

Eastern and Western Approaches to Medicine

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An objective comparison of Eastern and Western approaches to medicine is necessary to further evaluate the validity of Oriental medical techniques such as acupuncture. The development of medicine in Western nations follows the way of hypothetical deduction and the Eastern approach uses the inductive method. The Western approach clearly divides the health from the disease, yet the Eastern approach considers health as a balanced state versus disease as an unbalanced state. The Western approach tends to change the environment and the Eastern way is to prefer to adapt to the environment. There are numerous difficulties in comparing these two approaches. The same terminology may apply to entirely different facts, the teaching and learning methods are quite different, and the evaluation of the treatment is almost not comparable.

In order to help understand the Eastern approach better, an understanding is needed of the basic Chinese concepts: the concept of a small universe living in a large universe; the duality concept of yin and yang; the concept of anatomy; the concept of physiology in Chinese medicine—the state of equilibrium expressed by the five elements; the concept of pathophysiology expressed by the external and internal insults; the concept of maintaining and promoting health expressed by the circulation of chi and hsieh; the therapeutic concept in Chinese medicine—the normalization or reestablishment of balance of the body function; the concept of preventive medicine.

TWO WESTERN STATES in the United States, Nevada and Hawaii, have regulated acupuncture as an independent practice not requiring medical referral or supervision.¹ Two other states have ruled that acupuncture can be practiced under the supervision of a licensed physician as in Oregon¹ or by physician's referral as in California.² This seems to indicate that the possibility of acceptance of the practice of Oriental medical

techniques by the profession and the general public in this region is promising. There is, however, a great variety of contrary opinions about acupuncture within the medical profession which is reflected by the diverse legislations in many states. An objective comparison of Eastern and Western approaches to medicine may well shed some light on the true value of Oriental medicine and help to integrate this approach into our modern medical practice.

Western medicine has developed through hypothetical deduction. Every statement in Western medicine is a result of a series of fact probings.

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The hypothesis is usually derived from general observations of a phenomenon and a research plan is carefully designed. When enough data are collected, conclusions are drawn as a result of critical statistical evaluations. In contrast, Eastern medicine uses the inductive method. Oriental medical literature in general is a record of practical experience accumulated from millions of practitioners throughout thousands of years. The format of recording is a result of direct observation. This makes it difficult to compare the results of the two different approaches to medicine.

The Western approach to medicine clearly divides health from disease, and the main emphasis is on the individual body. The environment is considered as only one factor that affects the body. Responsibility for various phases of health and disease care is shared by professionals in several disciplines. Physicians are trained mainly for the care of acute phases of disease, that is, disease detection and therapy. The areas of health promotion, disease prevention and rehabilitation are taken care of largely by other trained professions.³ This team approach gives the impression of being more community-minded than individual-based, yet the objective is still individual well-being. The Eastern idea of health and disease is looked upon as the two sides of a coin. In other words, every individual person is in a state of balance between external insults and internal defensive mechanisms. If the insults are greater than one's defenses, one is ill; if not, one maintains good health. Since the individual person is considered merely a microcosm existing in a macrocosm, there are changes every minute, with constant readjustments. The duty of a physician is to strengthen the internal defensive power and power of adaptation of each individual person and enable him to fight the environmental insults, or to adapt to external changes so that he can live in peaceful balance within himself and with his environment, thereby maintaining good health. The responsibility of a physician is, in fact, to promote health and treat diseases when they occur.⁴

The Western approach to health care involves, among other things, changing the environment in which we live. For example, if the weather is not ideal for the body, a shelter is built with temperature control; if the atmosphere and humidity are not comfortable, other controls are added. Antibiotics are developed to counteract bacteria harmful to the body. Sterilization techniques are prac-

ticed to shelter from the bacterias. In therapy, the same principles apply. Artificial limbs and organs are used to replace diseased or injured body parts. Synthetic hormones and vitamins are used for impaired bodily functions. These achievements mark the victory of science and wisdom of mankind. However, in spite of the fact that human life is being prolonged, and the handicapped and retarded are functioning, the majority of people may be free from serious disease but not from discomfort or pain, either physical or mental. In other words, people are still suffering and unhappy. The Eastern approach may be passive toward, or may simply ignore, the idea of converting the environment. Its emphasis is from the "within" to strengthen the enormous defensive and adaptive powers of one's body so that the latter may accommodate physical or mental stress. It may work slowly and appear to be less effective; but, if successful, the result usually is a balanced, comfortable body and a happy person.

With all the dichotomies mentioned above, it follows naturally that the learning systems and the terminologies used must be different. Even if the same terms are used, they may, perhaps, have quite different meanings.

The Western approach looks into every aspect of a person with great detail, from a microscopic to a macroscopic view of biology, embryology, histology and microbiology, studies the cellular level of chemistry and physics, then looks to the basic anatomy and physiology, and finally moves to the clinical practical aspects of internal medicine, surgery, pediatrics, obstetrics and gynecology, psychiatry and public health. With this large field in such minute detail, no one can master everything; therefore, training and practice tend to be segmented.

In the Eastern approach, the learning process begins with the universe. The laws of nature find a parallel in bodily phenomena; the Eastern medical student must, therefore, learn astronomy and geography: "If in curing the sick you do not observe the records of heaven nor use the principle of earth, the result will be calamity."⁵ "If you understand the period above; the writing of heaven (astronomy) below; the principles of earth (geography) and in between earth and heaven; the affair of man, then may you live a long life."⁶ The system of the body is classified in a way quite different from that of Western medicine. So too, are the other aspects of medicine. For

instance, the body is divided into 12 anatomical, physiological and psychological units. The causes of disease are divided into six environmental insults and seven internal insults. All the diseases are represented by symptom groups or syndromes. This approach may appear oversimplified in matter. In addition, the much smaller volume of written statements and literature, the writing mostly in the form of inductive recording, may appear easier to learn and largely philosophical in approach. However, this leads to the necessity for more clinical observations and practice and longer periods of individual teaching on a one-to-one basis. Even with all the differences, Western-trained physicians can clearly see that the Eastern approach emphasizes knowledge in terms of environmental health, surface anatomy, functional physiology, neurophysiology and the psychosomatic aspects of medicine, although different terms are being used. After learning the differences, students may be able to make a fair judgment of the validity of either the Eastern or Western approach to medicine and take advantage of knowing both.

The Chinese Concept

Since the readers are largely Western-trained professionals who are familiar with the Western approach in medicine, this section will only categorize the Eastern concepts.

The Microcosm Living Within the Macrocosm

In Chinese medicine a human being is looked upon as a small universe. The anatomical structures and the physiological functions of the body are correlated with one another. They also correspond and react to the outside environment—the large universe. When everything coexists in perfect harmony, a person is in excellent health. Since the physiological process is in continual change and balance, as are the environmental conditions, this delicate change and balance between the small and the large universe are constantly being readjusted in every respect. Once the balance is disturbed, illness sets in.

In one chapter of Ling-Shu in the ancient *Nei Ching* (or Canon of Medicine),* it says:⁷

**Huang-Ti Nei Ching (The Yellow Emperor's Canon of Medicine)* was originally published in two volumes, in which the Ling-Shu describes the theory and the Su-Wen discusses the practical aspects of acupuncture and moxibustion. Chi-Bai is thought to be Huang-Ti's medical officer. From the geographical names, literary construction and historical allusions, it may be assumed that the *Nei Ching* was published about the end of the Chou dynasty (1121-249 BC) or the beginning of the Chin dynasty (221-207 BC). The contents are naturally much older. Evidently it is not the work of a single person but a compilation of various writers.

“Man is nothing but a creature living between the heaven and the earth.”

“Atmosphere is what Heaven bestows on us; Produce is what Earth bestows on us. Life is a product of the interaction between the atmosphere of Heaven and the produce of Earth; and reproductive energy is the source of life. The spirit comes about as a result of a struggle between the two reproductive energies (the beginning of life); the physical strength (the body) is the element that is responsible for the performance of activities. Sentiment (the soul) is the element that directs the mind to perform activities.

“Therefore, a man of wisdom will live his life in accord with the four seasons and in line with cold and hot climates keeping peace with the environment; he will live a harmonious life of joy and anger in a peaceful manner keeping peace within oneself; he will maintain a balance between yin and yang, between robustness and tenderness. Consequently, a man of wisdom will not be susceptible to attack from vicious energies and he will live a long life.”⁸

The Duality Concept in Chinese Medicine—Yin and Yang

Yin and yang are two basic fundamentals of ancient Chinese philosophy. First described in the *I Ching, Book of Changes*, they are opposite terms representing the duality of positive and negative power. Normally they are equal in value, in balance with each other, and cannot exist one without the other.

In the classical Chinese medical literature, yin and yang are used to describe the state of equilibrium within and around the body, its organs and functions, and the relationship to the environment. The following illustrates this application:

- *The Beginning of Life*

“The origin of life started with yin (female) and yang (male).”⁹

- *Structure of the Body*

“When speaking of yin and yang, the exterior is yang, the interior is yin; when speaking of yin and yang in the human body, the back is yang, the front is yin; when speaking of yin and yang of the organs in the body, the solid organs are yin, the hollow organs are yang.”¹⁰

“Therefore, the heaven is yang and the earth is yin; the part of the body above the waist is comparable to the heaven while the region of the body below the waist is comparable to the earth.”⁷

Since the meridians, functional tracts of the body, running on the outer surface of the extremities are called yang meridians and the inner surface are called yin meridians, the outer surface is yang and the inner surface is yin.

- *Activities of the Body*

Yang represents the active, strong, fast and positive aspects of the body. Yin, on the other hand, describes the passive, weak, slow and negative nature of the being. As a matter of fact, all of the visible organs and structures of the body are described as yin because of their passive nature when they are not functioning. The organs classified as yang are so named because they exist only by activity.

“Yang results in spirit, yin gives the shape.”

“Yin in the interior is the guardian of yang; yang in the exterior is the activator of yin.”⁵

- *Diagnoses of Diseases*

“So to explain the yin and yang, hypofunction is a yin disease, hyperfunction is a yang disease. Chronically inactive is yin, acutely active is yang. Limpering, weakening or decaying is yin; hasty flourishing is yang.”¹¹

- *For Treatment*

“In yang diseases, treat the yin; in yin diseases, treat the yang.”⁵

- *In General*

It seems that everything in life can be classified according to its yin and yang components.

“The relation of yin and yang is the means whereby the myriad of things are able to come to birth; yin and yang react upon each other, producing change.”⁵

To further prove that the words yin and yang are used merely as symbols, it is said “now the yin/yang have a name but no form. Thus it can be extended from 1 to 10, from 10 to 100, from 100 to 1,000, from 1,000 to 10,000, etc. It can embrace all things.”¹²

In order to be able to express all the phenomena, the yin and yang components not only oppose but also contain its opposite. “There is yin within yang and yang within yin. From dusk until midnight, the yin of heaven is the yin within the yin. From midnight until dawn, the yin of heaven is the yang within the yin.”¹⁰

This idea is best illustrated by the symbol (Figure 1) where there is a small black dot in the white half and a white dot in the black half.

By now, readers may realize the similarity of the expressions of many phenomena in Western

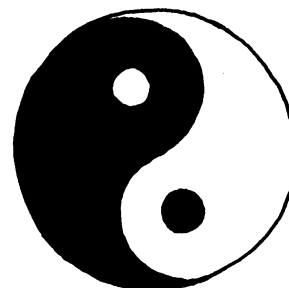


Figure 1.—Yin (left) and Yang.

science. The most obvious ones are the positive and negative electrical charges, the levorotatory and dextrorotatory chemical compounds, the acid base balance and the reciprocal phenomenon of the hypothalamic-pituitary-gonadal axis.

An interesting illustration of yang within the yin and the yin within the yang might be the fact that there are androgens (male hormones) existing in women and estrogens (female hormones) existing in men.

The Concept of Anatomy in Chinese Medicine

Since the Chinese divide the body into parts by their functions rather than by their structure, the three components of the body—the anatomical, physiological and the psychological—are linked by an abstract term, meridian. Many Westerners thought the Chinese did not know true anatomy. The fact is that even in the Yellow Emperor's (Huang-Ti) first book it was stated: “at first, the embryo is brought into being by a combination of two reproductive energies, yin and yang; and then the marrow in the brain is formed and the bones are formed in order to support the body; and then the meridians are developed in order to transmit energy and blood; and then the tendons are formed in order to sustain the bones; and then the muscles are built in order to serve as the walls of the body; and then the skin becomes solid and the hair grown. After the baby is born, the stomach begins to take in food, the meridians begin to function, and the blood and energy begin to circulate in the body.”¹³

“As to the man himself who is only eight feet tall on the average [Chinese feet], the external size of his body is measurable because its skin and flesh are nearby, and also his pulse may be taken in different regions. In addition, when a man dies, his body may be dissected for observation. For this reason there are established standards by which we determine the hardness and crispness of the viscera, the size of the bowels,

the quantity of food consumed, the length of meridians . . . All these aspects of the human body as outlined above are governed by a set of established standards. Therefore, these standards also govern the techniques of acupuncture therapy and moxibustion therapy.”⁷

Since we know that the Chinese did understand anatomy, this way of dividing body components which is not based upon anatomical structure alone, may offer a significant new point of view. The following shows the details of the units and the anatomical, physiological and psychological components of each unit.

The five tsang (stores): “What are called the five solid organs store life essence and energy (hsieh and chi) and do not let them leak away; therefore, they are filled but cannot be full.”¹⁴

- *Hsin*—Stores the organ heart, the function of the brain and the psychological function of the mind. It is expressed by the element fire.

- *Kan*—Stores the organ liver, the liver function, the sensory-motor system, and the psychological function of equilibrium and tranquility. The element wood represents it.

- *P'i*—Stores the organ spleen-pancreas, the functions of absorption, digestion, distribution and utilization of nourishment at both the organic and cellular level. The psychological component is temper and intelligence. The element that represents it is earth.

- *Fai*—Stores the organ lung and the respiratory function of gas exchange at both the organic and cellular levels. The psychological component is the willpower and the element metal represents it.

- *Shen*—Stores the organ kidney and the function of the endocrine system such as the functions of the neurohormonal system. The psychological component is the willingness of the person and the element representing it is water.

The six fu (houses): “. . . the six hollow organs transmit and transform matter but do not store it; thus they are full and cannot be filled.”¹⁴

- *Tan*—Houses the gall bladder. The function is to control the circulation of lymphatics and other body fluids such as the fluid in the peritoneum. The psychological and representative elements are the same as its partner kan, which are equilibrium, tranquility, and “wood.”

- *Hsiao Ch'ang*—Houses the small intestine, the function of absorption of digestive nutrients from the lumen into the blood stream and the

transportation of waste products to the large intestine. The psychological component is the same as hsin, the heart, which is also the mind. Fire is the element that represents it.

- *Wei*—Houses the organ stomach, the function of digestion and the mechanism of muscular contractions. The psychological component is the same as p'i, temper and intelligence, and it is represented by earth.

- *Da-ch'ang*—Houses the organ large intestine. The function is the self-defense mechanism, particularly for cellular response to infection and the immunological system. The psychological component is the same as the fai, willpower, and the element represented by it is metal.

- *Pang-kuang*—Houses the organ urinary bladder and the function is water balance and excretion. It is paired with shen, the kidney, therefore its psychological component is the same: compliance and the element representing it is water.

- *San-chiao*—May be translated as “triple-burner,” which represents the three functional zones of the body. The upper governs respiration and cardiovascular circulations, the middle one is for digestion and the lower zone for excretion. This unit is a coordinator of all functions of the body and, like the hsin unit, is represented by fire.

From the above listing, one can see the specific understanding in Chinese medicine that all the organs and functions of the body are closely related to the psyche, and that in the literature, the psychosomatic relationships are well known and well documented.

The Concept of Physiology in Chinese Medicine

There has been much discussion about the need for a Western-trained person to study the formula of “five elements” because it appears to be highly mysterious: yet, at times, its application seems oversimplified. However, if one really wants to understand the trend of thought behind the Oriental approach to medicine, this study is essential. It simply uses the daily events surrounding us to describe the various functions of our body. For instance; the “water” can kill the “fire,” the “fire” can melt the “metal”; consequently if the kidney is damaged, it may affect the heart, and the heart trouble will cause damage to the lungs, and so on. Using this simple illustration one can describe the complicated interreaction of the body functions at different times. It

was written in Su-Wen, "The five elements, wood, fire, earth, metal, water, encompass all the phenomena of nature. It is a symbolism that applies itself equally to man."¹⁵

Because in Chinese medicine the concept of health depends upon the state of equilibrium, to keep perfect equilibrium of one's body is the goal. This calls for the five stores and six houses to be in perfect harmony with one another, and at the same time in harmony with the environment surrounding the person. In other words, the small and large universes are in perfect harmony. Any change in one part of the body or the environment will set off a chain reaction in other parts and thereby disrupt the state of equilibrium. This requires the capacity of the readjusting power within the body to regain its equilibrium. This complicated reaction and counterreaction are illustrated by the law of five elements and using the above mentioned principle.

The Concept of Pathophysiology in Chinese Medicine

In Chinese medical literature the causes of diseases are almost equally divided into six physical aspects and seven emotional factors, or outer and inner insults. The former are the wind, cold, heat, dampness, dryness and fire. The latter are happiness, anger, sorrow, anxiety, sadness, fear and shock. For instance, "The vicious energies of wind and cold attack the upper half of the body, while the vicious energy of dampness attacks the lower half. However, when vicious energies attack the yin meridians, they will cause disease to the bowels; and when they attack the yang meridians, they will cause disease to the meridians themselves . . ."¹⁶

"Worry and fear may cause harm to the heart; exposing oneself to cold and consumption of cold food may cause harm to the lungs . . ."¹⁶ Credit should be given to the very early recognition of psychosomatic medicine by the Chinese: "in my opinion, only an unskilled physician will confine himself to the physical appearance of his patient, a skilled physician will go one step further and examine the emotions of his patient as well."⁴

The Concept of Maintaining and Promoting Health

Since the definition of good health means the state of equilibrium within one's body and with one's surroundings, the way of maintaining health and promoting health is eventually to keep the

balance of all the body functions, the body and the mind, the person and his environment.

Within the body, there are two systems of circulation described in the classical Chinese literature: chi (air) and hsieh (blood). Chi represents the invisible circulation of the vital energy and, therefore, is classified as yang. This energy circulates along definite pathways within definite periods of the day and ceases to circulate when the organism dies. These pathways are called hsieh, according to our present understanding, and include all the visible circulations of the body, such as cardiovascular, lymphatic and even cerebrospinal fluid. Only when these two circulation systems maintain a constant balance, can a person be kept in perfect equilibrium.

In fact, it was detected in the medical literature that the Chinese were fully aware of the circulating nourishment and self-defense mechanism in describing different kinds of chi function. One of them is called yin-chi (nutritional circulations); the other one is called wei-chi (defensive circulation).

"Man receives chi in his food. Chi, entering the stomach is transmitted to the lungs, the five solid and six hollow organs, so that all these may receive chi. The power part of food is nourishing chi, or yin-chi; the less pure part: protecting chi, or wei-chi; yin-chi, being within the meridians and blood vessels, and wei chi outside them."¹⁷

"Nourishing chi collects fluid and pours it into the vessels changing it into blood in order to nourish the four extremities and to flow into the solid and hollow organs . . . Only if the vessels are so regulated that there is an uninterrupted circulation of blood can they be strong, vigorous and supple. Thus the reason why the eyes can see, the feet walk, the hand grasp and the skin sweat, because they are all irrigated by blood."¹⁸

Adapting the above descriptions, we can see that the chi in Chinese literature represents all the invisible functions of the body—the vital energy, the nerve impulses, the automatic control of the mental activities. Hsieh represents the visible circulations, the organs and actually the body itself. In order to maintain health, one must keep equilibrium between the functions and the organs of one's self, and between the mind and the body by keeping in balance one's chi and hsieh.

Maintaining the balance between body and environment can be done through adjustment of the chi and hsieh circulating through the meridians (tracts): "The 12 meridians are externally in

tune with the 12 meridian-like rivers, and internally they are in tune with the five stores and the six houses

"Therefore, the standards governing the techniques of acupuncture therapy and moxibustion therapy which are aimed at adjusting the energy of meridians can be in harmony with those governing the 12 meridian-like rivers which are aimed at adjusting the flow of water in the rivers."¹⁷

In other words, in order to keep balance between man and his environment, the meridians are the communication routes. Since meridians are supposed to connect nearly a thousand acupuncture points (skin receptors of acupuncture stimuli) of the body, skin is really the reactor of the body to the surroundings. This does fit into the Western theories of the cutaneous-visceral and the viscerocutaneous reflexes and the referring pain tracts. That it is the relation between cutaneous caresses and contact which stimulates the homeostasis and produces soothing effects.

The Therapeutic Concept in Chinese Medicine

When there is a disruption of the balance of the body function or body and mind, traditional Chinese physicians use either the pharmacological approach—herb medicine—or the physical approach—acupuncture and moxibustion through the meridian system.¹⁹ (A complete text on acupuncture techniques was *Jai Yi Ching* containing 118 chapters.¹⁹)

Preventive Medicine

"To administer medicine for diseases that have already developed and to suppress revolts that have already developed are comparable to the behavior of those persons who begin to dig a well after they have become thirsty, and to those who begin to make their weapons after they have already engaged in battle. Would these actions not be too late?"²⁰

"I have heard that in ancient times the people lived to be over a hundred years and yet they remained active and did not become decrepit in their activities, but nowadays people only reach half of that age and yet become decrepit and failing. Is it that mankind is degenerating through the ages and losing his original vigor?"²¹

Chi-Po answered: "In ancient times those people who understood the ways of nature, patterned themselves upon the yin and yang. Modern man drinks wine like water, leads an irregular life, engaging in sexual intercourse while he is drunk thus exhausting his vital energy. They do not know how to preserve their vital force, wasting energy excessively seeking only physical pleasure, all of which is against the rules of nature. For these reasons they reach only half of the hundred years and then they degenerate."²¹

It is interesting to know that, although the dangers of self-indulgence were documented three thousand years ago, modern man continues to ignore those dangers.

This general review should lead the reader to a better understanding of the Chinese concept of medicine.

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