Chapter 2 Basic Theories of Traditional Chinese Medicine

Francisco Lozano

Introduction

Traditional Chinese medicine (TCM) is a unique, complete medical system arising from a living tradition of literate scholarship that spans at least 2,000 years. Well structured and resting upon a solid, coherent theoretical basis, TCM provides an integral framework for understanding, interpreting, and organizing interventions in the human health-disease process. Over the course of its long history, TCM in various forms has been the main form of health care in China and many other countries in Asia. Its theories and techniques are studied and practiced alongside Western biomedicine in countries such as Japan, Vietnam, Singapore, Taiwan, and mainland China, and it has become one of the main forms of alternative medicine in North America and Europe.

TCM views the human being as standing in intimate relation to its natural environment. In fact, this relationship is considered a key element in the health of the individual. Disease is understood to be a deviation from natural conditions, which correspond with changes in the natural environment. TCM thus describes diseases as being caused by wind, cold, dampness, heat, and so on, while the internal functions of the body are grouped together according to perceived systemic relationships. What these descriptions point to are clusters of related phenomena in the body, which occur together and can be treated with specific interventions, i.e., acupuncture, herbal therapy, and so on.

The importance of these theories for the application of acupuncture and herbal therapy cannot be underrated. Unlike Western biomedicine, which focuses on structural changes in the body and alterations in the chemical composition of blood and other tissues, the emphasis of TCM theory is in alterations of function. In order to manifest the full therapeutic potential of TCM, the patients and their conditions

F. Lozano (⊠)

Fig. 2.1 Taiji diagram (Tai Ji Tu). The classic yin and yang diagram



need to be analyzed through the lens of this system. In our experience, this not only optimizes the applicability of TCM-based therapies, such as acupuncture and herbal medicine, but also complements the highly specific approach of Western biomedicine, thereby providing superior health care and optimal clinical results.

Basic Theories of Traditional Chinese Medicine

TCM theory in its present form arose from the naturalistic philosophies of ancient China, influenced and expanded upon by the accumulated clinical experience of generations of literate scholar practitioners. It is because of this cultural context that TCM theory can at times seem abstruse or outdated. However, it represents a complete, integrated method of interpreting human physiology and responding to pathological changes in the body [1].

The most important concepts taken from ancient Chinese naturalistic philosophy in TCM are those of *qi*, *yinyang*, and the five phases (*wuxing*). Theoretical concepts specific to TCM include the doctrine of *zheng ti guang nian*, the concepts of the viscera and bowels (*zangfu xue shuo*), channels and networks (*jingluo*), body substances (*qi*, blood, essence and body fluids *qi xue jing jinye*); and pathogenic agents (*bing yin*). These theories, together with the methodologies of the four (diagnostic) methods (*si zhen*) and pattern discrimination (*bian zheng*) comprise the theoretical framework of TCM. Each of the therapeutic tools of TCM, including acupuncture and moxibustion (*zhenjiu*), Chinese herbology (*zhongyao fang*), and Chinese therapeutic massage (*zhongyi tuina*) rest upon this theoretical basis [2–7].

Yinyang Theory (yinyang xue shuo)

Yinyang theory expresses a universal standard of quality that describes two complementary, opposite aspects of an indivisible whole (Fig. 2.1). It is used to describe function and relationship of these aspects as part of a continuous process of transformation and change in the universe. Applied to medicine, *yinyang* theory is used to compare and contrast, and thus differentiate, physiological and pathological phenomena.

Yin is associated to qualities such as cold, rest, responsiveness, passivity, darkness, structure, the interior, downward and inward motion, and decrease. By contrast, *yang* is associated with heat, stimulation, movement, activity, light, the exterior, upward and outward motion, and increase. It is important to observe that these aspects occur only in relation to each other (i.e., cold can be defined only by the knowledge of heat, darkness by the presence or absence of light, and so on). In medicine, *yinyang* theory would be applied to opposites such as structure (*yin*) and function (*yang*), the lower body (*yin*) in relation to the upper body (*yang*); however, the concepts of *yinyang* are never absolute. They are applied to given objects in order to express their relation to other objects, actions, or processes.

Yinyang theory has four fundamental characteristics, known as the four relations of *yinyang*:

- 1. Opposition
- 2. Interdependence, interdivisibility, and relativity
- 3. Inter-consuming-supporting
- 4. Intertransforming

Opposition

As previously mentioned, *yinyang* theory describes a universal qualitative standard. One of the key aspects of this is that the *yin* aspect of something exists only in opposition to its *yang* aspect. Heaven and earth, sun and moon, night and day, male and female, up and down, inside and outside, and quiescence and movement are manifestations of a duality intrinsic to the universe. Water is cold and fire is hot, and water flows downward while fire tends to rise. Therefore, water is *yin* and fire is *yang*. Similarly, day is *yang* and night is *yin*, high is *yang* and low is *yin*, matter is *yin* and energy is *yang*, and the passive element is *yin* and the active element is *yang*.

In terms of medicine, the upper body is *yang* in relation to the lower body, which is *yin*. However, the anterior side of the body is *yin* while the posterior side is *yang*. The medial aspect of the extremities is *yin* while the lateral aspect is *yang*. As a whole, the interior of the body is *yin* while the exterior is *yang*. Within the interior of the body, the *zang* organs (sometimes called "viscera"), considered "solid" and in charge of storage, are *yin*, whereas the *fu* organs (sometimes referred to as "bowels") are held to be "hollow" and in charge of discharging their contents, and thus are *yang*. Diseases that manifest signs and symptoms associated with heat and excessive metabolic activity are *yang*, whereas diseases that display cold signs and a decrease in activity are *yin*. Rapid, replete, forceful pulses are *yang*, whereas slow, vacuous, and forceless are *yin*. Medicinal substances are classified as hot or warm (*yang*) and cool or cold (*yin*). As previously mentioned, overall *yin* refers to structure and form in the body, as opposed to function and metabolic activity, which are *yang* (Table 2.1).

Table 2.1 Basic yinyang correspondences used in TCM

Yin	Yang		
Water	Fire		
Cold	Hot		
Interior	Exterior		
Slow	Rapid		
Passivity	Activity		
Quiescence	Movement		
Lower position or downward direction	Upper position or upward direction		
Interior position or inward direction	Exterior position or outward direction		
Dimness	Brightness		
Inhibition	Excitation		
Weakness	Strength		
Hypoactivity	Hyperactivity		
Structure	Function		
Internal organs	Body surface		
Zang organs	Fu organs		
Lower body, below the waist	Upper body, above the waist		
Anterior region	Posterior region		
Medial aspect of the limbs	Lateral aspect of the limbs		
Right side	Left side		
Qi	Blood		

Interdependence

Yin and *yang* define aspects of a whole, and therefore, they depend on each other. The whole is defined by the existence of the two opposing aspects. "Cold" cannot be defined without "heat," "above" is meaningless without "below," and "exterior" and "interior" mutually define each other. This is all in relation to a whole that contains these two parts.

In medicine, the clearest example of *yinyang* interdependence is the relationship between structure and function. Structure (or form) pertains to *yin*, and function to *yang*. Together, they are complementary aspects of the whole that is the living body. Sufficient substance (structure) in the form of body fluids, healthy tissue, etc., allows for normal function. In turn, only when the functional processes are in good condition can the essential substances be appropriately replenished. The balance between structure and function is the basis for healthy physiological activity.

Interdivisibility and Relativity Because *yinyang* are aspects of the whole, no object, phenomenon, event, or situation can ever be labeled as purely or wholly *yin* or *yang*. Phenomena in the universe have *yin* and *yang* aspects, depending on the

viewpoint of analysis. For example, day is considered *yang* when compared with night, but the early hours of the day (before noon) are *yang* when compared with the hours after noon, which are *yin*. In Chinese thought, it is said that the morning is *yang* within *yang*, and the afternoon is *yin* within *yang*. These hierarchies of *yin* and *yang* can be extended ad infinitum, as each separate phenomenon can be divided into its *yin* and *yang* aspect.

Inter-consuming-supporting

In *yinyang* theory, a gain, growth, or advance of one aspect of the whole means a loss, decline, or retreat of the other (this is sometimes referred to as "the waxing and waning" of *yin* and *yang*). Under normal conditions, this consumption/support occurs within limits. In terms of physiology, it could be likened to homeostasis. Exceeding these limits results in dysfunction and disease, but here, too, we may see the consumption of one by the other. A *yang* disorder, with an excess of metabolic activity, will gradually consume the resources (*yin*) of the body. Conversely, cold congelation or advanced age (*yin*) can bring about a drastic reduction of body function (*yang*). In terms of pathology, all diseases can be thought of as pertaining to one of four imbalances along these lines: excess of *yang*, excess of *yin*, deficiency of *yang*, or deficiency of *yin*.

Intertransformation

This back and forth between *yin* and *yang* implies a characteristic of constant motion and transformation, which is observed in the world. *Yin* transforms into *yang*, and *yang* in turn evolves into *yin*. The *yang* day transforms into the *yin* night, just like shadows moving across the face of a mountain as the sun travels across the horizon.

In terms of medicine, the intertransformation of *yinyang* can be said to occur in two ways: harmoniously, as in the natural course of development, growth, aging, and death, and deviating from the norm, as in response to drastic environmental changes or internal imbalance. Normally, *yin* and *yang* follow each other naturally, and this constant transformation is the source of life as we observe it. We could call this smooth, successive process as "health." In disease, this process is disrupted and *yin* and *yang* are out of balance—an excess of one, which automatically presupposes a deficiency of the other. This can continue to the point where intertransformation occurs, but as a progression of disease. Chinese medical thought holds that "when the exuberance of *yin* reaches and extreme, it will transform into *yang*; when heat blazes, it transforms into cold." This is observable when, for example, a very high fever (which would be a *yang* disorder) causes shock with hypothermia, loss of consciousness, etc. (*yin* symptoms).

Application in Traditional Chinese Medicine

Yinyang theory permeates every aspect of TCM. As can be seen from the examples given above, it is used as a framework to understand anatomy, physiology, pathology, diagnosis, and treatment. Its importance cannot be overrated.

Five-Phase (wuxing) Theory

Five-phase theory establishes a system of correspondences that groups phenomena in the universe into five categories. These categories represent tendencies of movement and transformation in the universe, and are associated with the natural phenomena of wood (*mu*), fire (*huo*), earth (*tu*), metal (*jin*), and water (*shui*). Clear, constant relationships between them are used to explain changes in nature.

Five-Phase Categorization

Each of the phases represents a category of related functions and qualities. Wood is associated with the season of spring, sprouting, early growth, awakening, morning, childhood, and the penetrating, powerful impetus of new life, anger, and wind. Fire is associated with summer. It represents a maximum state of activity, flourishing, exuberant growth, outward motion, high noon, and the expansive movement of happiness and open flame. Earth is associated with the long summer (or the transition between seasons). It signals balance and equilibrium, the early afternoon, nourishment, abundance, the quiet of pensiveness and worry, and dampness. Metal is associated with the autumn season, declining function, a movement toward crystallization and shedding that is not needed, dusk, clarity and sadness, and dry weather. Water is associated with winter. It expresses a state of downward motion, accumulation, rest, nighttime, and the development of new potential, the concentration of willpower and fear, and the cold.

Five phase correspondences permeate all aspects of classical thought in China. The five-way categorization is applied to colors, sounds, odors, flavors, emotions, animals, the planets, and ultimately everything in the universe (see Table 2.2).

Relationships Between the Five Phases

The five phases succeed each other in cycles, acting upon each other in fixed ways. Two cyclical relationships are held to exist among the five phases: an engendering (*sheng*) cycle and a controlling (*ke*) cycle. Both of these cycles are deemed to be natural and necessary. Without engenderment, there is no life; without control, things become excessive.

Table 2.2 Five-phase correspondences

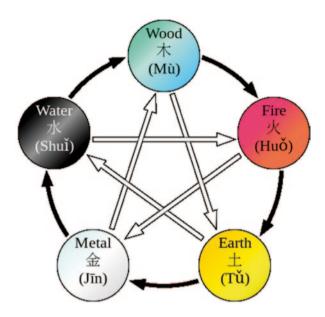
	Wood	Fire	Earth	Metal	Water
Direction	East	South	Center	West	North
Season	Spring	Summer	Late summer	Fall	Winter
Climate	Wind	Heat	Dampness	Dryness	Cold
Planet	Jupiter	Mars	Saturn	Venus	Mercury
Number	3+5=8	2+5=7	5	4+5=9	1+5=6
Meat	Chicken	Goat	Beef	Horse	Pork
Cereal	Wheat	Millet	Sorghum	Rice	Beans (soy)
Sound	Jiao	Zheng	Gong	Shang	Yu
Musical note	C	D	E	G	A
Color	Green	Red	Yellow	White	Black
Taste	Bitter	Acid	Sweet	Pungent	Salt
Smell	Uremic	Burnt	Scented	Cool	Putrid
Organ	Liver	Heart	Spleen	Lung	Kidney
Viscera	Urinary bladder	Small intestine	Stomach	Large intestine	Bladder
Senses organ	Eyes	Tongue	Mouth	Nose	Ear
Tissue	Tendons	Vessels	Muscles	Skin	Bones
Bodily sounds	Hu (sigh)	Laugh	Singing	Crying	Moan
Virtues	Benevolence	Courtesy	Fidelity	Justice	Knowledge
Emotion	Anger	Joy	Worry	Melancholy	Fear
Spiritual activity ^a	Hun	Shen	Yi	Po	Zhi
Bodily region	Neck, nape	Thoracocostal	Spine	Escapulodorsal	Lumbar

^a Hun corresponds to a number of actions equivalent to unconscious activity, but it is also related to deep sleep, etc. Shen is the mental activity, the substrate of thought. Yi is the thought, the ability to generate ideas. Po is the vegetative activity, automatism, etc. Zhi is the will, perseverance, etc.

Engendering Cycle This is the cycle whereby the phases are believed to proceed in order to generate each other in an orderly sequence. The natural action or movement of one phase fosters the growth or waxing of the next, thus wood engenders fire, fire engenders earth, earth engenders metal, metal engenders water, and water engenders wood. This cycle is also known as the "Mother-Son" relationship, with the engendering phase acting as "mother" to the next (the "son").

Controlling Cycle This cycle follows the sequence in which the phases suppress, control, or inhibit each other. In this sequence, wood controls earth, earth controls water, water controls fire, fire controls metal, and metal controls wood.

Fig. 2.2 The five phases (engendering and controlling cycles)



Thus, all phases stand in relationship to the others in one of the four ways: engendering, being engendered, controlling, and being controlled. It follows that the state of one phase in the system is always dependent on the condition of the others. If viewed as aspects of an organic whole, the actions of control and engenderment exerted by each of the phases add up to maintain a dynamic balance (Fig. 2.2).

Five-Phase Theory in Traditional Chinese Medicine

As can be seen from Table 2.2, five-phase correspondences exist in TCM as well. The viscera (zang) and bowels (fu), along with the acupuncture channels, are classified in this system. Five-phase theory is also used to interpret the physiology and pathology of the human body in relation to the natural environment. It is likewise applied to etiology, diagnosis, treatment, and prognosis.

The main five-phase correspondences used in TCM are those of the zang organs: wood is attributed to the liver, which regulates free flow of qi; fire is attributed to the heart, which promotes the warming of the whole body; earth is attributed to the spleen, which is in charge of the transportation and transformation of food; metal is attributed to the lung, which promotes the descending of qi; and water is attributed to the kidney, which is responsible for the storage of essence and regulating body fluids. The basic engendering and controlling relationships of the five phases are interpreted as follows in physiology:

Engendering Cycle

- Wood engenders fire: the liver stores blood and supplements the blood to be regulated by the heart.
- Fire engenders earth: the heart provides warmth, which is indispensable for the spleen to function.
- Earth engenders metal: the spleen transforms and transports the essential nutrients and sends them up to replenish the lung and support its activity.
- Metal engenders water: the lung, with its clearing and descending functions, sends down *yin* fluids to the kidneys.
- Water engenders wood: Kidney essence nourishes liver blood.

Controlling Cycle

- Wood controls earth: The liver's dredging effect prevents spleen *qi* from becoming stagnant.
- Fire controls metal: The upward and outward movement of heart fire prevents lung *qi* from descending excessively.
- Earth controls water: The action of transportation of the spleen prevents the fluids controlled by the kidney from overflowing.
- Metal controls wood: The clearing and descending action of the lung counteracts the ascent of liver *qi*.
- Water controls fire: Kidney *yin* flows upward to nourish heart *yin*, thus restricting heart *yang*.

Five-Phase Theory in Disease Causation

The engendering and controlling cycles of the five phases are used to explain disease causation, mainly through the "Mother-Son" relationship. In addition, a condition of excess or deficiency in one of the organs can affect other organs by altering the relationships of engenderment and control (see later).

Disease Causation Through the "Mother-Son" Relationship

- Disease of the Mother affecting the Son: If the Mother becomes deficient, it will be unable to nourish the Son, and will eventually cause a deficiency of the Son. For example, a deficiency of the kidney essence (water) will negatively impact the production of liver blood (wood), gradually inducing a condition of liver deficiency. Conversely, if the Mother is affected by an excess condition, this may cause the Son to become excessive as well. For example, if liver fire (wood) flares upward, it will cause heart fire (fire) to become exuberant, leading to an overabundance of fire in the liver and heart.
- Disease of the Son affecting the Mother: In most cases, a disease of the Son will induce a deficiency of the Mother. For example, a deficiency of kidney *yin* can induce a deficiency of lung *yin*, leading to deficiency of both organs. This is explained as due to the increased supply from the Mother to the deficient Son eventually exhausting the resources of the Mother.

Disease Causation Through Deficiency or Excess of an Organ

- Deficiency of one of the organs can induce any of the following scenarios:
 - Deficiency of the Son due to reduction of nourishment
 - Deficiency of the Mother due to increased demand for nourishment
 - Overcontrolling from its controller, which would aggravate the deficiency
 - Counter-domination by its controlled organ
- Excess of one of the organs can result in any of the following:
 - Excess of the Son
 - Excess of the Mother
 - Over-controlling of its controlled organ, causing debilitation of the latter
 - Counter-domination of its controlling organ, causing its debilitation

Five Phases in Diagnosis and Analysis of Symptoms

It is important to point out that although five-phase correspondences exist for many diagnostic signs (see Table 2.2), in actual clinical practice, these findings need to be correlated to the entire diagnostic picture developed through the use of the four methods. In all cases, TCM needs to correlate a large amount of concurrent data in order to arrive at a diagnosis and, in this context, the actual relevance or meaning of any one sign or symptom may vary when analyzed in relation to the whole.

That being said, certain signs, such as facial complexion, odor, tone of voice, etc., can be used as indicators of disease or pathology affecting the corresponding viscus per five-phase theory, or the associated Mother-organ or Son-organ. This can, in some cases, be used also to construct an entire therapeutic strategy according to the five-phase engendering and controlling cycles, as will be explained in the next section.

Five Phases in Therapeutics

As we have seen, disease of one viscus may affect other viscera according to the engendering and controlling cycles of the five phases. Therefore, certain pathological conditions are deemed to be the result of an imbalance between two or more viscera, as opposed to only the imbalance of one viscus. This is borne out in clinical practice by the clusters of associated symptoms and signs that often occur together, and which are associated with specific conditions in TCM diagnostic theory.

It follows that treatment should focus on regulating these relationships. In some cases, this means to treat the affected organ/phase system. However, a therapeutic strategy using the Mother-Son relationship is considered very effective. As the adage goes, "In case of deficiency, tonify the Mother; in case of excess, drain the Son." There are common examples of this in clinical practice (such as tonifying kidney *yin* in order to help resolve a deficiency of liver blood), but the majority of five-phase-based treatment strategies used in modern TCM practice involve the use of a special group of acupuncture points known as the transport-*shu* points.



http://www.springer.com/978-1-4614-5274-4

Acupuncture for Pain Management

Lin, Y.-C.; Shen, E.S.-Z. (Eds.)

2014, XIV, 276 p. 54 illus., 49 illus. in color., Softcover

ISBN: 978-1-4614-5274-4