of all physicians. Consequently, the five-phase doctrine has not been applied as directly and systematically in clinical practice as the yīn-yáng. However, it has left an indelible mark on the function model of the viscera that has been universally accepted for two millennia.

5. Essence, Qi, Blood, Fluids: Basic Substances

Chinese medicine posits a limited number of basic substances that explain physiology: essence, qì, blood, and fluids.

5.1. Essence

Essence (or “essential qì”) is a substance that is stored in the kidney. It is derived from two sources, from one's parents before birth, and from the nutrients ingested during the course of one's life. The concept of essence is used to explain reproduction, growth, development, and aging.

Functions of essence

- **Reproduction:** Male essence and female essence mingle to produce offspring.



精 *jīng*, essence
(ancient character)

- **Growth and development:** As the essence of the newborn gradually becomes stronger, the child grows and develops.
- **Aging:** After maturity, the body's reserves of essence gradually decrease, causing the decline in health and vigor of advancing years.

Pathologies of essence: Essence is susceptible to insufficiency. The manifestations differ according to the age at which the insufficiency appears.

- When essence is insufficient in young children, it causes problems of mental and physical development.
- When essence becomes insufficient in advancing years, it leads to signs of premature aging and early loss of mental faculties.

5.2. Qi

Qi has already been introduced as the principle of activity in nature and in the body. Here, we describe the formation of qì in the body, the functions of qì, kinds of qì, and pathologies of qì.

Formation of qì: Qi as the activating substance in the body is produced from:

- **Essential qì** in the kidney,
- **Essence of grain and water,** extracted by the stomach and spleen, and
- **Clear qì,** i.e., air inhaled by the lungs.



气 *qì*, qì,
(ancient character)

Functions of qì: It has the functions of movement, retention, transformation, defense, nourishment, and warming.

- **Movement:** Qi moves constantly; it thereby propels blood and fluids around the body.
- **Retention:** Qi retains blood and fluids (preventing bleeding, excessive sweating, loss of urine, etc.).
- **Qi transformation:** Qi is responsible for all transformations of substances, including the production of blood, body fluids, and urine.
- **Defense:** Qi provides a barrier against the invasion of external evils (wind, cold, summerheat, etc.).
- **Nourishment:** Qi provides nourishment to all parts of the body.
- **Warming:** Qi generates bodily warmth.

Kinds of qì: Qi is known by different names according to function and location.

- **Ancestral qì:** The qì that concentrates in the chest and drives respiration and the heart is called “ancestral qì.”
- **Defense qì:** A special qì that flows outside the vessels and wards off invading evils is called “defense qì.”
- **Construction qì:** Paired with defense qì, “construction qì” is a form of qì that flows with the blood inside the vessels. Its function is to help with the production of

blood and to provide nourishment to the body, particularly to the internal organs.

- **Bowel and visceral qi:** The qi that powers the activity of the bowels and viscera is called “bowel and visceral qi.” Each bowel and viscus has its own qi (heart qi, liver qi, spleen qi, lung qi).
- **Channel qi:** The qi that runs through the channels is called “channel qi.”
- **Right qi:** In addition, Chinese medicine has the concept of “right qi,” which is not a form of qi in the narrow sense of a diffuse, active substance. This term refers to every aspect of the body (including blood, fluids, yīn, and yáng) that defends the body against disease and helps maintain health. Right qi stands in opposition to “evil qi,” which is any disease-causing agent.

Translations of “qi”: The Chinese term qi has been translated differently over the centuries. When Latin was the academic language of the West, it was often rendered as “spiritus” (originally meaning “breath,” but then also vital force, life-giving spirit). It has also been translated as “pneuma” (a Greek word also meaning breath). In modern times, it has been translated as “vital breath,” “vapor,” or as “energy,” reflecting the modern difficulty in understanding it as a substance. Ingeniously, historian Paul Unschuld has translated it as “influences.” In the context of medicine, it has over recent decades been increasingly rendered in transcription as “qi.”

Pathologies of qi: Qi is susceptible to several different pathologies. The most important of these are qi vacuity and qi stagnation.

- **Qi vacuity:** When qi is insufficient, it fails to perform one or more of the above-mentioned functions. This is called “qi vacuity” and manifests in fatigue and lack of strength, faint low voice, faint breathing, poor appetite, or poor digestion.
- **Qi stagnation:** When qi moves slowly or stops altogether, this is called “qi stagnation.” The main signs are dull or mild pain of unfixed location, fullness, and distention.

The other pathologies of qi are qi fall, manifesting in prolapse conditions, qi counterflow, i.e., movement of qi in the wrong direction, and qi block, a severe stoppage of qi stoppage of qi at the orifices, manifesting in loss of consciousness or in fecal and urinary stoppage. These will be described further ahead.

5.3. Blood

Blood is the red fluid that nourishes the whole body. It is chiefly produced from nutrients absorbed from ingested food.

Functions of blood: Blood provides nourishment to every part of the body. It is propelled around the body by the action of qi.

Relationship between qi and blood: Blood is paired with qi in a complementary relationship as yīn and yáng respectively. Qi propels blood and holds it in the vessels. Blood nourishes qi, and “bears qi,” which means that it keeps it afloat and prevents it from running aground, allowing it to flow smoothly.

Specific forms of blood:

The liver and heart have their own blood, which refers to blood in the liver and heart as well as parts of the body governed by them. “Liver blood” and “heart blood” stand in a yīn-yáng relationship with liver qi and heart qi respectively.



血 xuè, blood
(ancient character)

Pathologies of blood: The main pathologies of blood are blood vacuity and blood stasis.

- **Blood vacuity:** When blood fails to perform its nourishing function, this is called “insufficiency of the blood” or “blood vacuity.” It is marked by a lusterless or withered-yellow complexion, pale tongue, dizziness, heart palpitations, and a fine pulse.
- **Blood stasis:** When the blood moves slowly or stops moving, this is called “blood stasis.” Blood stasis accounts for bruises, varicose veins, abdominal masses, and many other conditions.

The pathologies of blood further include blood heat and blood cold. These will be discussed further ahead.

Physiology vs. Pathology: In general, pathology in Chinese medicine offers much more detail than physiology. Blood is a classic example: the only fact we are told concerning its physiological functions is that it provides nourishment. By contrast its pathologies are discussed in copious detail.

5.4. Fluids

Fluids are a major element in the body. A distinction is made between thinner fluids called “liquid” (jīn 津) and thicker ones called “humor” (yè 液). Fluids take specific forms such as saliva, gastric juice, tears, nasal mucus, sweat, and urine.

Function of the fluids: The fluids provide moisture for the whole of the body.

Formation and distribution of the fluids: Body fluids are formed from food and drink by the action of the stomach and spleen. They are distributed around the body principally by the action of the lung. By the action of the kidney, waste fluids are turned into urine, which is stored in the bladder for discharge.

Pathologies of the fluids: Fluid pathologies include various forms of insufficiency and accumulation.

- Insufficiency of the fluids can be the result of high fever or excessive vomiting and urination.

- Fluid accumulations take the form of edema, called “water swelling,” or local accumulations in the chest, abdomen, and other parts of the body, generically called “phlegm-rheum.” Phlegm is a thick pathological fluid; rheum is a thinner kind.

5.5. Relationships

Qì is yáng, while blood and fluids are yīn. Qì and blood in particular are considered to be yīn and yáng counterparts. Qì propels blood, while blood nourishes and “bears” qì (allows it to flow smoothly). Hence, qì is described as the “commander of blood,” while blood is the “mother of qì.” Qì also propels the fluids, while the fluids “bear” qì.

6. The Bowels and Viscera: The Chief Internal Organs

As already mentioned, the internal organs are divided into two categories, the bowels and the viscera. The viscera are the liver, heart, spleen, lung and kidney. These are respectively paired in yīn-yáng relationships with the gallbladder, small intestine, stomach, large intestine, and bladder. However, the bowels are six in number, the sixth being the triple burner. Especially in the theory of the channels and network vessels, the pericardium counts as a sixth viscus to provide the triple burner with a coun-

terpart. In this section, we discuss only the five viscera and their corresponding bowels.

Preeminence of the viscera: The viscera play a preeminent role in physiology for the following reasons:

- They each perform key functions in the body.
- They have a dominant influence over the bowels. The viscera are relatively interior to the bowels they are paired with, and hence the bowels and viscera are said to “stand in exterior-interior relationship to each other.”
- They each “govern” other parts of the body, notably various body constituents (flesh, sinews, bones, etc.).
- They each open at a specific “orifice” (e.g., eyes, ears, nostrils, mouth, tongue). Note that the term “orifice” is used metaphorically as a point of outside contact, since the eyes and tongue do not constitute “orifices” in the physical sense.

Table 6 below shows the associations of each viscus with a specific function, with a corresponding bowel, with a “body constituent”, and with an “orifice.”

The description of the physiology of bowels and the viscera comes from the *Huáng Dì Nèi Jīng* (The Yellow Emperor’s Inner Canon), which was written over 2,000 years ago and which since that time has been a major authority in medical matters in China.

Table 6. Associations of the Five Viscera

Phase	Wood	Fire	Earth	Metal	Water
Viscus	Liver	Heart	Spleen	Lung	Kidney
Function	Stores the blood; governs free-coursing	Stores the spirit; governs the blood & vessels	Governs movement & transformation	Governs qì; governs diffusion & depurative downbearing	Governs water; stores essence
Bowel	Gallbladder	Small Intestine	Stomach	Large Intestine	Bladder
Body Constituent	Sinew	Vessels	Flesh	Skin & Body Hair	Bone
Orifice	Eyes	Tongue	Mouth	Nose	Ears

Importance of the five phases: Each viscus belongs to one of the five phases. As we have already explained, five-phase theory was important in providing a framework within which physicians could develop their understanding of the body. The five phases embody correlative thinking, that is, a kind of thinking that in medicine estab-

“Governing”: Chinese medicine uses the political metaphor of governing to describe the relationship of the viscera to their functions. Thus “the liver governs free-coursing” means “the liver has the function of free-coursing.” The word govern is also used to describe the relationship between each viscus and its body constituent.

lishes relationships between the human body and the macrocosm. Although this kind of thinking may seem illogical to the modern student (Chinese as well as Western), it was highly plausible to Chinese people two thousand years ago, who made sense of the world by spotting relationships between disparate phenomena. In the discussion of the five viscera that follows, we show how five-phase theory contributed to early Chinese physician’s understanding of the functions of the viscera. Although the association of the viscera and the five phases never gained great significance in the context of therapy, the contribution of the correlative thinking to the understanding of the five viscera has stood to the test of time and should not be underestimated.

6.1. Heart

The relationship of the vessels to the heart did not escape the attention of China's early physicians. However, because qi explained for them all movement in the body, they did not have to search for a mechanistic explanation of the heart as pump for the blood. The ancient Chinese, like the ancient Greeks, believed that the heart was the seat of the mind.

The *Huáng Dì Nèi Jīng* says, "The heart holds the office of monarch, whence the spirit light emanates." This political metaphor suggests that the heart resembles a sovereign, the person who provides leadership and illumination for the nation. Based on the notions of power and luminescence, it is not surprising that the heart is associated with fire, the most yáng of all the five phases.

The Heart Xīn 心

- Belongs to fire in the five phases. It is the sovereign ruler of the human body.
- Functions
 - Stores the spirit, that is, it is the seat of consciousness.
 - Governs the blood and vessels. It moves the blood through the vessels.
- Opens at the tongue. Pathological conditions of the heart are reflected in abnormalities of the tongue, particularly the tip of the tongue.
- Stands in exterior-interior relationship with the small intestine.

The heart stores the spirit: The main function of the heart is to "store the spirit." That is, the heart is regarded as the seat of consciousness. This notion has much in common with the West's traditional nonmedical idea of the heart as the seat of the mind and emotions. The main signs of heart are insomnia, profuse dreaming, heart vexation (restlessness felt in the center of the chest) and heart palpitations, all of which are understood to reflect "disquieted heart spirit." When a patient suffers from an unclear mind or loses consciousness, this is called "clouded spirit."

The heart governs the blood and vessels:

According to traditional theory, blood is produced from nutrients in our food as its material basis. It is enlivened and turned red by the action of the heart and lung. The heart, by the power of its qi, moves the blood through the vessels. For these reasons, the heart is said to govern the blood and vessels.

The heart opens at the tongue: This notion is also expressed as "the tongue is the sprout of the heart." Although the tongue and its fur may reflect pathological states of all the bowels and viscera, heart disease often manifests with special clarity. For example, in cases of pathological fire in the heart, the tip of the tongue becomes distinctly red and the tongue may become painful and ulcerated.

The heart stands in exterior-interior relationship with the small intestine: This is notably reflected by the tendency for pathological heart fire to spread to the small intestine.

6.2. Lung

The lung's main function is respiration. Unlike Western medicine, Chinese medicine also accords the lung other functions, notably in regard to water metabolism.

The lung governs qi: Governing qi is the lung's main function. The physicians of early China realized that the lung must constantly inhale air, or "clear qi," for the body to live. They posited that inhaled qi combined with the essence of grain and water (the nutrients derived from food and drink) to create the qi of the whole body. Since breath is inhaled and exhaled through the nose, they deemed the nose to be the orifice of the lung. They also noted connections between the lung and the voice.

The lung, like each of the bowels and viscera, has its own qi, which powers its activity. Lung qi has two main directions of movement. One is an upward and outward movement, called "diffusion," which keeps the nose and throat clear and helps to carry fluids to the periphery of the body to enable them to be discharged in the form of sweat. Nasal congestion, a hoarse voice, and sweating abnormalities are explained in terms of nondiffusion of lung qi. The other is a downward and inward movement, called "depurative downbearing." This powerful downbearing movement of lung qi carries inhaled air downward into the body. It also contributes to fluid metabolism by carrying fluids downward to the bladder. Furthermore, it keeps the airways clear of phlegm, which tends to accumulate there. Since "depurative" means "purifying," this is why it is called "depurative downbearing."

The Lung Fèi 肺

- Belongs to metal.
- Functions
 - Governs qi. It inhales clear qi and exhales turbid qi. The inhaled clear qi combines with the essence of grain and water extracted by the spleen from food and drink to form the qi of the body.
 - Lung qi has an upward and outward "diffusing" movement and a downward "depurative downbearing" movement.
- Governs the skin and body hair.
- Opens at the nose.
- Stands in exterior-interior relationship with the large intestine.

The lung belongs to metal: As to why the lung is attributed to metal in the five phases, we can only make an educated guess. Metal is a material used to make sharp tools and weapons. It is associated with the autumn, when the first frosts exert a destructive but purifying ac-

tion on nature. This purifying action is echoed in the term “depurative downbearing,” used to describe the cleansing downward motion of lung qì.

Furthermore, metal is used not only for its ability to make tools; it is also known for its ability to produce fine sounds. The connection between the voice and the lung may have encouraged the association with metal as a sound-producing material. Sudden loss of voice due to the invasion of an external evil is often referred to as “replete metal failing to sound,” evoking the image of a hollow metal object like a bell that loses its resonant qualities when filled with unwanted matter.

The lung governs the skin and body hair: The lung governs the skin and body hair. The diffusing action of lung qì is responsible for carrying moisture and nourishment to the skin. Lung qì also carries defense qì to the exterior of the body to control the opening and closing of sweat pores and to defend the exterior against invading evils.

The lung stands in exterior-interior relationship with the large intestine: This connection may have originally been suggested by the fact the large intestine forms stool and discharges it from the body; it therefore has a downward cleansing action similar to the depurative downbearing function of the lung. The large intestine also has the function of absorbing liquid from waste to form the stool. Thus both the lung and large intestine contribute to water metabolism. In clinical practice, exuberant phlegm-heat in the lung is often treated not only by addressing the lung, but also by using “draining precipitants,” agents that cause stool to be expelled.

6.3. Spleen

Although Western medicine has learned that the spleen is part of the lymph system, Chinese medicine considers it to be an organ of digestion. All treatments used to enhance “spleen” function are in reality treatments that enhance digestion and assimilation.

The spleen governs movement and transformation of the essence of grain and water: The spleen is paired with the stomach. Early medical scholars must have realized that food passed through the digestive tract where nutrients useful to the body were extracted. The *Huáng Dì Nèi Jīng* tells us that “grain and water” pass down to the stomach, which “ripens and rots” them. They then assumed that the spleen, the large organ lying at the side of the stomach, was responsible for absorbing nutrients into the body. Hence it is said that “the spleen governs movement and transformation.”

Since the yīn-yáng system had fostered the understanding that one class of organs (the bowels) had closer contact with foreign matter and another class (the viscera) handled the internal products of the body, it made sense to think of the stomach as responsible for digestion and

the spleen as responsible for the process of internal assimilation. Because the earth phase is associated with the season of “long summer” (late summer), when most grains and fruits are harvested, the spleen and the stomach, which harvest nutrients from food in the digestive tract, naturally became associated with the earth phase. The *Huáng Dì Nèi Jīng* describes the spleen and stomach as the “office of the granaries,” in other words, the body’s “ministry of agriculture.” This political metaphor clearly reflects the attribution of the spleen to earth.

The spleen governs the flesh: The ability to absorb and assimilate the “essence of grain and water,” as it is traditionally expressed, is reflected in the amount of flesh a person carries—flesh meaning both red flesh and white

The Spleen Pi 脾

- Spleen belongs to earth..
- Function: It governs movement and transformation of the essence of grain and water.
- Governs the flesh.
- Opens at the mouth.
- Stands in exterior-interior relationship with the stomach.

fat. Both emaciation and obesity are understood to stem from disturbances of the spleen. Hence the spleen “governs the flesh.”

The spleen opens at the mouth: Because of the importance of food intake to the spleen, the mouth is considered to have a special relationship to the spleen. Hence it is said that “the spleen opens at the mouth.”

The spleen stands in exterior-interior relationship with the stomach: As stated above, the stomach and spleen are considered to have complementary actions in the process of dealing with ingested food. The stomach digests food, while the spleen absorbs it into the body. Stomach qì carries food down the digestive tract; spleen qì sends absorbed nutrients up and out around the body. Of course, it is important to remember at all times that the Chinese understanding of the spleen and stomach differs from that of modern medicine.

6.4. Liver

The description of the physiological function of the liver differs between Chinese and Western medicine more widely than that of any other viscus. This is probably because the appearance of the liver suggests very little about its function and because the liver works silently and without any movement that we are aware of. In short, it provides few naked-sense observations from which to reason.

The Liver **Gān** 肝

- Belongs to wood.
- Functions
 - Stores blood.
 - Governs free coursing, that is, it ensures the free movement of qi around the body.
- Governs the sinews.
- Opens at the eyes.
- Stands in exterior-interior relationship with the gallbladder.

Chinese medicine does not understand the liver to be the body's "chemical factory," as Western medicine does. However, like Western medicine, it recognizes a close connection between the liver and the blood. Under the apparent influence of the five-phase doctrine, an expansive function of qi akin to that of wood was also ascribed to the liver.

The liver stores the blood: This function may have been suggested by its apparently bloody texture. The liver is seen as a collecting place of blood. During physical exertion, blood moves outward from the liver to provide nourishment to the body's tissues; during rest it flows back to the liver.

The liver governs free coursing: The second function ascribed to the liver is "free coursing," that is, ensuring the free movement of qi around the body. This function is apparently related to the doctrine of the five phases: The liver is associated with wood, which symbolizes both the substance wood and plant life as a whole. In the springtime, the season associated with the wood phase, the whole of nature comes to life. New plants spring from the earth; old trees and plants undergo new growth. Plants grow upward and outward, and thrive best when this expansive movement is uninhibited. Probably under the prompting of the doctrine of the five phases, early Chinese physicians discovered a function of ensuring the free flow of qi around the body, which they associated with the liver and with the expansive properties of wood. This action of the liver is called "free coursing." Free coursing is most clearly understood in the pathological context. When the free coursing action of the liver is inhibited, qi and blood tend to stagnate, giving rise to distention and pain, particularly along the channel associated with the liver.

The liver governs the sinews: The sinews are often, somewhat confusingly, equated with the Western idea of tendons and ligaments. In fact, the Chinese term *jīn* 筋 loosely refers to all the stringy parts of the body, not only tendons and ligaments, but also muscles. From our modern anatomical view, therefore, the Chinese medical concept of "sinews" overlaps with that of the flesh (associated with the spleen). According to the Chinese medical understanding, the sinews are body tissues that have the springy, stringy, fibrous qualities of wood and bamboo. Sinews are those parts of the flesh that can be "plucked" during tuīná massage. The trapezius or sternocleidomas-

toid muscles are examples of body parts that are classified as sinews according to Chinese theory, but as muscles according to Western medicine.

Spasm in Chinese medicine is a pathology of the sinews. It is attributed to internal wind. Just as trees and other plants are blown by the wind, so the liver can also be affected by wind. Convulsions (i.e., clonic spasm, the alternating contraction and relaxation of muscles) in particular are usually explained in terms of "internal wind." For this reason, the liver is called the "viscus of wind and wood."

The liver opens at the eyes: A close relationship is observed between the liver and the eyes. It is reflected in the fact that many eye diseases are explained in terms of liver pathology and treated through the liver.

The inspiration for connecting the eyes with the liver may originally have from the observation that vision is the sense that stretches furthest afield, allowing us to perceive things at great distances from us. This is in keeping with the outward stretching quality of the wood phase.

In any event, the association of the liver with the eyes was substantiated by numerous clinical observations. For example, red eyes are often observed in a disease pattern called "liver fire flaming upward," and is treated by clearing heat and draining the liver. Dry eyes and dizzy vision are usually a sign of liver yīn vacuity, and can be treated by supplementing liver yīn.

The liver stands in exterior-interior relationship with the gallbladder: The relationship between the liver and the gallbladder is based on the notion that surplus qi of the liver is turned into bile, which is stored in the gallbladder.

6.5. Kidney

Chinese medicine, like Western medicine, understands the kidney to produce urine. In addition, it also accords it the function of storing essence, which accounts for reproduction, development, and aging.

The kidney governs water: Chinese medicine understands the kidney's role in water metabolism by an analogy to a pot of water over a fire. The kidney's yáng qi heats the fluids, causing the clear part to steam upward and again reenter circulation, so that it can be used again. This leaves the turbid, which becomes urine and is passed down to the bladder for periodic discharge.

The kidney stores essence: Chinese medicine ascribes to the kidney another major function that is not recognized by Western medicine, namely that of storing "essence," which is significant not only for reproduction, but also for the processes of growth, development, and aging. In males, reproductive essence takes the form of semen. After intercourse, this male semen mingles with female essence (which we now know to be the ovum) to begin the process of reproduction. After birth, the gradual strengthening of the child's essence explains its gradual growth and development; the waning of essence in later years causes the gradual weakening of the body and

deterioration of health. This has already been discussed in subsection 5.1.

The Kidney Shèn 肾

- Belongs to the water phase.
- Functions
 - Governs water (produces urine). Kidney yáng has the function of steaming the fluids of the body, returning the clear part into circulation and sending the turbid part down to the bladder.
 - Stores essence. The winter season belongs to water in the five phases; just as nature stores its potential in winter, so the kidney stores the potential of the human body.
 - Is the root of the yīn and yáng of the entire body.
- Governs the bones.
- Opens at the ears and the two yīn.
- Stands in exterior-interior relationship with the bladder.

The kidney belongs to water: The kidney is ascribed to water in the five phases, presumably on account of urine production. The function of storing essence can also be related to its association with the water phase: The season of water is winter, a time when many plants retreat into their stems and roots, some only surviving until spring in seed form. Winter is a time when life is dormant and stored in an essential form. Thus, the water phase is associated with the notion of storage. Chinese physicians versed in the doctrine of the five phases naturally associated the viscus belonging to water with the potential human life. In this way, the five-phase doctrine greatly contributed to the understanding not only of the functions of the kidney, but also of the nature of essence.

The kidney is the root of yīn and yáng of the whole body: The essence stored by the kidney can be understood as human life in its most essential form. Not surprisingly, therefore, the yīn and yáng of the kidney is also considered to be the basis of the yīn and yáng of the whole body.

The kidney governs the bones: The state of the bones is intimately related to the state of kidney essence, and hence to the aging process. As children grow, their bones become larger and stronger; as people advance in years, their bones become brittle. Medicinals used to enhance kidney function include substances that are effective in stimulating the healing of broken bones. Examples include drynaria (*gǔ suì bǔ* 骨碎补) and dipsacus (*xù duàn* 续断).

The kidney opens at the ears and the two yīn: The kidney is associated with the ears. Kidney essence ascends to the ears to ensure good hearing. Depletion of kidney essence in advancing years often leads to hearing problems. The kidney is also said to open at the two yīn. The “two yīn” are the external genitals (in particular the urinary meatus) and the posterior yīn, the anus. The word “yīn” in this context refers simply to “private” parts.

The kidney stands in interior-exterior relationship with the bladder: As has already been explained, the bladder is the collecting place of urine produced by the kidney.

7. Channels and Network Vessels: The Pathways of Qì

The pathways along which qì flows in the body are called the “channels and network vessels.” The channels are the larger pathways; the network vessels are the smaller ones. While qì is more concentrated in the channels, it also pervades all tissues through the network vessels.

7.1. The Twelve Main Channels

There are twelve main channels, each of which is duplicated on both sides of the body (“bilateral”). These are all joined so that qì flows through them in an endless circuit. There are six bilateral channels designated as yīn and six designated as yáng. The yīn channels “home” to the viscera, while the yáng channels home to the bowels. The yīn channels pass over the inner faces of the limbs, while the yáng channels pass over their outer faces.

The Twelve Major Channels

Hand greater yīn (*tài yīn*)
lung channel

Hand reverting yīn (*jué yīn*)
pericardium channel

Hand lesser yīn (*shào yīn*)
heart channel

Hand yáng brightness (*yáng míng*) large intestine channel

Hand lesser yáng (*shào yáng*)
triple burner channel

Hand greater yáng (*tài yáng*)
smaller intestine channel

Foot greater yīn (*tài yīn*)
spleen channel

Foot reverting yīn (*jué yīn*)
liver channel

Foot lesser yīn (*shào yīn*)
kidney channel

Foot yáng brightness (*yáng míng*) stomach channel

Foot lesser yáng (*shào yáng*) gallbladder channel

Foot greater yáng (*tài yáng*) bladder channel



经络 *jīng luò*,
Channels & network
vessel
(ancient characters)

7.2. The Eight Extraordinary Vessels

In addition, there are “eight extraordinary vessels.” They serve as reservoirs for the twelve main channels, thus helping to regulate the channel and network system as a whole.

Governing (*dū*) vessel

Controlling (*rèn*) vessel

Thoroughfare (*chōng*) vessel
 Girdling (*dài*) vessel
 Yīn & yáng linking (*wéi*) vessels
 Yīn and yáng springing (*qiāo*) vessels

7.3. The Channels & Network Vessels in Treatment

The channel and network vessel system is important in treatment, especially acupoint therapy. Insertion of fine needles at specific acupoints on the channels achieves therapeutic effects mainly by stimulating flow and removing stagnation. Other procedures are also believed to influence the flow of qi in the channels, namely:

- moxibustion, which is the burning of a dried, finely pounded herb called mugwort (*ài* 艾, *Artemisia Herba*) on or close to the skin,
- cupping, which is the application of suction cups to the skin, and
- tuīná, which is Chinese massage and bone manipulation (*tuī ná* 推拿 literally means pushing and grabbing).

In general, pathologies on a part of the body that is traversed by a particular channel, including the bowels and viscera, can be treated by applying a therapeutic stimulus either locally or distally (close to or far from the affected area). For example, ST-36 (*zú sān lǐ* 足三里), a point on the stomach channel just below the knee, is commonly used to treat stomach problems.

Any treatment usually involves providing a stimulus at several different points. When using acupuncture, the needles can be angled and manipulated in different ways to provide different therapeutic effects.

The channels and network vessels have special significance in the treatment of febrile diseases. Zhāng Jī of the Hàn Dynasty refined earlier theories that diseases resulting from a contraction of external evils entered the channel system and that they developed in distinct stages as they passed from one channel to another.

Points, Holes, or Caves? Acupuncture needling sites are usually referred to as “points” in English. However, in Chinese they are called 穴 *xué*, which literally means a cave. They are so called because they are usually located in depressions between bones and sinews (tendons, and muscles).

8. Causes and Processes of Disease

In Chinese medicine, sickness is explained by numerous causes including environmental and mental factors, in addition to physical injuries. Chinese medicine distinguishes between external and internal pathogenic agents. These trigger etiological processes in the body that are called “pathomechanisms.”

Causes of Disease

- External causes (environmental): wind, cold, summerheat, dampness, dryness, and fire.
- Internal causes (mental and emotional): joy, anger, anxiety, thought, sorrow, fear, and fright.
- Miscellaneous causes: external injuries, dietary irregularities, and excesses of activity or inactivity.

8.1. External Causes: The Six Excesses

We all know that we can “catch a cold” if we are exposed to cold with insufficient clothing. Many of those who suffer from arthritis know that their condition is exacerbated by damp weather. In Chinese medicine, environmental factors include not just cold and dampness, but also wind, summerheat, dryness, and fire (fire being used metaphorically to denote environmental heat). These six are called the “six excesses” (*liù yín* 六淫). Other factors include “pestilential qi.” All environmental factors are referred to as “evils” (*xié* 邪) or “evil qi” (*xié qi* 邪气). Because they come from outside, they are often called as “external evils.”

The six excesses are each prevalent in different seasons and are categorized according to both the yīn-yáng and the five phases systems of correspondence, as shown in Table 7. Note that fire is omitted from the table.

Diseases resulting from an invasion of the body by external evils are referred to as “external contractions.”

These six excesses can invade the body in different ways. Most commonly they enter through the skin and settle in the body’s exterior, giving rise to “exterior patterns,” which are essentially characterized by fever and aversion to cold. Exterior patterns are usually caused by combinations of wind and cold (wind-cold) or wind and heat (wind-heat). This is seen in what Western medicine calls common cold or flu. Sometimes external evils that have settled in the exterior can pass into the interior where they give rise to more severe conditions. Under some circumstances, external evils penetrate immediately into the interior. All of these conditions are referred to “external contractions.” Because they are largely characterized by fever, they are also called “febrile diseases” or

Table 7. Correspondences of the Six Excesses

Yīn-yáng	Six excesses	Five Phases	Season
Yáng	Wind	Wood	Spring
Yáng	Summer-heat	Fire	Summer
Yīn	Dampness	Earth	Long summer
Yáng	Dryness	Metal	Autumn
Yīn	Cold	Water	Winter

“externally contracted febrile diseases.”

External evils can also enter the channels. The classic example of this is the invasion of the channels by wind, cold, and dampness, giving rise to “impediment patterns,” which correspond to what Western medicine calls arthritis and other painful musculoskeletal diseases.

Wind is the governing qi of spring, but can occur in any season.

- Wind tends to affect the upper and outer parts of the body, giving rise to headache, nasal congestion, itchy skin, sore throat, facial puffiness, aversion to wind (feeling of cold on exposure to wind or drafts), and sweating.
- Wind is swift and changeable by nature, so it gives rise to diseases characterized by analogous signs. Since wind moves quickly, conditions caused by it are characterized by movement: convulsions, tremor, twitching, dizziness.
- Wind’s swiftness and changeability also account for the rapid onset of external contractions (colds and flu), for the wandering pain of “impediment disease,” and for itching that changes location in “dormant papules” (which corresponds to “urticaria” in Western medicine).

Cold is predominant in winter. However, thin clothing, exposure to cold after sweating, or getting caught in the rain at any time of the year can give rise to invasions of cold evil.

- Cold weakens the yáng qi of the body, giving rise to such signs of yáng vacuity as cold limbs, cold abdominal pain, diarrhea with undigested food in the stool, and long voidings of clear urine.
- Cold also causes contracture and tautness, giving rise to contraction of the sweat pores that prevents sweating, hypertonicity of the sinews (i.e., tension in the muscles), and pain. A patient suffering from cold tends to assume a curled-up lying posture to minimize heat loss.
- Cold reduces the normal loss of fluids through sweating; when cold enters the interior, it can therefore cause long voidings of clear urine. When it affects the lung’s diffusion function, it often causes runny nose with clear nasal mucus.
- Cold slows the movement of qi and blood, so that the facial complexion is white and the tongue pale.

Summerheat is the heat of summer; it occurs only in summer. Summerheat affects the body when someone is exposed to a blazing sun or simply to excessive heat in the environment during the summer months.

- Summerheat is characterized by high fever, vexation, profuse sweating, thirst with large fluid intake, and short voidings of reddish urine. It causes the blood to move more quickly, so the pulse is rapid and surging. It may also manifest in dizziness and blurred vision.
- Direct exposure to a hot sun can cause sudden collapse and clouded spirit (what we call “sunstroke”).

- Summerheat often combines with dampness, giving rise to dizziness, heavy-headedness, oppression in the chest, lassitude of spirit, nausea, poor appetite, and sloppy stool (see next item).

Dampness refers to dampness in the environment. Factors such as prolonged rainy weather or damp clothing can cause damp diseases. It is not associated with any particular season, although in China it often occurs in the long summer.

- Dampness is heavy and clammy in nature. When it invades the body, it manifests in generalized heaviness, heavy-headedness, dizziness, fullness in the chest, and a slimy tongue fur.
- Dampness often affects the spleen, giving rise to abdominal fullness, poor appetite, sloppy stool, and scant urine.
- Dampness often combines with heat or cold (into damp-heat or cold-damp respectively).

Dryness is dryness in the environment, in China occurs mostly in autumn.

- Dryness gives rise to dry nose and throat, dry mouth and thirst, dry cracked skin, scant urine, and constipation.
- It tends to affect the lungs, giving rise to dry cough with scant sticky phlegm that is sometimes flecked with blood.

Fire refers to heat in the environment. It is similar to summerheat. Yet while summerheat occurs only in the summer, fire occurs both in the summer and in any of the other seasons. Fire is often referred to as “heat.”

- Fire causes high fever and sweating.
- Fire easily damages the fluids, giving rise to thirst, dry lips and throat, constipation, and short voidings of reddish urine.
- Fire stimulates the movement of blood, so it is also characterized by a red facial complexion, a red tongue, and a rapid pulse.

The six excesses are external evils. With the exception of summerheat, the other five excesses can also arise internally; in other words, conditions similar to those produced by externally contracted evils can arise from internal imbalances in the body. More will be said about this in subsection 8.4, Pathomechanisms.

In addition to these six, an additional type of external evil is called “pestilential qi.” This term denotes virulent evils that cause contagious diseases such as mumps, smallpox, cholera, and diphtheria.

8.2. Internal Causes: Emotional and Mental

Emotional and mental states of abnormal intensity and duration also cause illness. These are known as “internal causes” of disease. In the context of pathology, Chinese medicine observes seven mental states, called the “seven affects:” joy, anger, anxiety, thought, sorrow, fear, and fright.

Anger and thought are the most common affects to influence the physical health of the body negatively.

- Excessive anger and frustration tend to impair the liver's free coursing action and cause liver qi to become depressed.
- Excessive thought (preoccupation with problems and brooding) damages the spleen.

8.3. Miscellaneous Causes

In addition to these internal and external causes, Chinese medicine recognizes the following causes of disease:

- external injuries,
- animal and snake bites,
- “worms” (parasites),
- dietary irregularities, and
- excesses of activity or inactivity

These are sometimes called “neither internal nor external causes of disease.”

Furthermore, various pathological processes give rise to the pathological products phlegm-rheum and static blood, which in turn can give rise to disease.

The gradual depletion of the body's health-maintaining forces in advancing years creates an increasing susceptibility to illness. Particular constitutional insufficiencies also create vulnerability to illness. Moreover, illness itself can have a damaging effect on the body's resources. Once a patient has recovered from an illness, the damage it caused can give rise to other problems in the future. Not least, Chinese medicine is well aware of iatrogenic conditions, i.e., conditions that result from inappropriate medical treatment.

8.4. Pathomechanisms

The processes by which pathological conditions arise and progress are called “pathomechanisms.” Although pathomechanisms are infinite in number, all conditions can be explained in terms of a disharmony between yīn and yáng. Many can also be adequately explained in terms of a struggle between right and evil. Many can ultimately be explained in terms of disturbances of the bowels and viscera.

Yīn-yáng disharmony: Subsection 4.1 introduced the concept of yīn-yáng disharmony. You will remember that a disharmony of yīn and yáng arises when an imbalance of yīn and yáng causes the body to become abnormally hot or cold.”

Disharmony as superabundance or insufficiency: The concept of disharmony rests on the notion of either having too much of one thing or not enough of another. This is often expressed in terms of “superabundance” and “insufficiency,” or of “surfeits” and “deficits.” In either case, they lead to a general “vacuity” or “repletion” in the body.

How disharmony arises: Conditions of superabundance mostly arise as a direct result of the body being invaded by the six excesses, which were described above. Condi-

tions of insufficiency largely arise when factors such as poor diet, overwork, illness, and the wear and tear of life damage qi, blood, yīn, or yáng.

Vacuity or deficiency? The word 虚 *xū* is often translated as deficiency. In Chinese, there are in fact two terms, 不足 *bù zú*, “insufficiency,” and 虚 *xū*, “vacuity.” “Insufficiency” describes a lack of some substance or aspect of the body. “Vacuity” emphasizes that insufficiency in relation to the whole. When we say “heart qi vacuity,” we don't mean that only heart qi is insufficient; we mean that the whole body, as it is affected by an insufficiency of heart qi, is relatively empty. “Vacuity” expresses the dynamic holistic view of sickness better than “deficiency,” which refers only to the absence of a particular substance.

However, superabundance can also arise from internal imbalance, such as when frustration and anger cause liver qi to become depressed and stagnant. Insufficiency can also arise as a secondary result when the six excesses cause damage to qi, blood, yīn, or yáng within the body.

Disharmony is always yīn-yáng disharmony: Since all facets of health and sickness, including both the internal elements of the body and externally invading evils, are classified according to yīn and yáng, superabundances and insufficiencies can always be understood in terms of deficits or surfeits of yīn or yáng.

Vacuity and repletion: Conditions caused by superabundance are often referred to as “repletion,” emphasizing that the body as a whole is overloaded by an unwanted evil. Repletion conditions are characterized not only by the presence of an evil, but also by a powerful reaction of “right qi”—the forces of the body that maintain health and resist disease. Conditions caused by insufficiency are often referred to as “vacuity,” a term that emphasizes the whole body's empty state that results from the relative weakness of one of its aspects. Repletion tends to be what Western medicine calls an “acute condition,” while vacuity is usually a “chronic condition.”

Vacuity and repletion can be focused in different organs and parts of the body, e.g., heart vacuity, spleen vacuity, exterior vacuity, interior repletion, etc.

Disharmonies created by surfeits and deficits: Here we discuss disharmony created by surfeits, disharmony created by deficits, and surfeits and deficits giving rise to each other.

Disharmony created by surfeits: When a yáng evil such as summerheat or fire (heat) invades the body, it causes a surfeit of yáng; when a yīn evil invades the body, it creates a surfeit of yīn. In both cases, the surfeit of yīn or yáng damages the opposite side, thereby causing a general imbalance between the two sides. A yáng surfeit damages yīn; a yīn surfeit damages yáng.

Thus, when the yáng evil summerheat invades the body, it creates a surfeit of yáng that damages the yīn-fluids of the body, giving rise to thirst and short voidings

of reddish urine. When the yīn evil cold invades the body, it creates a surfeit of yīn, which weakens the yáng qì of the body, giving rise to such signs as cold limbs, cold

abdominal pain, diarrhea with undigested food in the stool, and long voidings of clear urine.

Table 8. Surfeits and Deficits of Yīn and Yáng

Cold		Heat	
Repletion Cold (yīn Surfeit)	Cold limbs Aversion to cold Tongue: pale Pulse: slow	Repletion heat (yáng surfeit)	Vigorous fever Red face, red eyes Thirst with desire to drink Reddish urine Tongue: red Pulse: rapid
Vacuity Cold (yáng deficit)	Bright white facial complexion Fear of cold Cold limbs Liking for quiet & lying in curled-up posture Long voidings of clear urine Diarrhea with undigested food in the stool Tongue: pale Pulse: slow	Vacuity heat (yīn deficit)	Vexing heat in the five hearts Tidal fever Upbearing fire flush (hot flashes) Emaciation Night sweating Dry throat and mouth Tongue: red with little fur Pulse: fine, rapid, & forceless

Disharmony created by deficits: Poor lifestyle, the general weakening of the body with age, constitutional insufficiencies, and severe or recurrent illness can take their toll on the body. Depending on the nature and conjugation of these factors, either qì and yáng or blood and yīn are affected.

When the yīn aspect is damaged, the yáng aspect of the body grows proportionately stronger. This results in heat signs such as tidal fever (fever recurring each day at a certain time) and heat in the palms and soles. This condition is called “vacuity heat,” meaning heat due to yīn vacuity.

When the yáng aspect is damaged, the yīn aspect becomes disproportionately strong. This results in cold signs such as cold limbs, limp aching lumbus and knees, long voidings of clear urine, and impotence (failure of the “yáng member” to perform its function). Conditions of this kind are called “vacuity cold,” meaning cold due to yáng vacuity.

Surfeits and deficits giving rise to each other: Deficits can give rise to surfeits. For example, when the yáng qì of the spleen is weakened, it can fail to deal adequately with ingested fluids (which are yīn), giving rise to internal dampness. Dampness is thus a yīn evil that arises internally from a weakness of yáng qì. Furthermore, dampness can gather to form another pathological product, phlegm, which also creates repletion patterns.

Surfeits can also give rise to deficits. For example, when externally contracted heat damages the fluids of the body, a deficit of fluids arises. Thus, a yáng surfeit of heat causes a yīn deficit of fluids. When externally contracted cold damages yáng qì, a deficit of yáng arises.

In complex conditions, where deficits and surfeits coexist, usually one is more pronounced than the other. The dominant element is often referred to as the “root” of the disease, while the secondary element is called the “tip” (also called “branch”).

Struggle between right and evil: A specific form of imbalance that arises when evils are present is the struggle between the body’s health-maintaining forces and the

Right and Evil: Chinese physicians use a moral metaphor to describe the forces interacting in pathological processes. Environmental factors affecting the health of the body negatively are called “evils” and the forces of the body resisting their invasion are called “right.” Because both of these are active forces, they are often referred to as “evil qì” and “right qì.”

forces threatening it—the struggle between right and evil.

The clearest example of the struggle between right qì and evil qì is observed when external evils invade the exterior of the body. When one of the six external excesses invades, right qì struggles against it. In most cases, the fierce struggle between right and evil gives rise to fever. While a mild or absent fever tends to signify that the offending evil is cold, the presence of fever does not necessarily mean that the offending evil is heat. If the evil remains undefeated by right qì, it can pass into the interior and transform into fire, giving rise to high fever and constipation. This constitutes a condition in which yáng qì is superabundant and causes damage to the yīn fluids of the body.

The end of the discussion on pathomechanisms brings us to end of “basic theory” of Chinese medicine. Following section discuss diagnosis, starting with the four examinations.

Pathomechanism: The term *bìng jī* 病机 literally means disease/illness machine/mechanism. Many Westerners inspired by alternative health care ideals expect the language of Chinese medicine to be organic rather than mechanistic. This notion is only partly true. The term “pathomechanism” is one of many Chinese terms that contain a mechanistic metaphor. See Chapter 18 for more about metaphors in Chinese medicine.

9. Four Examinations

Diagnosis involves first identifying all the signs of sickness and then matching these to known pathologies (that is, patterns and diseases, which are discussed in the last two sections of this Introduction, 10 and 11). In Chinese medicine, signs of sickness are identified through the four examinations—inspection, listening and smelling (considered as one examination), inquiry, and palpation. Diagnosis is not limited to objectively quantifiable signs determined by the physician, as it tends to in biomedical practice. Rather it depends upon information gathered with the practitioner’s naked senses, in conjunction with the patient’s answers to the practitioner’s questions.

Chinese medicine does not primarily aim to treat particular symptoms, which are considered as the “tip” of the overall condition, but rather to treat the underlying “root” of the disease. Diagnosis is a complex process because an individual symptom in most cases does not provide sufficient basis for an effective treatment. A symptom can be treated only when its cause is understood. The cause can only be understood when all symptoms are carefully correlated. For example, thirst is usually due to damage to fluids or to yīn vacuity. However, thirst without an increased intake of fluid may indicate that the supply of fluid to the mouth is obstructed by either blood stasis or phlegm-rheum. To determine the exact cause, further signs must be found. Very often, indications are provided by the facial complexion, tongue, and pulse, as these reflect subtle changes that point to deeper pathological processes hidden within the body.

9.1. Inspection

In the inspection examination, attention focuses on: the spirit; the body and its posture; facial complexion; skin and flesh; head and face; and tongue and tongue fur.

Spirit: In the diagnostic context, “spirit” means the general vitality of the patient as it manifests in the face and eyes, and in the posture and bearing. The main purpose of inspecting the spirit is to determine the severity of the illness.

Spiritedness: If a patient has a clear mind, clear speech, bright eyes, and sharp reactions, this is called “spiritedness.” Whatever the condition may be, it means that the prognosis is probably good.

Spiritlessness: If a patient has an unclear mind, confused speech, dull lifeless eyes, and poor reactions, and in severe cases, a “clouded spirit” (partial or total loss of consciousness), this is called “spiritlessness.” It often signifies a poor condition of right qì and therefore a poor prognosis.

The body and its posture: Inspection of the body as a whole and of its posture and bearing provides a variety of data.

Body: The general appearance of the body informs the practitioner about the constitution of the patient.

- A thin sinewy body indicates a constitution marked by yīn vacuity.
- A fat flabby body indicates a constitution marked by yáng vacuity.

Posture: Posture often reveals information about heat and cold. Examples:

- Patients who lie in curled-up posture are suffering from cold.
- Patients who spreads their arms and legs, and throw off their clothing or bedclothes are suffering from heat.

Facial complexion: Complexions are categorized as white, red, yellow, green-blue, or black (five-phase colors). Each has multiple significances and must therefore be correlated with other signs. The broad lines are as follows:

- A white (pale) complexion indicates vacuity.
- A red complexion indicates heat.
- A withered-yellow complexion (a pale, yellow complexion like the color of dried leaves) is a sign of blood vacuity. A more pronounced yellow complexion is a sign of jaundice.
- A green-blue facial complexion can indicate severe cold, pain, or blood stasis.
- A black complexion points to kidney vacuity, cold patterns, blood stasis, or water-rheum (fluid accumulations).

Tongue and tongue fur: Inspection of the tongue and its fur is a highly refined element of diagnosis. The tongue mainly gives hints about vacuity and repletion, as well as cold and heat.

- A pale tongue can mean yáng vacuity, dual vacuity of qì and blood, or externally contracted cold.
- A red tongue indicates heat.



神 *shén*, spirit
(grass script)

- Purple speckles on the tongue, usually on the margins, indicate blood stasis.
- A thin white tongue fur is normal and is also seen in mild illnesses.
- A thick tongue fur can indicate the presence of dampness or phlegm.
- A thick slimy tongue fur means phlegm.
- A yellow tongue fur indicates heat.

The color of different parts of the tongue and the distribution of the tongue fur provide the practitioner with further information. In addition, there are many abnormalities of the shape and bearing of the tongue that are observed in severe illness.

9.2. Listening and Smelling

Listening and smelling are classed as one examination simply because the Chinese *wén* 聞 means both to listen and to smell.

In the listening examination, the practitioner listens to the sound of the voice, breathing, coughing, and hiccupping. These mainly help to identify vacuity and repletion in the body. For example, rough loud sounds usually form part of a repletion pattern, while low faint sounds form part of a vacuity pattern.

The smells of body odors, breath, expectorated phlegm, and vaginal discharge mainly assist in detecting the nature of a disease and of any evil causing it. The more personal odors are usually assessed indirectly through inquiry.

9.3. Inquiry

The inquiry examination is wide-ranging. The practitioner asks about such topics as the history of the present illness, the history of past illnesses, the locality and environment where the patient lives, and the patient's occupation and temperament. All these factors provide useful data about the patient's susceptibility to illness and thus are important to understanding the present illness and to determining treatment.

In addition, inquiry covers the patient's perception of physical symptoms, such as fever and aversion to cold; sweating; discomforts in the head and body; appetite, thirst, and taste in the mouth as experienced by the patient; urine and stool; sleep. Problems specific to women and men are also the subject of inquiry.

Cold and heat: Fever and aversion to cold are an important subject in inquiry.

- A fever with aversion to cold is observed in common cold and flu. It indicates that the exterior of the body has been invaded by an external evil.
- When the aversion to cold abates and the fever becomes more vigorous, this indicates that the evil has entered the body's interior and has transformed into heat.
- "Tidal fever" is most commonly a sign of yīn vacuity.

- "Vexing heat in the five hearts" (i.e., heat felt in the palms of the hands, soles of the feet, and in the center of the chest) is also a sign of yīn vacuity.

Sweating: Abnormalities of sweating are observed in numerous conditions.

- Externally contracted disease
 - When an external evil has invaded the exterior, giving rise to slight fever and pronounced aversion to cold, an absence of sweating indicates that the offending evil is wind-cold and that the pattern is one of pure repletion; in contrast, the presence of sweating indicates that the evil repletion is complicated by exterior vacuity.
 - When an external evil enters the interior and transforms into heat, a vigorous fever is invariably accompanied by profuse sweating.
- Other conditions
 - "Spontaneous sweating," that is, sweating during the daytime that is unrelated to physical exertion, is observed in patients with yáng vacuity.
 - "Night sweating," i.e., sweating during the night (or during sleep at other times of the day) that ceases on waking, is a sign of yīn vacuity.

Head and body: Discomforts in the head and body are numerous. The most common sensations are pain and feelings of fullness or distention. These often point directly at the location of a disease and its cause.

- Pain is explained as the absence of movement, as expressed in the saying, "when there is stoppage, there is pain." It is caused by qì stagnation, blood stasis, the inhibiting effect of cold on yáng qì, or the disruptive effect of heat.
- Feelings of fullness and distention can be caused by qì stagnation, dampness, phlegm-rheum, or qì vacuity.

Appetite, thirst, and taste in the mouth: These items provide information about the state of the stomach and spleen.

- Poor appetite with sloppy stool, fatigue, pale tongue, and a lack of strength indicates a weakness of the spleen and stomach.
- Poor appetite with fullness in the abdomen and a thick tongue fur is often a sign of spleen vacuity with dampness.
- Swift digestion and rapid hungering in an emaciated patient is usually a sign of stomach heat.
- A thirst that is greater than normal, with increased fluid intake, indicates heat, while the absence of normal thirst is a sign of cold.
- Thirst without an increased fluid intake may indicate either blood stasis or phlegm-rheum obstructing the supply of fluid to the mouth.
- A bitter taste in the mouth indicates liver and gallbladder fire.
- A sweet taste and slimy sensation in the mouth indicate damp-heat in the spleen and stomach.

Stool and urine: Stool and urine are important topics for inquiry. They provide a host of information about the internal processes of the body, specifically about digestion and the health of the spleen and stomach, about the state of the fluids, and the presence of heat and cold.

- **Constipation** most commonly arises from excessive heat or from an insufficiency of fluids. Both of these cause the stool to become dry and hard.
- **Diarrhea** is often due to spleen vacuity, but it can also be caused by damp-heat, food stagnation, or phlegm-damp.
- **Long voidings of clear urine** constitute a vacuity cold condition. Short voidings of reddish urine are a sign of repletion heat or damp-heat patterns.
- **Frequent urination at night** (nocturia) is usually a sign of kidney yáng vacuity.
- **Enuresis** (bed-wetting) and urinary incontinence (involuntary loss of urine during the day) are both signs of kidney qì failing to retain urine.

Sleep: Sleep disturbances include insomnia (inadequate sleep) or hypersomnia (excessive sleep). Insomnia is

The importance of inquiry: The inquiry examination provides information that cannot be gleaned through the other examinations. At the same time, it can partly replace some of the examinations, for example, the visual or listening-smelling examination of stool, urine, phlegm, menstrual flow, and vaginal discharge, which are less readily available to the clinician.

Inquiry shapes the overall examination process. It accords the patient an active role in interpreting his or her condition and influencing treatment. Illness is thus determined in a cooperative process between the patient and the healer. For this reason, many modern Chinese textbooks place it before the other three examinations.

usually caused by repletion heat or vacuity heat, while hypersomnia is usually attributed to yáng vacuity.

9.4. Palpation

The palpation examination includes feeling the pulse and palpating the body.

PULSE-TAKING

Feeling the wrist pulse is the single most important aspect of palpation. It is one of the hallmarks of a skilled physician, requiring both extensive experience and intuitive sensitivity.

The pulse is taken by placing the index, middle, and ring fingers close together on the pulsating point close to the styloid process of the radius, with the index finger closest to the patient's hand. The positions corresponding to the index, middle, and ring fingers are called the "inch, bar, and cubit," respectively. Each position can

provide different diagnostic information. In addition, varying amounts of pressure are applied to determine the nature of pulse at the superficial, middle, and deep levels.

The wrist pulse reflects the flow of qì and blood in the channels, which in turn reflects healthy and morbid states in the body. From the pulse examination, the practitioner can determine the exterior/interior location of disease, the state of qì, blood, and fluids, as well as the condition of the bowels and viscera.

The pulse examination entails matching states detected in the pulse with specific pathologies. With some experience, a certain pulse type can be matched directly with certain characteristics of the patient's condition.

Floating pulse & sunken pulse: When an evil is in the exterior of the body, the pulse is floating, which means that it is felt with only slight pressure of the fingers. When the disease is in the interior, the pulse is sunken and most prominently felt only when greater pressure is applied.

Rapid pulse & slow pulse: A rapid pulse indicates heat, while a slow pulse indicates cold. This is related to the fact that heat stimulates activity, causing the blood to move more quickly, while cold decreases activity, causing qì and blood to slow down.

Vacuous pulse & replete pulse: A pulse that is forceless at all positions (inch, bar, and cubit) and all levels (superficial, middle, and deep) is described as vacuous; it feels empty and soft under pressure. The vacuous pulse is seen in vacuity patterns, especially in dual vacuity of qì and blood. A replete pulse is firm and forceful at all positions and levels; the pulse is exuberant on both arrival and departure; the blood vessels feel wide. A replete pulse is observed in repletion patterns and in healthy individuals.

Surging pulse & fine pulse: A surging pulse is large (the blood vessel feels wider than normal) and forceful; it signifies repletion heat. A fine pulse is one in which the vessel feels thinner than normal. It typically indicates blood vacuity or yīn vacuity.

Slippery pulse & rough pulse: A slippery pulse is one that moves freely. It is often observed in healthy people, especially pregnant women. In illness, it is associated with phlegm-rheum or food stagnation. A rough pulse is the opposite of the slippery pulse, i.e., one that does not flow smoothly. It is often seen in blood stasis patterns and dual vacuity of qì and blood.

Stringlike pulse: This is a long taut pulse that feels like the tightened string of a musical instrument. It is associated with disease of the liver and gallbladder (especially in ascendant hyperactivity of liver yáng). It is also associated with phlegm-rheum, which is typically characterized by a pulse that is slippery and stringlike. A pulse that is stringlike and forceful is called a "tight pulse," which is associated with cold and pain.

Interrupted pulses: An interrupted pulse is one that periodically skips a beat. Three types are identified:

- **Bound pulse:** A pulse that is slow with pauses at irregular intervals. It is mostly seen in cold, phlegm, and static blood patterns. It can also be seen in dual vacuity of qì and blood.
- **Intermittent pulse:** A pulse that has long pauses at relatively regular intervals and is soft and weak. It is observed in debilitation of visceral qì, in pain, fright or fear, and in injuries due to knocks and falls.
- **Skipping pulse:** A pulse that is rapid with pauses at irregular intervals. It is observed in repletion heat and in stagnation of qì, blood, or food. It may also be a sign of debilitated visceral qì.

BODY PALPATION

Body palpation involves feeling the surface of the body with the hand to determine the presence of heat, cold, moistness, distention, and pain, and to observe the patient's reaction to pressure. Palpation is applied to different parts, notably the skin, the extremities, abdomen, and certain acupoints.

Palpation concludes the practitioner's diagnosis of the patient's state of health as the last of the four examinations. The pathological signs gathered during diagnosis then allow the practitioner to proceed to identify patterns.

10. Identifying Patterns

Like biomedicine, Chinese medicine has the notion of "disease" in the sense of a specific affliction, such as measles, mumps, cholera, or jaundice. However, because Chinese medicine focuses attention not just on a patient's disease, but on the overall state of the patient in relation to the disease and on the dynamic of yīn and yáng, it also has the concept of "patterns," also called "syndromes." Patterns capture the totality of a patient's state at any one time. Identifying patterns is the key to choosing an effective treatment tailored to the precise needs of the individual.

Patterns are pathological states of the body described in terms of offending evil, yīn-yáng imbalance, and disease location, for example, "exterior heat," "interior cold," "wind-cold fettering the exterior," "liver qì invading the stomach," "nondiffusion of lung qì," "cold congealing in the vessels," "heart and kidney failing to interact," "yīn vacuity," and "yáng vacuity."

Diseases (such as measles or cholera) can also be analyzed in terms of patterns. Any disease is characterized by different signs at different stages. Furthermore, any given stage of a disease can manifest in different ways in different patients. This is because a pattern reflects not only the effects of evils in the body but also the state of right qì, which is different in every individual. Hence, diseases manifest in different patterns. However, even when no specific disease entity is present, a pattern is always identifiable.

"Pattern identification as the basis for determining treatment" is now generally regarded as a key concept of Chinese medicine and one of its main distinguishing features. It has undergone considerable systematization in modern times.

In the process of identifying patterns, the practitioner first identifies general characteristics of the illness according to a differentiating process called "eight-principle pattern identification." He or she then focuses on the more specific aspects of the condition. These are distinguished according to "qì, blood, and fluids pattern identification," "bowel and visceral pattern identification," and "externally contracted disease pattern identification."

Pattern identification

- Eight-principle pattern identification
- Qì, blood, and fluids pattern identification
- Bowel and visceral pattern identification
- Externally contracted disease pattern identification
 - Six-channel pattern identification
 - Four-aspect pattern identification

10.1. Eight-Principle Pattern Identification

This is the most general of pattern identification procedures. The eight principles are exterior-interior, cold-heat, vacuity-repletion, and yīn-yáng. The practitioner first determines if the disease is in the exterior or interior, whether its nature is cold or heat, and then whether the condition is one of vacuity or repletion. Finally, the practitioner determines whether overall the condition is a yīn pattern or a yáng pattern.

Exterior and interior refer to parts of the body. Determining whether a patient's condition is an exterior or interior pattern is most important, because only initial-stage externally contracted diseases (febrile diseases) manifest as exterior patterns. In simple terms, exterior patterns are characterized by aversion to cold with fever. Interior patterns may manifest in numerous signs including aversion to cold or fever, but almost never with these two symptoms occurring together.

Cold and heat can manifest in aversion to cold and fever, respectively, but in practice the state of the fluids is often the main gauge. Cold is characterized by copious clear urine and nasal mucus; heat is characterized by scant yellow nasal mucus, dry throat and mouth, scant reddish urine, red facial complexion, and a red tongue.

Vacuity and repletion reflect the relative state of right qì and evil qì. A vacuity pattern is chiefly characterized by weakness of the body. A repletion pattern is a condition characterized by the strong resistance of the body's right qì to an evil, which in external contractions usually manifests in fever. Detecting vacuity and repletion is important in the case of heat or cold, because both vacuity and repletion patterns may include heat or cold signs.

Yīn and yáng are the general classifiers of all the other patterns. Interior, cold, and vacuity patterns are yīn,

while exterior, heat, and repletion patterns are yáng. Conditions that develop slowly are generally classified as yīn, while conditions marked by acute onset and rapid progression are typically yáng in nature.

When eight-principle pattern identification has been successfully applied, the practitioner's focus is narrowed. If a patient is found to be suffering, or to have recently suffered, from an exterior pattern that is related to the present condition, the next step is externally contracted disease pattern identification. If the condition is not related to a recent exterior pattern, then the next step is either qì, blood, and fluids pattern identification, or bowel and visceral pattern identification.

10.2. Qì, Blood, and Fluids Pattern Identification

Qì, blood, and fluids pervade the whole body. Many morbid states of the body of the body involve them.

Qì disease patterns: Qì has the functions of movement, retention, qì transformation, defense, nourishment, and warming. Qì disease patterns arise when any of these functions fails or is disturbed. The main pathologies of qì are qì vacuity, qì fall, qì stagnation, and qì counterflow.

Qì vacuity: When qì is insufficient and fails to perform one of its functions (especially movement, retention, transformation, defense, and nourishment), this is called “qì vacuity.” The main signs are fatigue and lack of strength. Other manifestations vary according to the bowel or viscus whose qì is affected. For example, if the lung is affected it may cause shortness of breath and a faint low voice. When the spleen is affected, it results in poor digestion.

Qì fall: Qì is the force that holds all the organs in place. When this function fails, qì fall occurs. This manifests in prolapse of the rectum or the uterus. In modern practice, floating kidney and gastropptosis are also attributed to qì fall. Qì fall is also called “spleen qì vacuity fall,” because it is characterized by pronounced spleen qì vacuity signs.

Qì stagnation: When qì moves slowly or stops altogether, this is called “qì stagnation.” The main signs are dull or mild pain of unfixated location, fullness, and distention.

Qì counterflow: When qì moves in the wrong direction, this is called qì counterflow. For example, qì normally carries food down the digestive tract. When qì stagnates and moves in an upward direction, this is called “counterflow ascent of stomach qì,” which manifests in belching and hiccup or in nausea and vomiting.

Qì block is any critical condition arising when the qì dynamic of a particular bowel or viscus and its orifice are obstructed and characterized by signs such as loss of consciousness, by severe cold of the limbs, by gripping pain in the internal organs, or by urinary or fecal stoppage.

Blood disease patterns: The main pathologies of the blood are blood vacuity, blood stasis, blood heat, and blood cold.

Blood vacuity: When blood fails to perform its nourishing function, this is called “insufficiency of the blood” or “blood vacuity.” It is characterized by a lusterless or withered-yellow complexion, pale tongue, fine pulse, dizziness, heart palpitations, and many other signs. Patients diagnosed in Western medicine as anemic are often found to be suffering from blood vacuity.

Blood stasis: When the blood moves slowly or stops moving, this is called “blood stasis.” Blood stasis manifests in local swelling and distention, stabbing pain of fixed location, abdominal masses, black complexion, and green-blue or purple lips. Bruises and varicose veins are manifestations of blood stasis. Blood stasis often manifests in tiny purple speckles or small purple macules on the tongue. It is reflected in a rough pulse.

Blood heat: This arises in externally contracted disease or miscellaneous disease when when internal heat enters the blood (i.e., becomes concentrated in the blood). Heat causes the blood to move faster and more forcefully. This is often described as “frenetic movement of hot blood.” Blood heat damages the vessels and causes extravasation of blood. It manifests in expectoration of blood (from the lung), retching of blood (from the stomach), bloody stool or urine, or nosebleed. In women, it explains certain instances of profuse menstruation or nonmenstrual bleeding (flooding and spotting).

Blood cold: When congealing cold and stagnant qì inhibit the movement of blood and cause blood stasis, this is called “blood cold.” It manifests in cold pain in the extremities, dull purple coloration of the skin, pain and tension in the lower abdomen. It can also give rise to scant or delayed menstruation with dark purple clotted menstrual flow. It is always characterized by general signs of cold.

Fluid disease patterns: Fluid pathologies include various forms of insufficiency (damage to fluids) and accumulation.

- **Damage to fluids:** Fluids can be damaged by high fever, vomiting, excessive urination, or blood loss. This pattern is characterized by dry mouth, dry throat, and reddish (i.e., tea-colored) urine.
- **Fluid accumulation:** Fluids can accumulate in various parts of the body, most notably in the flesh and in the chest and abdomen.
 - ♦ **Water swelling:** Water can accumulate in the fleshy parts of the body (e.g., in the lower legs) to cause swelling. Water swelling corresponds to edema in Western medicine.
 - ♦ **Phlegm-rheum:** Mucous fluids can gather in specific parts of the body. These are referred to generically as “phlegm-rheum.” Phlegm is thick, while rheum is a thinner fluid.

Relationships between qì, yáng, blood, and yīn vacuity: “Qì vacuity” normally refers to an impairment of the propelling, retaining, and transforming functions of qì. When qì vacuity is complicated by a breakdown in its

warming function, it is denoted by the term “yáng vacuity.” Yin vacuity implies an insufficiency of both blood and fluids.

10.3. Bowel and Visceral Pattern Identification

Bowel and visceral pattern identification is highly complex and hence difficult to summarize in this brief introduction. Here we merely describe the general features of visceral patterns and some specific characteristics of visceral pathologies.

- The viscera each have specific (though not necessarily unique) pathological signs, which are related to breakdown in their functions.
 - Heart disease: abnormalities of the spirit.
 - Lung disease: respiratory signs (e.g., cough and panting).
 - Spleen disease: digestive signs (e.g., abdominal fullness or diarrhea);
 - Liver disease: abnormalities in the flow of blood and qi.
 - Kidney disease: urinary and essence signs.
- Morbidity of the viscera also manifests in signs relating to parts of the body they govern. For example, the spleen governs the flesh, and emaciation is a sign of spleen disease. The liver opens at the eyes and governs the sinews, so eyesight problems and spasm are signs of liver disease.
- Each viscus can suffer from vacuity and repletion patterns. An exception to this is the kidney, which according to modern textbooks is affected only by vacuity patterns.
- Each viscus has its own qi. Qi vacuity of a particular viscus is characterized by general qi vacuity signs (e.g., fatigue and lack of strength), plus the typical signs of disease of that viscus.
- The heart and liver have their own blood vacuity patterns (heart blood vacuity and liver blood vacuity). This means that there are patterns of general blood vacuity in which the heart or liver are specifically affected.
- The viscera have yīn and yáng aspects, although lung yáng is rarely discussed in modern textbooks. Yīn or yáng vacuity of a particular viscus means general yīn or yáng vacuity with specific visceral signs. The yīn vacuity and yáng vacuity patterns of each viscus are characterized by heat and cold signs respectively.
- Disease of the viscera is mostly caused by internal (mental and emotional) or by miscellaneous causes. External (environmental) causes most commonly affect the lung, but sometimes also the spleen (dampness).

Heart disease patterns: Heart disease patterns include vacuity and repletion patterns. Vacuity patterns are

mostly caused by damage to right qi through enduring illness, constitutional insufficiency, or taxation of the spirit through excessive preoccupation. They include heart qi vacuity, heart yáng vacuity, heart blood vacuity, and heart yīn vacuity. Repletion patterns mostly involve phlegm, fire, cold, or static blood.

The main signs of heart disease are heart palpitations, heart vexation (feeling of restlessness focused in the chest), heart pain, insomnia and profuse dreaming, forgetfulness, clouded spirit (partial or total loss of consciousness) and delirious speech, and tongue sores.

Lung disease patterns: Lung disease patterns include vacuity and repletion patterns. The vacuity patterns are lung qi vacuity and lung yīn vacuity. Repletion patterns are caused by wind-heat, wind-cold, repletion heat, and phlegm.

Signs of lung disease include cough, expectoration of phlegm, shortness of breath, panting, hoarse voice, expectoration of blood, chest pain, sore throat, nasal congestion, runny nose, and sneezing.

Spleen disease pattern: Pathologies of the spleen and stomach include cold, heat, vacuity, and repletion patterns. Spleen vacuity patterns include spleen qi vacuity and spleen yáng vacuity, spleen qi vacuity fall (same as qi fall), and spleen failing to control the blood. Repletion patterns include cold-damp encumbering the spleen and damp-heat brewing in the spleen.

The signs of spleen disease include poor appetite, abdominal distention, abdominal pain, sloppy stool or diarrhea, fatigued limbs, bleeding, and puffy swelling (edema).

Liver disease patterns: Liver disease can be divided into three categories: vacuity patterns include liver blood vacuity and liver yīn vacuity; repletion patterns include binding depression of liver qi, liver fire flaming upward, extreme heat engendering wind, and cold stagnating in the liver vessel; lastly, vacuity-repletion complexes include ascendant hyperactivity of liver yáng and liver yáng transforming into wind.

The liver governs the sinews, opens at the eyes, and stores blood. The typical signs of liver disease are: distending pain in the chest and rib-side, breasts, lesser abdomen, and head; eye problems; dizziness and tinnitus; mental depression or rashness, impatience, and irascibility; tingling or numbness of the limbs; various forms of spasm, such as hypertonicity of sinews, twitching of the flesh, and convulsions; and menstrual irregularities.

Kidney disease patterns: In modern clinical practice, kidney diseases all fall into the category of kidney vacuity. These include kidney yáng vacuity, kidney yīn vacuity, insufficiency of kidney essence, insecurity of kidney, and qi kidney failing to absorb qi.

Kidney signs include essence-related problems such as slow development in childhood, sexual dysfunction in adulthood (impotence, sterility, and infertility), and signs of premature aging in advancing years. They also include water-related signs such as urinary disturbances and puffy

swelling. Lastly, they can manifest in discomfort in the lumbus, knees, and head and ears—that is, parts of the body that are related to the kidney.

Combined visceral patterns: A patient will often, if not usually, display a combination of disease patterns involving more than one viscus. This is because disease processes in general affect more than one bowel or viscus. Hence it is important to understand combined bowel and visceral patterns. The most common combined patterns are spleen-kidney yáng vacuity, liver-kidney yīn vacuity, liver-gallbladder damp-heat, heart-kidney yáng vacuity, and spleen-stomach vacuity.

10.4. Externally Contracted Disease Pattern Identification

There are two systems of externally contracted disease pattern identification, and the six channels and the four aspects systems.

SIX-CHANNEL PATTERN IDENTIFICATION

Six-channel pattern identification is a method of diagnosing externally contracted febrile disease. Stemming from the cold damage school, it was first described by Zhāng Jī in the Hàn Dynasty. As the term “cold damage” suggests, Zhāng Jī’s system regards cold (or wind and cold) as the prime cause of externally contracted disease, even though it can transform into heat under certain circumstances.

The six channels are the greater yáng, yáng brightness, lesser yáng, greater yīn, lesser yīn, and reverting yīn (introduced in section 7). In six-channel pattern identification, the same terms are used to refer to different levels of penetration in the progression of a disease. External evils (wind and cold) invade the exterior and settle in the greater yáng channel. If the disease fails to resolve, it can move to other channels; the advance is marked by changes in the signs displayed by the patient. Under normal conditions, the disease advances through the yáng channels first. Only when right qì is weak does the disease advance from the yáng into the yīn channels. In some cases, evils can penetrate the yīn channels directly.

Greater yáng (tài yáng) disease: Greater yáng disease arises when wind and cold invade the exterior. The main signs are aversion to wind or cold, headache, and a floating pulse. Sometimes this is accompanied by fever, generalized pain, and tension and stiffness in the neck and back. The presence of sweating marks a vacuity pattern; the absence of sweating marks a repletion pattern. In some cases, the disease can pass along the channel pathway into the greater yáng bowel, i.e., the bladder.

Yáng brightness (yáng míng) disease: Yáng brightness disease usually arises when evil qì in the greater yáng fails to resolve and passes into the yáng brightness interior, transforming into heat in the process. The main signs are generalized fever and sweating, aversion to heat, agitation, and thirst. If the yáng brightness bowels (stomach and large intestine) are also affected, it further manifests in constipation with abdominal fullness and pain.

Lesser yáng (shào yáng) disease: Lesser yáng disease usually arises when the debilitation of right qì allows an invading evil to bind in the gallbladder channel and affect the normal upbearing and downbearing of qì. The main signs are: alternating fever and aversion to cold, fullness in the chest and rib-side, no thought of food or drink, heart vexation, retching, a bitter taste in the mouth, dry pharynx, dizzy vision, and a stringlike pulse.

Greater yīn (tài yīn) disease: Greater yīn disease can arise from inappropriate treatment or lack of appropriate treatment of disease of the yáng channels. It can also arise when, owing to spleen yáng vacuity, cold evil directly strikes the greater yīn. The main signs are abdominal fullness with periodic pain, vomiting, diarrhea, absence of thirst, and a pulse that is moderate and weak.

Lesser yīn (shào yīn) disease: Lesser yīn disease arises in cold damage disease when the yīn and yáng of the body are body weakened. It is centered in the heart and kidney. Lesser yīn disease takes one of two distinct forms. The main form is a yáng vacuity pattern manifesting as aversion to cold, curled-up lying posture, somnolence, severe cold of the limbs, and a pulse that is fine and faint. Diarrhea with undigested food in the stool may occur in some of such cases. The other form is a pattern of yīn vacuity with internal heat, manifesting as heart vexation, insomnia, and dry pharynx and mouth.

Reverting yīn (jué yīn) disease: Reverting yīn disease is characterized by upper-body heat and lower-body cold. The main upper-body heat signs are thirst with large intake of fluid, qì surging up into the heart, heat vexation in the heart, and clamoring stomach (a sensation similar to pain or hunger). The lower-body cold signs are no desire for food, and vomiting of roundworms.

10.5. Four-Aspect Pattern Identification

Four-aspect pattern identification is the pattern identification system of the doctrine of warm diseases, which arose in the Míng and Qīng dynasties to compete with the doctrine of cold damage. While the cold damage school regarded wind and cold as the primary causes of disease, the warm disease school focused on warmth (i.e., heat) as the primary cause. The difference is usually attributed to changes in prevailing febrile diseases over the centuries, an increase in epidemics partly as a result of war, southward population shifts, and other factors.

Despite the difference in the primary cause, warm damage theory has much in common with cold damage theory. Most notably, it preserves the notion of levels of penetration. However, instead of using the six channels as its framework, it focuses on defense, qì, construction, and blood as the levels of penetration. In English, these are referred to as the “four aspects” for the sake of brevity.

In addition, warm disease theory has an alternative theory for disease penetration that is based on the three burners. Disease progresses from upper burner, through the center burner, to the lower burner—the deepest level of penetration. Triple-burner pattern identification is less

important than four-aspect pattern identification and hence can here be disregarded.

Warm disease takes the form of various different diseases that are named after the evils that cause them: wind-warmth, damp-warmth, spring-warmth, summer-heat-warmth, and warm dryness (autumn dryness). All of them are related to a specific season and can be analyzed in terms of the four-aspect pattern identification system.

Defense-aspect patterns: Defense-aspect patterns can take different forms, but the basic signs are fever with slight aversion to cold, and dry mouth. This may or may not be accompanied by sweating. Defense-aspect patterns correspond to greater yáng (*tài yáng*) patterns of cold damage. However, unlike cold damage patterns, they are caused by heat evil and manifest in heat signs.

Defense-aspect patterns are caused by wind warmth and damp warmth. Wind warmth is characterized by signs of lung heat such as cough, sore pharynx, and a distinctly red tongue. Damp warmth patterns are marked by signs of damp turbidity obstructing the center, such as a general sensation of heaviness, oppression in the chest, nausea, and a slimy tongue fur.

Qi-aspect patterns: Qi-aspect patterns take numerous forms. However, they are broadly characterized by fever, aversion to heat rather than cold, thirst, a bitter taste in the mouth, yellow or reddish urine, a rapid pulse, and yellow or yellow and white tongue fur.

Construction-aspect patterns: When evil heat enters the construction aspect, it manifests in signs such as a red or crimson tongue, a rapid pulse, and generalized fever. If the evil is damp warmth, it will cause a thick slimy tongue fur.

Construction-aspect patterns vary. When the evil is just starting to penetrate the construction aspect, the condition manifests predominantly in qi-aspect signs. When it has penetrated deeply, it may lead to clouding of the spirit, which indicates “heat entering the pericardium” (in other words, the heart).

Blood-aspect patterns: When the evil enters the blood aspect, it manifests in signs of frenetic movement of the blood, such as spontaneous external bleeding and purple maculopapular eruptions (rashes). The tongue is crimson, and may also be bare and smooth like a mirror, indicating damage to yīn and fluid desertion. The insufficiency of yīn-humor can give rise to vacuity stirring internal wind, which is marked by convulsions.

11. Identifying Diseases

The Chinese notion of disease entities is similar to that of Western medicine. Nevertheless, Chinese medicine also includes items among its disease categories that we might think of only as symptom names, for example, headache, jaundice, or heart palpitations. It also recognizes many diseases whose names have no natural correspondence in the English language. This has forced us to devise new names for them in English that are based on the Chinese

terms (e.g., chest impediment, dispersion-thirst, fearful throbbing).

Diseases in Chinese medicine are identified by symptoms, not as in modern Western medicine by quantifiable signs. Cholera, for example, is identified by sudden and severe simultaneous vomiting and diarrhea that (except in mild cases) is followed by severe cramps. Thus, the scope of the disease is wider than in Western medicine, where only conditions caused by the *Vibrio cholerae* bacteria are labeled as cholera.

Below are a few examples of diseases in Chinese medicine, and the principal symptoms by which they are identified.

chest impediment (胸痹 *xiōng bì*): A disease characterized by fullness and oppression in the anterior chest that arises when qi and blood flow are impeded. In severe cases it will manifest in pain stretching to the back, and panting that prevents the patient from lying flat. Chest impediment includes what Western medicine calls heart disease, pulmonary emphysema, and pleurisy.

dispersion-thirst (消渴 *xiāo kě*): A disease characterized by thirst, increased fluid intake, and copious urine. Most cases of dispersion-thirst correspond to diabetes mellitus in Western medicine. The condition is called “dispersion-thirst” because imbibed fluids are dispersed without relieving the thirst.

fearful throbbing (怔忡 *zhēng chōng*): Heart palpitations (the subjective sensation of one’s heartbeat) that are not induced by emotional stimulus. The name does not derive from the palpitations being caused by fear, but rather from the fact that their intense nature is frightening.

fright wind (惊风 *jīng fēng*): A disease in infants characterized by convulsions and, in severe cases, by loss of consciousness. Distinction is made between acute fright wind, occurring with high fever as a result of contraction of external evil, and chronic fright wind, characterized by mild spasm, which occurs in severe enduring illness.

impediment (痹 *bì*): A disease characterized by pain (and other sensations) in the bones, joints, and flesh. It is attributed to external wind, cold, and dampness combining to obstruct the channels. It corresponds to such biomedical diseases as arthritis and sciatica.

malaria (疟疾 *nuè jí*): A recurrent disease that is characterized by shivering, vigorous fever, and sweating. It is attributed to contraction of summerheat, contact with mountain forest miasma, or contraction of cold-damp.

strangury (淋 *lín*): A condition characterized by urinary urgency and frequency, short painful rough voidings, and dribbling incontinence.

tetany (痉 *jīng*): Also called “tetanic disease.” Tetany manifests in severe spasm such as rigidity of the neck, clenched jaw, convulsions of the limbs, and arched-back rigidity.

welling- and flat abscesses (痈疽 *yōng jū*): A welling-abscess is a large suppuration in the flesh characterized

by a painful swelling and redness that is clearly circumscribed. A flat-abscess is a deep malign suppuration in the flesh, sinew, or even the bone.

wilting (痿 *wēi*): Weakness and limpness of the sinews that, in severe cases, prevents the lifting of arms and legs, accompanied by the sensation that the elbow, wrist, knee, and ankle are dislocated. In advanced cases, the affected limbs wither (become weak or atrophied).

wind-fire eye (风火眼 *fēng huǒ yǎn*): A disease marked by sudden reddening of the eyes. It is equivalent to acute conjunctivitis.

wind strike (中风 *zhòng fēng*): A disease marked by hemiplegia, deviated eyes and mouth (pulled to one side), and impeded speech. It often starts with a sudden loss of consciousness. It is equivalent to cerebrovascular accident (stroke) in Western medicine. Wind strike is so called because it was originally attributed to external wind. Over the centuries, it came to be reexplained as due to internal wind. Most wind strike patterns are now understood as being due to wind, phlegm, and heat.

12. Preventing and Treating Disease

12.1. Prevention

In the fight against sickness, Chinese culture places great emphasis on prevention as well as cure. Health is preserved by obtaining and maintaining internal balance and external harmony with the macrocosm. This is achieved by adjusting food, clothing, and exercise according to season. At any given time, one should have a varied diet appropriate to the local conditions, and avoid extremes of rest and exertion. The key to health is balance.

The Chinese have not only methods of preventing sickness, but a whole set of practices, including exercises and dietetics designed to stay fit and improve their health called “life-nurturing.”

Going with nature and the seasons *shùn yìng tiān shí* 顺应天时 is an important concept in the Chinese art “life nurturing.”

12.2. Treatment

In the treatment of disease, Chinese medicine offers several different modalities: medicinal therapy, acupuncture and moxibustion (acumoxotherapy), cupping, tuīná (massage), and dietary therapy. While acupuncture is more popular than medicinal therapy in Japan and in the West, in China it is very much secondary to medicinal therapy in importance.

Principles of treatment: Whichever treatment modality is applied, most principles are the same. In general, the main principle, “supplement insufficiency and drain

superabundance” guides therapy. In other words, treatment aims to supply what is lacking in the body, and remove anything that is harmful or in excess. Thus, when yīn is insufficient, the method of supplementing yīn is applied; when yáng is insufficient, the method of supplementing yáng is applied. When evils such as wind, cold, dampness, and summerheat are present, these must be removed from the body.

Medicinal therapy: Chinese medicinals are natural vegetable, animal, or mineral products. Although they are often referred to as “herbs,” about 25% are in fact animal or mineral products. In this text we use the word “medicinal” to reflect the true nature of substances used in Chinese medicinal therapy. In a Chinese pharmacy, ingredients are mostly still identifiable as leaves, stems, barks, shells, skins, etc., that have been processed in simple ways (drying, cutting, stir-frying) to facilitate storage, reduce any toxicity, or to enhance their effects.

Medicinals each have specific actions and indications that are related to their known properties. They are usually combined with several others to make a formula. The ingredients of the formula are subject to final preparation to produce a decoction, pill, powder, or paste. Of these, decoctions, which are medicinals boiled in water, are by far the most common preparation form. Traditionally, patients are given a packet of medicinals that they decoct for themselves at home. Nowadays, at least outside mainland China, ready-made decoctions prepared in granule or powder form (rather like instant coffee) enable the patient to conveniently reconstitute them with water.

Nature: Medicinals are hot, warm, cool, or cold. These properties are called the “four natures” or “four qi.” Since warm and cool are simply milder in degree than hot and cold, the four are really only two. In addition, some medicinals are balanced in nature, which means they are neither hot nor cold. Hot and warm medicinals are used to treat cold patterns; cool and cold medicinals are used to treat heat patterns.

Flavor: There are five basic flavors: sour, bitter, sweet, acrid, and salty. These properties are associated with the five phases, and thereby also with the five viscera: sour medicinals enter the liver channel; bitter medicinals enter the heart channel; sweet ones enter the spleen channel; acrid ones enter the lung channel; and salty ones enter the kidney channel. In actual practice, though, the five-phase relationships are less important than other known actions: Sourness has an astringing action; bitterness dries and drains; sweetness supplements and relaxes tension; acridity dissipates and moves; and saltiness softens hardness.

Bearing: Agents that act on the upper part of the body are described as “upbearing”; those that act on the lower part of the body are called “downbearing.” Agents that act on the surface of the body are described as “floating.” Agents that act on the inside of the body are called “sinking.” Upbearing and floating agents, referred to generically as upfloating medicinals, are yáng in nature; downbearing and sinking medicinals, referred to generically as downsinking, are yīn in nature.

Actions: Medicinals perform various actions. A few examples are given here.

- **Resolving the exterior:** Exterior-resolving medicinals promote sweating so that external evils can be eliminated. Most of them are acrid and upfloating. Some are warm and treat wind-cold; others are cold and treat wind-heat.
- **Clearing heat:** Heat-clearing medicinals are used to treat internal heat in the body. They are generally cold, bitter, and downbearing.
- **Precipitation:** Precipitation is also called “purgation.” It refers to the action of freeing the bowels. Precipitating medicinals are generally cold, bitter, and downbearing.
- **Transforming dampness:** Dampness-transforming medicinals eliminate dampness. It is called “transforming dampness” because the word transform (*huà* 化) is used to denote gradual destructive (or creative) change. Dampness-transforming medicinals are mostly warm and acrid.
- **Rectifying qi** is the method of treating qi stagnation. Qi-rectifying medicinals are generally acrid in flavor.
- **Calming the liver and extinguishing wind:** These medicinals treat liver wind stirring internally.
- **Opening the orifices** is the method used to treat clouded spirit (loss of consciousness) in block patterns. Note that they are not used in vacuity patterns.
- **Supplementation** is the method used to treat vacuity. Supplementing medicinals include qi-supplementing medicinals, yang-supplementing medicinals, blood-supplementing medicinals, and yin-supplementing medicinals. Most are sweet.
- **Securing and astringent** is a method used to stem loss of fluid in the treatment of sweating, chronic diarrhea, seminal emission, and severe vaginal discharge. Most are astringent.

Acupuncture: Acupuncture involves the insertion of metal needles into the flesh in order to influence the flow of qi in the channel and network vessel system.

The way in which qi is influenced depends upon the sites in which the needles are inserted, on the direction of insertion, and on the way that they are manipulated after insertion.

A sensation felt by the patient (and by the practitioner), known as “obtaining qi,” is achieved by needle manipulation, and is considered by many practitioners to be an essential component of treatment success.

Needles are typically retained in situ for a given period of time, during which auxiliary techniques may be added to strengthen the effect of treatment.

Needles are usually inserted at specific points called “acupuncture points” or “acupoints.” Most acupoints lie on channels (channel points). Others lie off the channels (non-channel points).

Needle stimulation at each acupoint is known to produce certain therapeutic effects. The effect may be local, such as relieving pain, swelling, or hypertonicity. In addition, stimulation of channel points is generally capable of producing therapeutic effects not only locally, but also at distant locations on the particular channel. For example, LI-4 (*hé gǔ*), a point between thumb and index finger on the hand yang brightness large intestine channel, which passes through the jaw, is found to be effective in treating toothache.

Needles can be manipulated in different ways to supplement or drain. For example, when a needle is inserted obliquely in the direction in which the channel qi flows, this serves to promote supplementation. If a needle is inserted obliquely counter to the qi flow, this provides a draining stimulus.

Acupuncture or Acumoxotherapy? The Chinese term 针灸 *zhēn jiǔ* literally means “needle-moxibustion,” reflecting the fact that this therapy involves both needling and burning moxa (the herb mugwort) on or close to the body. The English term “acumoxotherapy” is therefore often more accurate than “acupuncture.”