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The Historical Development of China's Medical System:
An Integration of Medical Paradigms

By

Sheryl S. Dickstein

B.A. (University of California, Santa Cruz) 1984

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

HEALTH AND MEDICAL SCIENCES

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA, BERKELEY

Approved:.....*Gregory M. Foster*.....*June 9, 1987*
Chairman Date

.....*Kathleen H. Brown*.....
.....*Gregory M. Foster*.....
.....*Gregory M. Foster*.....

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Preface

I first became interested in studying China's medical system in the winter of 1985-86 during a month-long vacation in Jinzhou, a "medium- to small-sized city" of 700,000 in the northeast of China. On that trip I had the good fortune to visit four hospitals, a clinic, and a medical college. These institutions provided an excellent cross-section of and introduction to the types of medical services available in China. The hospitals I visited included the Beijing Cancer Hospital, a modern facility in the nation's capital affiliated with the Chinese Academy of Medical Sciences; Jinzhou Medical College Affiliated Hospital, a 700-bed hospital used for teaching and research purposes by the Jinzhou Medical College (which I also visited); the 200-bed Jinzhou Traditional Medicine Hospital which specializes in traditional medical practices, yet also employs physicians trained in Western medicine and has a department of surgery; and Zhong An Hospital, a small 30-bed facility with one maternity room and a single operating room (which was not available for viewing until the person with the key to the locked door returned from lunch!) that served a village of 6,000 people and was run by two "co-presidents", one a Western-style doctor, the other a practitioner of Chinese traditional medicine.

At each of these sites I was received royally. I was able to speak with a variety of health care workers-- physicians, pharmacists, and nurses--as well as medical school instructors and medical students, all of whom appeared as eager to speak with me as I was with them. For most of them, I know, it was their first opportunity even to see--let alone talk to--a "waiguoren" (foreigner).

Of the many fascinating aspects of China's medical system, the one that intrigued me the most was the ease with which most everyone I spoke with accepted the legitimacy of doctors combining Chinese traditional medicine with Western medicine. In particular, I wondered how physicians and researchers and students trained in Western medicine--who rely on the methods of modern science to validate the "truth" and efficacy of their medical techniques--could resolve what I perceived might be an intellectual dilemma of integrating such different medical paradigms.

I returned to China the following summer to study this further. For three weeks I participated in the American Medical Student Association's (AMSA) China Study Tour, visiting a variety of hospitals, clinics, and medical schools in four major Chinese cities--Beijing, Chengdu, Kunming, and Guangzhou (Canton). In Beijing, we toured Beijing Medical University (our host institution) and one of its affiliate institutions, Oral Hospital of Beijing Medical University. We also visited the prestigious Peking Union Medical College and two of its teaching centers, Capital Hospital and Tong Ren Hospital. A fascinating tour of Dong Zhi Men College of Chinese Traditional Chinese Medicine rounded out our experiences in China's capitol city. In Chengdu we stayed at and toured West China University of Medical Sciences, the only medical school in China where all instruction is in English; we also visited several of its affiliated teaching centers, including an inpatient psychiatric hospital. In Kunming we were fortunate to be able to go to the Kunming Traditional Hospital, the Yunnan Provincial College of Traditional Chinese Medicine, and Kunming Medical College. Our single site visit in Guangzhou was to Guangdong Provincial Hospital.

At each medical facility, I spoke formally and informally with many people in a variety of departments. Our conversations covered a range of

topics: I focused my questions on their professional education, training, and practice, and also on what they thought of the official government policy supporting "combined medicine," i.e., the integration of traditional Chinese and modern Western medical systems; they wanted to know about American medical schools, the kinds of technology we have in our hospitals, and whether it is true that all American doctors are rich.

Following the AMSA China Study Tour, I was able to spend an additional month back in Jinzhou. Liu De-bang, a parasitology instructor at Jinzhou Medical College whom I had met the previous winter, arranged for me to speak with several physicians, both Western-trained and traditional.

All in all, I was able to speak at some length with ten physicians and one biomedical researcher who studies acupuncture analgesia. Three of the physicians were trained in Western medicine; they are young doctors who graduated medical college after 1977 (like most of China's Western-style practitioners). The other seven interviews were with physicians trained in traditional Chinese medicine (TCM). Four of these physicians practice TCM exclusively, two of whom have been seeing patients for over 50 years. The other three have practiced for a much shorter time (approximately ten years each), use both traditional and Western medical techniques--the "new Chinese medicine"--in caring for patients, and are university-educated rather than apprentice-trained as were the older doctors.

The limitations were substantial in trying to understand how these physicians cognitively address the integration of two systems of medicine which appear theoretically incompatible: first, I do not speak Chinese; second, the English-speaking abilities of my interviewees and the quality of translation varied considerably; and third, the question I posed, even with accurate translation, in and of itself seemed foreign to the Chinese mind.

Nevertheless, the message was clear: the intellectual quandary that I experienced was not shared by the Chinese physicians I spoke with. For them, it was a non-issue. The reasons for this, as I discuss in the pages to follow, are historical, political, economic, and cultural in nature.

Acknowledgements

The writing of this thesis has been a long, painstaking, and soul-searching task, and one that I would not have been able to accomplish had it not been for several individuals who appeared at strategic moments in my life. Thanks goes to Michael Halpern who gave me a reason to go to China in the first place. Liu De-bang, the parasitology instructor at Jinzhou Medical College, deserves special acknowledgement for the immense contributions he made. By serving as site planner, interview scheduler, interpreter, tour guide, cultural mediator and friend, he helped make my thesis idea a reality. Stateside, my appreciation and warm thanks go to Professors George Foster and Franz Schurmann for their patient guidance and helpful suggestions, and to Dorothy Brown for coaching me through numerous battles with the "thesis monster."

It would be most ungrateful of me not to acknowledge Dr. Harrison Sadler who successfully steered my project proposal through the San Francisco Foundation. Their financial support granted me access to the Chinese medical system by enabling me to participate in the AMSA China Study Tour. Additionally, I am indebted to Paul Unschuld, whose comprehensive and illuminating work, *Medicine in China. A History of Ideas*, provided the basis for much of my discussion on ancient Chinese medical beliefs and practices. And finally, this thesis would not have come into being without the never-ending patience, encouragement, and support shown me by Dr. Katherine Brown. To her I extend my deepest thanks and gratitude.

Chapter I. Introduction

Pluralism in medicine is the rule rather than the exception the world over. This view is amply supported by a review of the relevant literature (Stoner 1986; Unschuld 1980, 1985; Leslie 1975; Lock 1980; Janzen 1978). Even in the United States, where Western medicine is so powerful and well-organized that it appears to be a single, standardized, normative system, there are plenty of "alternative" healers, some of whom, although outside the arena of biomedicine, are accepted by a significant percentage of the population. Chiropractors are one such example; others, such as acupuncturists, homeopaths, and herbalists, experience lesser though varying degrees of acceptance. But it must be noted that this acceptance reflects the attitudes and openness of patients primarily and not of biomedical practitioners. In other words, although patients often combine several different medical systems, most physicians consider allopathic medicine the primary system, viewing other treatment modalities as alternative or adjunctive therapies at best or simple quackery at worst. This is recognized by Leslie:

The preeminence of cosmopolitan medicine in a country like the United States causes laymen and specialists to identify its professional institutions with *the* medical system. All other practices are then considered to be irregular, and thus to be aberrations of the system or altogether outside of it (1976:9).

In other parts of the world, this is not the case. Some Asian societies-- China and India in particular--are able to integrate traditional medical practices with biomedicine such that they co-exist as "normative institutions" (Leslie 1976). In China, many physicians utilize both traditional Chinese medicine and "modern" medicine-- two systems based on fundamentally different philosophies and understandings of physiology and anatomy-- yet they do not see this as discrepant or in need of cognitive resolution in order to

integrate both paradigms in their daily practices. Perhaps, for the Chinese, these systems are so different that they do not conflict. For the Western mind, however, the notion of integrating medical paradigms such as these is both perplexing and intriguing. To better understand this integration in China, one needs to examine the historical, cultural, and political factors that create the Chinese context. These issues are the focus of this thesis.

In the course of examining these issues, I begin with a brief introductory discussion of the nature of medical pluralism. A description of the historical development of pluralistic medicine within China comprises Chapter II. The third chapter continues this line of thought by looking at the various levels of pluralism existing in China today, including some of the political and economic factors that make medical integration and syncretism possible. From there I will address in Chapter IV some of the conceptual problems faced by people concerned with the theoretical integration of medical paradigms in addition to the practical considerations inherent in the merging of medical systems.

Before focusing directly on the Chinese context, it is valuable to begin with a general discussion of some problematical areas in the comparative study of pluralistic medical systems. In the early years of the field's development, medical anthropologists tended to discriminate "only between truth, science, and rapidly advancing modern medicine, on the one hand, and false, irrational, and static beliefs, stubbornly adhered to by uneducated primitives, on the other hand" (Unschuld 1985, p. 3). This view was changed drastically by Ackerknecht's (1942) suggestion that medical concepts should be studied and understood as integrated aspects of culture, rather than as independent absolutes. The concept of "medicine as cultural system" was revolutionary in that it created, for the first time, a sensitivity toward the

rationality and legitimacy of beliefs related to health and illness in the context of an all-encompassing culture; moreover, it greatly facilitated an understanding of the reluctance of many non-Western populations to accept modern Western medicine with great enthusiasm (Unschuld 1985).

Still, the "medicine as cultural system" view had its limitations. As Unschuld points out, "Ackerknecht's insights were based on an analysis of simple societies where most, if not all, members share one political, economic, and religious reality. It is in such societies that one may find the health care system representative of the culture as a whole" (1985, p. 4). This situation does not hold when we turn to complex civilizations in which many co-existing groups experience different socioeconomic realities and vary in their perceptions of a desirable social system. In these populations a plurality of medical concepts is inevitable. The multiplicity of healing alternatives/health-related beliefs in these settings necessitates a modification of Ackerknecht's recommendation to one considering "medicine as cultural systems".

Another difficulty in studying medical pluralism lies in terminology: many of the terms--"medical system", "medical pluralism", "Western" vs. "scientific" vs. "modern" vs. "cosmopolitan" medicine-- are used by different authors to mean different things. "Traditional medicine", for instance, is frequently a catch-all phrase for all non-Western therapeutic modalities used by health-seekers in developing societies. The semantics often imply that traditional and modern health care beliefs and practices are self-contained, mutually exclusive bases of healing and therapy. The problem with this approach, as Stoner (1986, p. 45) notes, is that "medical decision making" is interpreted primarily as "a choice between modern medicine on the one hand, and traditional, indigenous, or folk medical

systems on the other". However, it is clear that many different forms of traditional medicine may exist within a single community (Unschuld 1975, Leslie 1976). Perhaps a more accurate view, then, would be to conceive of pluralism as "a multiplicity of regional healing systems and traditions, rather than as individual systems of traditional and modern medicine" (Stoner 1986, p. 45).

This confusion with terminology is particularly evident in a discussion of China's medical system. Because of the diversity of therapeutic practice alternatives historically available in China, the use of the term "traditional Chinese medicine" is inadequate for a thorough understanding of the range of health care alternatives. Traditional Chinese medicine (TCM), as it is presently used, usually refers to the school of "systematic correspondences", the predominant indigenous system of healing practiced in China today (Unschuld 1987). From written sources stretching from as far back as the fifteenth century B.C. up to the present we know that the paradigm of systematic correspondence is but one of several schools of thought that were accepted widely enough to be recorded in the medical literature. During this period of nearly 3,500 years, oracular therapy, demonic medicine, religious healing, pragmatic drug therapy, Buddhist medicine, the medicine of systematic correspondence and, ultimately, modern Western medicine either originated in China itself or were adopted from foreign cultures. The evolution of these seven major conceptual systems was not characterized by a simple linear succession in which practitioners exchanged each old system for a new one. On the contrary, there was a great deal of overlap between the new systems coming in and older views that still had their practitioners and patients.

Chapter II. History of Medical Pluralism in China

Medicine in China: Antiquity to the mid-1800's

The oldest archeological evidence of medical practice in China comes from oracle bones dating from the Shang dynasty (ca. 1766-1100 B.C.). From these artifacts and from historical reports compiled during the subsequent Zhou dynasty (ca. 1100-245 B.C.), a reasonable understanding of Shang culture is possible. The most important Shang concept pertaining to the origin, prevention, and treatment of illness was harmony between the living and the dead. Ancestor worship, an important facet of the broad range of health care strategies employed by the people of China to this day,¹ has its roots in Shang agrarian culture. The divine ancestor Ti channeled the favor or displeasure of the deceased through oracle divination. Early oracular practices utilized cattle bones; later, the use of tortoise shells became more common. Most of the 36 oracles that have been excavated bear inscriptions from approximately the thirteenth century B.C.

The process of oracular medicine consisted of the following: several holes were first drilled in the bone or in one of the carapaces. The king, or someone he appointed, then made his inquiry and subjected the bone to heat, producing a series of cracks radiating from the holes. The interpretation of these cracks by the king revealed the will of his ancestors in the matter at hand. Dreams, hunting prospects, travel plans, political alliances, future harvests, war, weather, lack of offspring and, of course, illness--all were

¹Kleinman (1980) describes a continuity of ancestor worship among Chinese communities on Taiwan and in Hong Kong.

topics for which the oracles would be consulted.² In addition to inquiring as to the prognosis of a person's condition, information concerning the prevention and treatment of illness was also obtainable. Various offerings were made to prevent displeasure of the ancestors as well as to remedy situations where the deceased had already carried out their curses; prevention and treatment were equally geared toward placating the deceased. One oracle text, for example, reads: "Severe tooth illness. Should a dog be offered to the departed father Keng, and a sheep be ritually slaughtered?" (Chang Tsung-Tung 1970, translated by Unschuld 1985, p. 21). Should the harvest be poor, the battle lost, or sickness and death occur, it was clear that the offerings had not been sufficient to pacify the ancestors' wrath (Hume 1940; Unschuld 1985).

Two additional, though relatively minor, concepts of disease causation revealed through oracular inscriptions pertain to "natural" phenomena as sources of illness. "Wind-spirits" were one such influence; "evil wind", whether acting on its own or as a tool of divine ancestor Ti, could cause crops to fail or illness to befall an individual.³ The other "natural" phenomenon mentioned on the oracle bones as capable of causing illness is "snow". It is not clear whether this was considered to be a spiritual entity or whether it refers to the cold, white substance of the natural environment.

The importance of the oracles and "ancestral medicine" persisted into the Zhou dynasty, only to decline as a result of the social and political

²It is thought that this therapeutic activity was reserved primarily for the king and his closest disciples; unfortunately, little is known about the extent to which this healing resource was available to Shang peasantry.

³Wind remains, up to the present, one of the most important etiological concepts in traditional Chinese medicine.

upheavals that characterize the latter half of this period. Clashes between the various states in China over succession to the throne in 771 B.C. led to widespread bloodshed and chaos and spelled the beginning of the end of the Zhou dynasty. Hostilities peaked between 476-221 B.C., termed the "Warring States" period, the turbulence exacerbated by moral decay amongst the ruling families as each sought administrative and military control of individual regions. Centuries of bitter strife fundamentally changed almost every social and cultural institution of Chinese civilization. The old conventions became meaningless; no human life was spared when victory or defeat was at stake, reflecting the diminished significance of ancestors. Concomitantly, the perception of demons as the cause of daily misfortune and illness came into prominence.

Demonic medicine has been a major constituent of Chinese medical beliefs for many centuries. Thus, it is worthwhile to discuss in some detail aspects of its history, its approaches to treatment, and its close relation to magical thinking. Ancient beliefs in demonical forces as agents of illness are documented in the literature of the later Zhou, as well as during the subsequent Qin and Han dynasties. Han Fei, who died in 233 B.C., expressed the beliefs of his time when he explained, "When a person falls ill, it means he has been injured by a demon" (quoted in Unschuld 1985). And though demonic medicine reached its zenith toward the end of the Warring States period, we know that related concepts of disease etiology existed at least as far back as the Shang dynasty and continue up until the present (Unschuld 1985). For example, inscriptions on oracle bones and tortoise carapaces make reference to the lethal poisoning capability of *ku*, a "worm spirit", indicating the existence of demonic medicine as early as the fourteenth century B.C. At one time *ku* poisoning was practiced over the whole of

China, but by the medieval period (third to seventh centuries) the practice was prevalent only in southern China, and from the Tang period (A.D. 618-907) on it appears to have been even more confined to aboriginal tribes of the south. Despite its diminishing importance in Chinese medical beliefs, *ku* was still viewed as a reality by administrative officials of dynasties as late as the nineteenth century: the person who prepared and administered *ku* was considered the most despicable of criminals and was executed in a gruesome manner, sometimes with his entire family (Feng and Shyrock 1935, cited in Unschuld 1985). Furthermore, there is evidence that other variations of demonological therapy, which still flourish outside the People's Republic (primarily among the Chinese populations of Hong Kong and Taiwan), survive also in rural areas of the mainland itself (Kleinman 1980; Unschuld 1985). Demonic medicine, then, is one example of a medical belief (held in one form or another) from antiquity to this day.

Treatment in demonic medicine consisted of several therapeutic modalities. Exorcism, for instance, utilized similar measures to combat demons that had proven successful in human conflicts:

Several times a year, and also during certain special occasions, such as the funeral of a prince, hordes of exorcists would race shrieking through the city streets, enter the courtyards and homes, thrusting their spears into the air, in an attempt to expel the evil creature" (Unschuld 1985, p. 37).

This type of practitioner is depicted exactly in the ancient Chinese character for "healer" (*i*): the lower half consists of the ideogram *wu* (巫 , sorcerer or shaman) while the upper half is a combination of symbols representing a quiver containing arrows on the left (𠂇) and a hand grasping a spear or lance on the right (扌) (Wong and Wu 1936; Hume 1940; Unschuld 1985). Other methods of treating demon-induced illness included incantations or spells, acupuncture (thirteen points were specifically related to expelling

demons), and medicinal therapy. The use of medicinal drugs to rid the body of demons is as old as demonological therapy itself. The application of such substances, as well as the timing of exorcistic rituals, were guided by magical correspondences, a major theme throughout all of Chinese medical history.

Unschuld differentiates magical practices into two fundamental concepts: contact magic and homeopathic magic. He writes, "Contact magic is based on the view that a contact or former union between two elements creates a relationship in which manipulation of one of the elements, which are now spatially separated, produces a visible effect on the other." For example, "the possession of part of a fingernail, hair, or even a placenta, brings with it the power to influence the fate of the person from which the object came." In contrast, "homeopathic magic rests on the principle that like corresponds to like." As in voodoo medicine, "it is believed that harm inflicted upon the image of a person results in harm to that person himself, despite the fact that the two might be separated by great distances. It is also believed that eating a walnut, for example, can be beneficial to the brain, since the two objects have similar appearances" (1985, p. 52). One example of homeopathic magical thinking in demonic medicine is the use of the myrtle flag plant for medicinal purposes. The healing properties of this plant were assumed probably because its ideogram, composed of two sun symbols, was presumed to contain the "concentrated power of the sun" (Unschuld 1985, p. 42). The use of medicinal substances for the treatment of demon-related illnesses was refined over several centuries, culminating in the compilation by Chen Ch'uan in A.D. 600 of the *Ku-chin lu-yen fang*, a collection of prescriptions designed to rid the body of demonic "possession" (Unschuld 1985, p. 41).

At about the same time, Sun Ssu-miao (A.D. 581-682?), an alchemist, wrote a treatise including remedies pertaining to the "fumigation" of demons, demonic medicine spells and incantations. Influenced by Taoist and Buddhist traditions, Sun Ssu-miao viewed illness and suffering as natural and unavoidable. This ran counter to the already existing principles of the medicine of systematic correspondences which was based on the belief that illness could be avoided by living one's life in the appropriate way.

Thus, even while demonic beliefs persisted, another system of healing had been developed. This system, rather than a single set of guiding principles, was an amalgamation of many of the paradigmatic world views existing in China at that time. Concepts of demonic medicine, magical beliefs in the unity of nature and the related Yin-Yang and Five Phases theories, and certain structural elements associated with the unification of the empire--all were incorporated into the syncretic "medicine of systematic correspondence." This terminology-- "systematic correspondence"--reflects a central precept of this therapeutic system: that structures and functions of the human body are analogous to--and, therefore, in correspondence with-- the structures and functions found in nature and society. These correspondences between humans and the world at large were manifestations of the view that "Man is parallel to the universe; a universe is a man and a man is a universe" (Kuo lin-tsung, quoted in Lessa 1968, p. 18). In short, proponents of systematic correspondence subscribed to the belief that "Man is Heaven and Earth in miniature" (Morse 1934, p. 3).

The medicine of systematic correspondences evolved during the last centuries of the Zhou period and continuing into the Han dynasty (206 B.C.-

A.D. 221)⁴, incorporating many aspects of Confucian doctrine that had begun to take hold (Agren 1975). Confucius' (551-479 B.C.) political philosophies, dealing exclusively with the here-and-now, down-to-earth matters of government rule and societal behaviors, advocated strict observance of a clearly defined hierarchy of relationships among the various members of society as a means of achieving an ethical and harmonious social order. Unschuld argues that the terminology representing the physiological and pathological principles of this medical system corresponded to many of the Confucian-inspired ideas and sociopolitical structures that developed as China struggled to recover from the chaos that marked the end of the feudal period:

A consideration of the terms used to designate the major structural elements of the organism reveals a significant etymology. A literal translation indicates that the organism was composed of "storage facilities" or "depots" (*tsang*) and "grain collection centers" or "palaces" (*fu*). These "depots" and "palaces"...were linked by a system of conduits or transportation channels...running through the entire organism like a Grand Canal. All important elements of the transformed state economy--granaries (i.e., "depots") and centers of consumption (i.e., "palaces"), as well as the transportation network necessary for the exchange of resources among these entities--were represented in the organism. In this regard even the existence of the anatomically indeterminable "Triple Burner" becomes comprehensible. The triple burner was considered an organ...that, simultaneously at three locations in the body, contributed to the transformation of raw materials, by means of heat, into useful products. The logic of the economic allegory virtually compelled an organic parallel to the smelters and saltworks so vital to the state, even when the existence of a such a structure could not be definitely proven. Similarly, the concept of the transportation channels, or

⁴Medical texts unearthed from the Ma-wang-tui graves of 168 B.C. are noteworthy for their recording of a broad range of healing concepts and techniques. Among the practices recommended are "moxa-cauterization, oral spells and magic rituals, gymnastics, sexual practices, drugs, massage, cupping, bathing, and fumigation" (Unschuld 1985).

conduits, reflects a transfer of an understanding of the vital importance of waterways to the state to a conception of the vital importance of the flow of specific substances through the organism to the human individual (Unschuld 1985, p. 81).

The existence of a "transformed state economy" indicates societal adoption of a Confucian ideology designed to create economic and political stability. Moreover, that the medicine of systematic correspondence reflected Confucist social reorganization in its terminology revealed an adherence to Confucian doctrine that was largely responsible for its widespread acceptance as the official and orthodox system of healing. Consequently, as Unschuld points out, both the success and the more recent decline of the medicine of systematic correspondences "has been continuously dependent on the interests and fate of Confucianism, itself" (1985, p. 67).

The Confucist contribution to Chinese medicine went beyond structural and linguistic aspects, however. Doubting the existence of gods, spirits, or demons, Confucius paid little attention to the afterlife and therefore lacked divine or transcendental laws to explain social and political phenomena. Instead, Confucist philosophers incorporated for this purpose the already existing theories of Yin-Yang and the Five Phases, philosophical constructs fundamental to the understanding of health and illness.

The doctrines of both Yin-Yang and the Five Phases are considered to be "logical and systematic extensions of homeopathic magic" that permitted the incorporation of "most, if not all, natural occurrences and abstract concepts into a single system of correspondence" (Unschuld 1985, p. 54). As already noted, both doctrines preceded Confucius, and both played central roles in understanding sociopolitical events as well as in the theoretical foundations of the medicine of systematic correspondences.

Yin-Yang theory has its origins in ancient agrarian observations of natural phenomena. Originally, the terms yin and yang referred to the shady and sunny sides of a mountain, respectively. But during the second half of the first millenium B.C., the meaning shifted from a literal topographic definition to a metaphysical "designation for the polar aspects of interrelated phenomena" (Porkert 1976, p. 65, Lee 1980). This linguistic shift occurred as the philosophico-religious ideas of Taoism became popular.

The focus of Taoist philosophy was man's relationship to "Tao", the driving force in the creation of the universe. Although the concept of Tao as a philosophy was common to both Confucianists and Taoists, in the Confucian tradition Tao signifies a morally correct path of human conduct and is thus limited to behavior. In contradistinction to the Confucists who were interested in human society alone, followers of Taoism were concerned primarily with man as an individual and, through his behavior in the natural world, with his relationship to Tao (Porkert 1976). Consequently, the Taoists "devoted themselves to the study of Nature, believing that man's life should be lived in conformity with her. . . ." (Needham 1970, p. 342). "The man whose manner of life and behaviour are in conformity with Tao, the Way of Nature, will attain the attributes of Tao. The spirits of the departed will not harm him. . . . Such a man will live long and is not subject to physical decay. Possessed of Tao, he endures long; to the end of his bodily life, he is exempt from all danger of decay" (Tao Te Ching, translation by James Legge quoted by Hume 1940, p. 49).⁵ Furthermore, it was believed that out of Tao evolved Yin and Yang, two opposing yet complementary forces that generate

⁵Thus, with his beliefs about the inevitability of illness, Sun Ssu-miao implicitly questioned the necessity of following the moral dictums to preserve health advocated by Confucist philosophers and certain Taoist sects (Unschuld 1985).

the dualities of Nature (day and night, the tides, summer and winter, etc.). Yin and Yang, representing the female and the male, the negative and positive elements, by their ebb and flow maintained all things in the world in their proper balance and harmony. In this way, even after creation was completed, Tao continued to guide the functions of everything within the universe (Vieth 1973). In this context, the body, like the universe, becomes a complex system of Yin and Yang.

This idea became central to ancient theories of disease etiology and therapy. If one aspires to live in accord with Nature, i.e., Tao, in hopes of living a healthier, happier life, one needs to consider that Yin and Yang, as the components of Tao, must exist in harmony as well. Indeed, disrupting the balance of these forces was thought to allow "pernicious influences"⁶ to enter one's body and cause disease. Simply stated, "a balance of Yin and Yang results in health; an imbalance leads to disease" (Eisenberg 1985, p. 37).

A second natural philosophy that influenced the medicine of systematic correspondences is the doctrine of the Five Phases (*wu-hsing*, sometimes translated as the Five Elements). According to traditional medicine, everything in the universe, including man, is composed of five basic elements--"wood," "metal," "water," "fire," and "earth"⁷--in balanced proportions (Hume 1940; Kaptchuk 1983; Unschuld 1985). The importance of this philosophy to the Chinese understanding of the workings of the

⁶The six "pernicious influences" (*liu-xie*, also called the "six Evils") that cause disease are: "wind," "cold," "heat" or "fire," "summer heat," dampness," and "dryness" (Kaptchuk 1983, p. 118). As mentioned earlier, wind has been regarded as a chief predisposing cause of disease since ancient times (Wong and Wu 1932).

⁷These "elements" are actually understood to be "phases" or "active processes" of the natural world, and not to the physical entities known by the same names.

universe can not be underestimated: "Combined with the Yin-Yang premise, the idea of elements formulated a frame of reference for interpreting the operation of the supernatural forces in the sky, the rise and fall of a dynasty, life and death, health and sickness, (and) poverty and prosperity. . . ." (Lessa 1968, p. 143). Both doctrines are generally considered to have been shaped into the forms adopted by Confucist philosophers by the scholar Tsou Yen (c. 350-270 B.C.) (Agren 1975, Unschuld 1985).

By 500 A.D. all elements characterizing traditional Chinese medicine (i.e., the medicine of systematic correspondences) were in place and no major new principles were introduced for over a millenium. Medicine in China was far from stagnant, however. By the Sung dynasty (A.D. 960-1126), many subspecialties within the medicine of systematic correspondences had come into existence.⁸ The pharmacological literature of systematic correspondence increased markedly after the Sung period as well: the medicinal properties of more plants, animals, and minerals were discovered, and individual drug prescriptions were regularly revised as new information on drug properties became known and as the errors of earlier authors were corrected.

Before describing the introduction of Western medicine into China and its subsequent integration with traditional medical practices, I want to stress the syncretic tendency of Chinese medicine throughout its history. The pluralistic nature of healing in China is well documented in the literature beginning with the ancient classic of Chinese medicine, the *Nei Ching*.

⁸From the ancient medical classic *Nei Ching*, we know that some subspecialties, such as obstetrics, branched out as early as 85 B.C. when the famous Han doctor Ch'un Yu-i began using drugs to induce labor (Lampton 1977).

Though it is estimated to have been written around the third century B.C., it is ascribed to the Legendary Yellow Emperor, Huang Ti (2698-2598 B.C.), and is considered to be the earliest attempt to systematize the medical thoughts of these ancient times (Wong and Wu 1932). The Ma-wang-tui texts of 168 B.C. recount the diversity of medical thought in Han times, describing a variety of therapeutic practices based on the paradigms of magic and systematic correspondences, on demonological concepts, and on empirical observations, as well (Unschuld 1985). Evidence of the continuation of health care alternatives through the Sung dynasty (A.D. 960-1280) is found "not only in the medical literature itself, but also . . . in the official list of medical specialties and examination subjects compiled during [this] period" (Unschuld 1985, pp. 166-167). More modern sources list the numerous types of practitioners in existence during the Qing dynasty (A.D. 1644-1911), making special note of the Qing Emperor's use of a variety of healers, including Taoist priests, practitioners of the medicine of systematic correspondences, and Jesuits, the first to introduce European medicine to the Chinese court (Spence 1975).

In summary, it is apparent that "traditional Chinese medicine" is anything but a single entity. The medicine of systematic correspondences, the dominant healing system in China for 2000 years, is a syncretic doctrine that has been subject to conceptual changes and diversifications through the ages. At no time has it represented a homogeneous system of ideas. The advent of Western medicine merely added yet another alternative to the health care options available to the Chinese people.

Introduction and Growth of Western Medicine in China: 1800-1949

The first Western doctors in China were those landing in Macao and Canton as crew members of trading ships. Although this contact began with the Portuguese arrival in 1504 and continued in a limited way for the next three centuries, the impact of Western medicine was insignificant until the 19th century when a Christian missionary presence was established in China (Lampton 1977, Kao 1973).

Other missionary groups had made earlier attempts to introduce Western medicine to China. Jesuit missionaries brought the best of European medicine to the court of the Qing (1644-1911) Emperor Kang-xi in Beijing, but were met with indifference by most Chinese scholars, even medical scholars, who translated only a very few of the European medical texts (Spence 1975; Croizer 1968). Though the Qing Emperor availed himself of the Jesuits' medical expertise, he "seems to have viewed Western medicine as being one of a series of special skills, like cartography, armaments manufacture, mechanics and astronomy, that should be preserved for the Emperor's own enrichment and power" (Spence 1975, p.78). Significantly, his use of the best available medical advice--whether it was Manchu⁹, Jesuit, Chinese classical or Taoist breathing techniques--shows that Western medicine was only one of a number of healing alternatives and that there was a great deal of flexibility toward medical care. During the eighteenth century the Jesuit's position in the Imperial court weakened, and, except for the introduction of the smallpox vaccine by surgeons of the East India Company (Waye 1973), Western medicine disappeared, leaving hardly a

⁹Following their successful invasion from the north, the Manchurians ruled during the Qing dynasty, bringing their indigenous healing beliefs to the Beijing court.

trace. Not until the nineteenth century did Western medicine return to China, mainly as part of missionary expeditions (Spence 1975; Croizer 1968).

Within the first three decades of the 19th century, clinics of Western medicine were opened by missionaries in Canton and Macao. In 1927 a dispensary for the poor was founded at Macao, and a few years later, a small charity hospital was established in Canton. With the signing of two key treaties¹⁰ in the mid-1800's, all of China became open to medical missionary work, allowing for more extensive diffusion of Western medicine than had previously been possible (Lampton 1977; Croizier 1968).

Dissemination of Western medical knowledge was carried out on several fronts. Foreign missionaries brought a substantial body of medical literature with them and were responsible for translating a variety of these texts including a series on anatomy, physiology, surgery, and pediatrics. Another venture was the creation in 1866 of Canton Missionary Hospital, site of the first modern medical school in China. And in 1886 the missionaries established China's first professional medical journal (Croizier 1968).

And so a symbiotic relationship between religion and medicine developed: "The missionary movement provided medicine with a vehicle by which it could move into China and medicine gave the missionaries something the Chinese needed which they could provide" (Lampton 1977, p. 7). By the turn of the century, several missionary-run medical schools had opened in China. And though Western medicine was slowly making headway into some of the intellectual circles as the "charitable nature of (the

¹⁰The 1842 Treaty of Nanjing (following the second Opium War) opened four new ports to missionaries, and the signing of the Treaty of Tianjin in 1860 (following the fourth and final Opium War) opened the entire country (Croizier 1968).

medical missionaries') work and . . . the demonstrable merit of their techniques" (Croizier 1968, p. 41) were recognized, the vast majority of the population still refused to accept modern medicine, believing that only the "medicine of the masters" could effect any real cures (Waye 1973, p. 346).

For Western medicine to gain a foothold in Chinese society, several things had to happen. First, the distrust held by the populace toward the proselytizing missionaries needed to be overcome. And second, institutional, or organizational, structures such as hospitals, medical schools and their administrative structures needed to be set up, a framework antithetical to Chinese society as far as medical tradition was concerned.

Neither problem was easily resolved. The reluctance of many to accept Western medicine was somewhat due to China's relative unfamiliarity with the role of cultural "borrower" since historically China had been a disseminator of culture. Furthermore, China suffered defeat and humiliation by Britain, France, and other foreign nations throughout the latter half of the nineteenth century, resulting in an understandably negative view toward the foreign missionary presence in China. And, whereas early missionary hospitals provided medical care at low or no cost to all who needed it and thereby gained some favor within the lower classes, the enfeebled Qing government was very slow to accept even the idea of supporting hospitals and medical schools to train modern Chinese doctors. Only after the Guomindang Nationalists came to power did the central government take steps toward medical modernization (Croizier 1968).

Part of the reason for Western medicine's success with the Nationalist government was that its leaders were intellectuals who shared a growing awareness that health care needed to become a major concern of the state: The standard of living in China had experienced tremendous decline during

the 19th century due to frequent wars, local banditry, floods and famine; the majority of the population lived in squalid conditions and the overcrowded and unhygienic environment was an ideal setting for disease transmission (Hillier and Jewell 1983). Although few were ready to dismiss Chinese medicine altogether, the significance of Koch's and Pasteur's discoveries in epidemic prevention forced more and more individuals to realize the social importance of medicine, and in particular, Western medicine. Even before the Nationalists came to power, China's experience with the great plague epidemic of 1910-1911 swayed many who had previously doubted the value of Western medicine. For one thing, the Western-style sanitation and public hygiene measures initiated by the Cambridge-educated physician Wu Lien-te (one of the first Chinese doctors to be educated abroad) effectively curbed the spread of pneumonic plague before it could spread throughout North China. Qing officials, impressed by this achievement, set up the North Manchurian Plague Prevention Service and named Wu Lien-te as its director. Even conservative officials were swayed by the success of Western public health measures:

Hsi Liang, the venerable and traditionally oriented Viceroy of Manchuria, remarked to the International Plague Conference: "The lessons taught us by this epidemic . . . have been great and have compelled several of us to revise our former ideas. . . . If railways, telegraphs, electric lights, and other modern inventions are indispensable to the material welfare of this country, we should also make use of the wonderful resources of Western medicine for the benefit of our people" (quoted in Croizier 1968, p. 46).

Thus, more and more people came to see the need for improving health care as a means of achieving national strength. This view, "Social-Darwinist" in tone, argued that "good medicine was a foundation for national prosperity and progress" (Croizier 1968, p. 59-60). One of the earliest proponents of this idea was Liang Qi-chao who in 1897 began the "Medical

Reform Society", an organization which advocated "improving, or reforming, medicine in China as an essential step in strengthening the race and, through it, the nation" (Croizier 1968, p. 60; Chen 1984; Unschuld 1985). The best way to do this, as he saw it, was to combine the best of both Chinese and Western medicine. Thus, Liang Qi-chao was the first of many to push for the integration of these two systems, though it was not to become a reality for over half a century.

Following the 1911 revolution that put the Nationalist Party in power, the position of Western medicine rose rapidly while that of traditional Chinese medicine (i.e., the medicine of systematic correspondences) quickly declined (Chen 1984). The National Medical Association, a precursor to the Chinese Medical Association founded by Western-trained physicians in the early years of the Republic, became the focus of elite medical activity. Concerned primarily with issues of research and teaching standards, their first resolution was a proposal to institute licensing of traditional Chinese practitioners (Croizier 1968; Lampton 1977). Intense animosity developed as traditional practitioners were forced to compete with Western-trained physicians for positions of legitimacy within state-sanctioned medical bureaucracies (Leslie 1975). Tensions increased still further when, in 1913, for the first time in Chinese history, anatomical dissection was made legal, explicitly recognizing the science of Western medicine and rejecting the traditional Confucian prohibitions on dissection and surgery.

Traditional practitioners attempted to fight back, but were continually rebuffed. In 1914, a group of traditional doctors approached the Minister of Education, Wang Ta-hsieh (former ambassador to England), hoping to gain government support for the formation of a traditional medical association. His reply was blunt: "I have decided in the future to abolish Chinese

medicine and also not to use Chinese drugs" (quoted in Croizier 1968, p. 69). One year later, Western medicine was adopted exclusively for the state-sanctioned medical curriculum.

The expanding institutionalization of Western medicine seriously threatened the existence of traditional medical practice. Legal regulations set by the Ministry of the Interior in 1922 differentiated between practitioners of traditional medicine and Western medical doctors, the former clearly assigned to a separate and lower rank (Croizier 1968). Debates during this time focused on the values of traditional versus modern medicine, with proponents of the latter vehemently attacking the former as being "unscientific" and a "fool's philosophy" (Croizier 1968). The passion of these arguments is exemplified by one student's denial of the authority of tradition and antiquity: "The very rock of ages upon which they (traditionalists) are depending has proved itself nothing but a medical iceberg melting now under the brilliant sunshine of science" (Chang Tsung-liang 1926, quoted in Croizier 1968, p. 76).

The position of traditional medicine in intellectual circles continued its downward spiral, resulting, in 1929, in the newly created Ministry of Health (run by graduates of Western-style medical schools) passing a bill that essentially outlawed traditional Chinese medicine. Traditional doctors protested by holding a half-day strike in Shanghai, and with extensive support both from the public and from cultural conservatives within the Nationalist Party, the government was forced to repeal the bill (Croizier 1973; Hillier and Jewell 1983). Practitioners of traditional medicine united to form the Institute for National Medicine, and throughout the 1930's and 1940's they sought government recognition in an attempt to defend China's indigenous medicine against further threats. Their efforts were

unsuccessful, however, and they continued to be discriminated against both politically and legally (Lampton 1977; Chen 1984; Croizier 1973). This situation was not to change for twenty years until the Nationalists were overthrown by Mao Ze-dong and the Communist Party and the People's Republic of China was established.

Chapter III. Medical Pluralism in China Today

Medicine in China: The Communist Experience

China of the 1980's is a vastly different nation than it was forty years ago under Nationalist rule. Changes have occurred in every aspect of Chinese society, but nowhere are they more visible than in the improved health status of the Chinese people. For example, life expectancy in the early 1980's was 70 years, more than double the 32 years one could expect to live in 1945; infant mortality decreased five-fold during this same period of time, from 250 infant deaths out of every 1000 live births to less than 50 per 1000 (Jamison 1984). This amazing turn-around was largely due to the efforts of Mao Ze-dong, the Chinese Communist Party, and their emphasis on preventive medicine, accessible health care, mass health education, and the synthesis of a culturally comfortable and economically beneficial merging of traditional Chinese and Western medicines (Miller and Strickler 1980). How Mao's ideology and the Communist Party evolved to shape these policy objectives deserves mention.

Early views of Chinese Communist Party (CCP) officials paralleled those of the Nationalists with respect to medicine--both had seen the benefits of Western medicine and shared the expectations that modern science would move China forward in the world of nations; traditional Chinese medicine was considered "backward" and an obstacle to China's advancement. Following the 1927 massacre of Communists in the cities,¹ however, the

¹Since the early 1920's an uneasy alliance had existed between the Chinese Communist Party and the Guomindang in their efforts to unify the country and free it from control by warlords and private armies. In March of 1927 Chiang Kai-shek betrayed this relationship when he ordered his forces to turn on his former allies.

CCP took to the countryside where their attitudes toward the utility of traditional medical practices were crucially altered. Mao had earlier shared the "progressive's" view that Western medicine was superior to traditional practices. But during the decades of fighting the Guomindang Nationalists, especially after being forced from urban centers, Mao and others took a more favorable view of what Chinese medicine had to offer. Originally, this was to a large degree "making virtue out of necessity" (Croizier 1973, p. 38); for instance, the lack of medicines forced a dependence on traditional herbs locally available (Hillier and Jewell 1983).

When Mao took control of China in 1949 he was faced with enormous problems on every front: Chiang Kai-shek had fled to Taiwan with the entire gold reserves of the country, leaving Mao with a bankrupt nation. Along with inadequate education and poor sanitation, there was a high prevalence of infectious disease morbidity and malnutrition, and parasitic diseases such as malaria and schistosomiasis were endemic throughout the rice-growing regions of the country (Jamison 1984; Lampton 1977). The infant mortality rate was even greater than India's at the same time; approximately 250 infants out of every 1000 live births died before reaching the age of one year. Overall, there was less than one hospital bed per 1000 population, and those hospitals that did exist were centered in urban areas. The number of trained medical doctors was estimated to be between 10,000 and 20,000-- only one for every 25,000 to 50,000 people-- and they, too, were concentrated in the cities, creating cavernous differences in the distribution of health care resources between urban and rural areas (Lampton 1977). Traditional medicine was the main source of medical care over most of the country, and although a nucleus of modern medicine was present, it was received by the

common people with ambivalence since it originated with the hated missionaries and the despised Nationalist government (Croizier 1968).

Mao, too, distrusted Western medicine because of its early ties to religion and foreign missionaries. Introducing Western methods of healing into China was, he claimed in 1939, an attempt of "the imperialist powers . . . to poison the minds of the Chinese people. . . . Their policy of cultural aggression . . . is carried out through missionary work" (quoted in Lampton 1977, p. 7). On the other hand, Mao clearly recognized the usefulness of modern medical practices in public health matters. Thus, at the First National Health Conference held in August of 1950, in addition to "serving the peasants, workers and soldiers," giving priority to preventive medicine over curative medicine, and utilizing mass health campaigns and mobilizations of the people to solve their own health problems (Chen 1984, p. 2; Lampton 1977), Mao's guidelines also promoted the union of traditional and Western healing practices: "Unite all medical workers, young and old, of the traditional and Western schools, and organize a solid united front to strive for the development of the people's health work" (quoted in Sidel and Sidel 1973, p. 129; Lampton 1977; Chen 1984; Miller and Strickler 1980).

These four priorities of Mao's post-liberation health policy were modeled after the Red Army's medical system which had provided for Communist health needs during the years of fighting the Guomindang and the Japanese. Their objectives had included a strong emphasis on preventive health measures, the use of paramedical personnel with little formal training, and mass mobilization for public health problems (Lampton 1977). Another feature of health work in the revolutionary base camps was the joint use of traditional doctors and Western-trained physicians--the former ran the departments of internal medicine while the latter manned the surgery

departments (Chen 1984). Mao's assimilation of this feature into his health care plan was to have a major effect on the future of China's medical system.

Mao's policy recommendations were as much a function of sociopolitical considerations as of the urgency of the health care situation at the time. Threatened by the "bourgeois tendencies" inherent in the sophistication of Western medicine and the knowledge gap it created between the "experts" and the masses, Mao initiated the use of paraprofessionals and mass health education campaigns to narrow the "elitist" gulf that would otherwise separate the health workers from the people (Miller and Strickler 1980). Ideological attacks on Western medicine as a "capitalist, imperialist, and colonialist" institution (Unschuld 1985, p. 247) had begun early on, spurring Mao to use his enormous prestige and personal power to resurrect traditional Chinese medicine from the depths to which it had fallen under the hands of the Guomindang. Economically, this made sense since traditional diagnostic techniques and therapeutic remedies were of low technology and utilized locally available resources, and thereby avoided the high cost of Western procedures, drugs, and technologies. There were strategic considerations, as well: acupuncture, for example, was a cheap, quick, and effective way to treat pain from combat wounds. Traditional medical practices also were culturally acceptable; preventive medicine was wholly consistent with Chinese medical tradition (Lampton 1977), and the patient's relationship with a traditional practitioner and familiarity with his approach to treatment offered reassurance and potential benefit from placebo factors (Miller and Strickler 1980). Furthermore, ideologically speaking, legitimizing China's indigenous medical practices offered a sense of national pride to the masses. And finally, combining traditional and Western practices was necessary in post-liberation China as Western medical

resources alone were not sufficient to combat the huge burden of infectious and parasitic diseases.

Thus, the reasons for re-establishing the use of traditional medicine in New China were varied and were based on both medical and non-medical factors. Moreover, many Chinese people had continued to believe in the efficacy of traditional therapeutics and viewed them as "a source of medical treatment that should not be discarded" (Sidel and Sidel 1973, p. 129). Pragmatically speaking, 80 percent of the Chinese population lived in rural areas where, except for major provincial towns, Western-style medicine was almost non-existent. Doctors of traditional medicine were the only practitioners available, but even if Western medicine had been available, many people would not have used it because of their faith in and familiarity with Chinese medicine (Sidel and Sidel 1973).

Support for China's traditional system of healing had not always been solely the province of the Communist leadership. From the time the Guomindang first tried to do away with Chinese traditional medicine in 1915, others had put forth arguments and rationalizations to sustain it, some of which were later voiced by the Communists. For example, Ch'en Kuo-fu, a militant Nationalist politician and ideologue who was convinced of China's need for scientific medicine to make the nation strong, also insisted that in spite of parts not being scientific, in its fundamentals the indigenous medical system was compatible with science "for it was based on empirically determined experience, the very essence of science" and "that it possessed a unique body of medical knowledge that could not be allowed to perish" (Croizier 1973, p. 35). Despite protests that it would degrade "Chinese medicine . . . to a mere component of Western medicine" (Unschuld 1985, p. 251), in 1929 Ch'en recommended using scientific methods to analyze

traditional medical practices so as to retain that which was useful while eliminating harmful or meaningless aspects. His insistence on both the institutional reform and scientific study of traditional medicine reflected his attachments both to modern science and to a Chinese identity. Despite the differences in their political ideologies, this same attitude was later expressed by Mao who declared in 1953: "Chinese medicine and pharmacology are a great treasure house; efforts should be made to explore them and raise them to a higher level" (Sidel and Sidel 1973, p. 129).

Not all of New China's leaders shared Mao's enthusiasm for traditional medicine, however. The Ministry of Health, the Chinese Medical Association (CMA), and the Academy of Medical Sciences all pushed for professional regulations that would exclude traditional practitioners from policy-making positions, objectives that were in direct opposition to Party policy. These three organization were dominated by Western-style physicians, many of whom had trained in Europe or America. The CMA, in particular, was very influential and was well represented in the Ministry of Health. The tension between professional and nationalistic interests led to claims that the Ministry of Health had "become divorced from Party Leadership" (Hillier and Jewell 1983, p. 83). By July of 1954 it was clear to Mao that "the directive of the Party Central Committee on integrating Chinese and Western medicine [had] not been carried out" (Hillier and Jewell 1983, p. 314).

Consequently, new Party directives were issued to strengthen the position of Chinese medicine, including one obliging Western doctors to study traditional medical practices to evolve a "new branch of medicine with Chinese characteristics" (Chen 1984). By 1956, traditional Chinese medicine (TCM) was a required subject in all modern medical schools (Agren 1975; Croizier 1973); 5000 Western-style physicians had enrolled in Chinese

medical courses in their spare time (Lampton 1977); and 2000 doctors had been withdrawn from regular practice for three years of full-time study of traditional medicine. That this occurred at a time of critical health manpower shortage revealed the depth of CCP support for TCM and its integration with Western medicine (Croizier 1973). Additional evidence of the Party's commitment was the growing number of new TCM institutional facilities and resources: in 1957, there were 77 more hospitals of traditional medicine than the previous year, and traditional medical colleges numbered thirteen, an increase of nine from the year before. Still, the Ministry of Health did not join the Party in backing the skills and utility of traditional doctors until forced to by the economic and agricultural disasters that followed the "Great Leap Forward" of 1958 (Hillier and Jewell 1983).

The political ramifications of the ill-fated "Great Leap" and of the following decade's disastrous "Cultural Revolution" have had enormous effects on recent medical policy in the People's Republic. The Great Leap was an ambitious plan designed by Mao and his supporters in the Party to transform the country at one stroke into a developed nation. In keeping with Mao's slogan referring to the integration of modern ways with traditional-- "To walk on two legs is better than to walk on one"--traditional doctors were brought in to staff commune health centers along with Western-trained physicians already there (Miller and Strickler 1980; Hillier and Jewell 1983). In the non-medical sphere, drastic decentralizing policy changes implemented in the countryside diverted large numbers of the rural workforce to local small-scale industrial projects. As a result, industry was in a state of confusion and agricultural output dropped precipitously. These severe economic imbalances set the stage for "three bitter years" (1959-

1962) during which China also faced floods, droughts and the loss of all technical and economic aid from the Soviet Union.

The turmoil of these difficult times opened a rift between Mao and the rest of the Communist Party. Several Party leaders openly blamed Mao for the failures of the Great Leap Forward and the split with the Soviet Union. They disagreed with Mao's strong emphasis on Socialist ideology and took a more pragmatic view of economics. Liu Shao-qi and Deng Xiao-ping were the leaders of this opposition. To Mao, their encouragement of free markets, material incentives and small private enterprises reeked of "revisionism" and a return to the capitalist past; their reliance on experts, intellectuals, and Western science to boost technology clashed with Mao's desires to narrow the gulf between the "experts" and the masses. By 1964, Liu and Deng were under attack by Mao and his "Socialist Education Movement" which, as its first priority, was to denounce and demand the removal of those in the Party who were partial to the "capitalist road." This was to form the basis of the infamous "Cultural Revolution" which Mao hoped would put China back on the revolutionary path.

In August 1966 the Party Central Committee adopted a program for the Cultural Revolution that reflected Mao's policies of self-reliance, priority for the needs of the peasants, and a campaign to destroy "bourgeois" influences. Health care changes during the Cultural Revolution "popularized all that was simple, easily accessible and non-expert, [and] played a vital part in the maintenance of traditional medicine, albeit in the new combination practiced by revolutionary 'barefoot doctors'" (Hillier and Jewell 1983, p. 321-322). Mao's slogan, "Doctors to the countryside" indicated a shift in emphasis from urban to rural areas, and the "barefoot doctors"--peasants trained to give medical treatment locally without leaving their farmwork--

were one manifestation of this policy. With just three to six months of initial training, barefoot doctors bore primary responsibility for the health needs of their villages. Preventive health measures, community hygiene problems (e.g., anti-mosquito and anti-fly campaigns), environmental and sanitation problems, and family planning were major concerns. Their training manuals used Western diagnostic labels but maintained traditional subclassifications² and covered topics such as basic first aid, acupuncture, common infectious diseases, and included both traditional plant remedies and Western-style drugs (Maddin 1974). Though their training was indeed rudimentary,³ barefoot doctors made primary health care accessible to 95% of the population. Thus, this paramedic-based health care delivery system rectified some of the inequities between rural and city health care (Lampton 1977) and, in retrospect, is considered one of the few positive features of the Cultural Revolution.

The effect of Cultural Revolution policies on medical education was not so positive. All medical schools were closed from 1966-1969--the prestigious Western-style Peking Union Medical College, did not reopen until 1976--preventing 12,000 to 15,000 medical students from graduating during the next six years (Maddin 1974). Medical education was reinstituted in 1969, but programs were reduced from five or six years to just three years because of the severe doctor shortage. Mao's ideological goals were clearly visible in the new three-year curricula; both basic sciences and traditional Chinese medicine were taught (including acupuncture and the use of herbs), and students were required to take courses in foreign language, the history of

²The complete English translation of *A Barefoot Doctor's Manual* was published by Cloudburst Press in 1977.

³Some continuing education was provided by local hospitals on a regular basis (Nutter 1973; Kao 1973).

the Chinese Communist Party, and the thought of Mao Ze-dong (Sidel and Sidel 1973).

Another element of the Cultural Revolution important to the development of health care in China was the strong political pressure placed on both doctors and patients to utilize acupuncture therapeutics; those who objected were criticized and punished. Keng Hsi-chen and T'ao Nai-huang, in a post-Cultural Revolution newspaper article, describe one consequence of the pressure to use acupuncture for anesthesia in surgery to prove the worth of traditional medicine and the value of combining it with Western medicine. They claim there were many instances when surgical patients were given sufficient amounts of anesthetic drugs, with needles subsequently placed in the patient's ears for appearance's sake. One ophthalmologist noted inconsistent and incomplete effects of acupuncture analgesia in his patients and, after confirming his observations by testing it on himself, wrote to higher authorities with his report. As a result, he was labeled "one with three hats" (i.e., "an intellectual not interested in practice") and met the criticism of the masses (Unschuld 1985, p. 364). Under this type of political pressure, it is likely that more than a few made statements against their will and acted against their conscience by promoting the use of acupuncture. In denouncing the political mentality that allowed these situations to occur, Keng and T'ao emphasized the importance of scientifically studying acupuncture's effectiveness in producing analgesia--to "seek truth from facts" using science rather than ideology-- before setting policies for its use (cited in Unschuld 1985).

Since Mao's death in 1976 and the political demise of the Gang of Four in 1976, the Cultural Revolution has been widely regarded as a national disaster. With Mao gone, Deng Xiao-ping returned to a position of power in

China and began to implement the "pragmatic" policies that twelve years earlier had precipitated his exile to the countryside (Starr 1984). Called "The Four Modernizations," his policies urged for massive improvements in agriculture, national defense, industry, and science and technology (the latter including medicine.) China's medical system, like every other aspect of Chinese society, has undergone drastic changes under Deng's process of modernization. Preventive medicine is still an important emphasis, although less so than when it was a hallmark of Mao's medical policy now that chronic diseases have replaced communicable illnesses as the major health problems (Jamison 1984). The emphasis on distributing health care resources to rural clinics and commune hospitals has shifted toward urban medical centers with high technology medicine and biomedical scientists (New 1986). In spite of all the changes brought about by the modernization effort, the commitment to traditional systems of healing re-established during the Cultural Revolution remains the official policy to this day.

Levels of Integration of TCM and Western Medicine

Government policy. From the 1950's to the present, the main focus of medical integration has been to evaluate the utility of traditional drugs and treatments within the theoretical framework of modern science. This effort has been furthered by the government's continued promotion of traditional medicine. Recent significant actions include: reviving the All-China Association of Traditional Chinese Medicine which had been dissolved (along with all other professional bodies) during the Cultural Revolution (Hillier and Jewell 1983); establishing the Academy of Traditional Chinese Medicine in Beijing, a facility theoretically equal in status to the Western-style Chinese Academy of Medical Sciences; creating, in 1980, a new medical journal

devoted to research and clinical studies of Chinese medicine; and publicizing traditional medicine's successful treatment of "hopeless" patients as well as the low price of its remedies as compared to Western drugs (Hillier and Jewell 1983).

In 1980 a national conference convened to determine the future direction of the integration of traditional Chinese and Western medical systems. Out of this meeting came the "Three Roads Policy" which advocates the simultaneous development of the three "branches" of medicine in China today: traditional Chinese medicine, Western medicine, and the combination of both systems--the "third road" (Unschuld 1985; Chen 1984; Jamison 1984). The Three Roads Policy was soon inaugurated with the announcement that an institute for combining traditional Chinese and Western medicine had been established that was to be totally separate both from the Chinese Medical Association and the All-China Association of Traditional Medicine (Hillier and Jewell 1983). Seven years later, government support for the combination of China's indigenous healing practices with Western medicine continues to be reflected on several fronts: state-sponsored research, professional training, and delivery of services.

Research. Before 1980, a dual system of professionalized indigenous and Western medicine had existed in the People's Republic of China, with parallel institutions for research, education, and practice (Leslie 1975, 1976). Already mentioned were the Academy of Traditional Chinese Medicine and the Chinese Academy of Medical Sciences, both in Beijing. A substantial number of their research projects (all of which are state-funded) explore the effectiveness of "combined" drug therapies, e.g., the use of digitalis with a Chinese herbal extract to treat hypertension (Maddin 1974); research is also being done there to ascertain the neurophysiological basis for

acupuncture analgesia. A third parallel structure in research was created by the establishment of the institute for the study of the combination of traditional and modern medical systems. Other facilities conducting more focused research are the Institute of Acupuncture and Moxibustion, also in Beijing, and the Shanghai-based Institute for the Study of Qi Gong (Eisenberg 1985). The Tianjin Herbal Institute, established in the early 1950's, still conducts experiments on herbal remedies such as those used to treat cancer, cardiovascular disease, and chronic bronchitis; it has also studied herbal "sponges" that are used in surgery along with hemostats to control bleeding (Maddin 1974). Similarly, pharmacologists at the Institute of Materia Medica, under the aegis of the Chinese Academy of Medical Sciences, use modern scientific methods to study traditional pharmaceutical remedies. Attempts to isolate, identify, and synthesize the "active ingredients" in herbal medicines are carried out in the Institute's many departments of pharmacological analysis, phytochemistry (plant chemistry), pharmacological research, and pharmaceutical chemical synthesis.

Medical Education. At each of these research institutes there are some scientists who have been trained in modern medicine and others who have studied traditional medicine. Part of the reason practitioners of these two medical systems can work so closely together may stem from the significant amount of overlap in their training. Since the end of the Cultural Revolution medical education, traditional as well as modern, has been standardized. All students are admitted to medical college directly from high school based on their national examination scores. The curricula of most of the 140 or so Western-style medical colleges and each of the 29 colleges of traditional Chinese medicine (one in each province except Tibet) are five-year programs

inclusive of a one-year required internship.⁴ Although students in both schools learn about the other system of medicine, Western science appears to play a larger role in the education of traditional physicians than does traditional instruction in Western-oriented schools. For one thing, curricula in traditional medical colleges are estimated to allot from 25% to 50% of their courses to basic sciences and Western methods of diagnosis. Schools of modern medicine, on the other hand, generally require only a one-semester course covering the history of Chinese medicine, herbal remedies, and acupuncture theory and therapeutics (Miller and Strickler 1980). Furthermore, Deng's modernization efforts are creating a trend toward medical specialization with a greater capacity for highly technical tertiary medical care. Hence, the interest in modern diagnostic and treatment technologies is high and is evoking an increased emphasis on the teaching of basic sciences and the training of scientific investigators (Nutter 1983). At the same, modernization is exacerbating the urban-rural inequalities in the distribution of health care resources (Miller and Strickler 1980). Part of the government's desire to codify and improve the training of traditional practitioners is a direct result of "the need to balance the development of rural health care against the expansion of urban hospital-based medicine [that has occurred] since 1976" (Hillier and Jewell 1983; p. 327).

Health Care Delivery. Applications of government policy with respect to "combined" medicine is also seen in the organization of China's hospitals

⁴Seven of the eight best medical universities in the country--the "key" schools--offer six-year curricula. Capital Hospital (the new name for the Rockefeller-sponsored Peking Union Medical College) is the only institution in China to offer an eight-year training program. Most of its 30 graduates each year go on to do biomedical research (Nutter 1983; Fox 1984).

and clinics. Nearly all facilities are staffed both by practitioners of traditional medicine and modern medicine, even up to the level of the hospital directors. However, although official policy statements proclaim to value traditional and Western medicine equally, certain observations at this organizational level may suggest otherwise. For example, one survey found that in large urban medical centers only 25% of medical professionals were traditional physicians, and a Western medical approach was generally dominant. As more rural medical facilities were looked at, an increase was noted in the percentage of doctors trained first in traditional methods, as well as in the emphasis placed on combined or strictly traditional systems of healing. In general, the more rural the facility, the higher the percentage of traditionally trained staff (Miller and Strickler 1980).

Then again, even urban hospitals offering the most sophisticated Western medical technology will have a department of traditional Chinese medicine, a Chinese herbal pharmacy, an acupuncture clinic, and perhaps a department of combined Chinese and Western medicine as well. Hospitals of Chinese medicine, in addition to a preponderance of traditional physicians on the staff, an herbal pharmacy, and a department of acupuncture, will also likely have a Western-style pharmacy, a diagnostic laboratory, and possibly even a surgery department. Additionally, although acupuncture may be administered in the traditional manner with the practitioner inserting steel needles and hand-twirling them at the desired frequency, the needles could be electrically stimulated, or newly developed lasers directed at the appropriate acupuncture point may obviate the use of needles altogether.

Although official policy occurs at a level far above the daily experience of ordinary people, it does ultimately affect the type of medical

system available to patients and physicians alike. But as Stoner points out, as far as the patient is concerned, the medical system per se is irrelevant: "for individual health seekers in times of illness, the immediate material of health care decision making is neither systems nor sectors, but available health care *options* " (1986, p. 47, his emphasis). In pluralistic medical societies such as China, "a variety of treatment options are available that patients can choose to utilize exclusively, successively, or simultaneously," and each alternative will mean something different to the individual patient with respect to its philosophical basis and the ideology, theory, and history it represents (Stoner 1986, p. 44). Indeed, in China, traditional and modern medicine compete with one another at some levels (e.g., allocation of resources such as funds for training, upgrading facilities, and research projects), but are complementary in providing health care to the majority of Chinese people who often use more than one system simultaneously.

Patients and physicians alike generally agree on which treatment modality is best suited for a particular illness: infectious diseases and acute illnesses respond better to Western antibiotics and emergency life support measures (surgery or intravenous fluids, for example), whereas functional disorders and chronic conditions, especially those with accompanying pain, are best handled with acupuncture and/or herbal therapy. Combined treatments have been successfully used for many conditions. Psychiatric disorders provide one example where a combination of traditional herbs and Western drugs is considered better than either treatment alone. Psychotropic medications will be prescribed to counter the presenting psychotherapy, with herbal medicines added either to potentiate the effect of the psychotropic drug so that a lower dose can be used, or to relieve some of the side effects

frequently caused by such medications (constipation, dryness of the mouth, and menstrual irregularities occur commonly) (Miller and Strickler 1980).

Physicians working within China's pluralistic medical system have the same options available to them personally as do their patients; many practicing doctors of Western medicine--even those skeptical of traditional medicine-- will admit to using Chinese remedies for some of their own illnesses, e.g., the common cold (Hillier and Jewell 1983). Professionally, these practitioners may move between the coexisting institutional structures of the two systems (at least theoretically this is possible) or they may "sit on the fence" and practice both forms of medicine to varying degrees. While there are some physicians who have received comprehensive training and are truly adept in both systems, they are indeed few in number. Most practice whatever form of medicine they have been educated in and work closely with their colleagues in the other system to integrate traditional with Western medicine.

But what happens when the Western-trained and traditional physicians treating the same patient disagree as to the most appropriate therapy? Sidel and Sidel asked this question and were told that both types of practitioners work together "for the good of the patient"; any disputes that arise are resolved around the patients needs (Sidel and Sidel 1973, p. 130). Still, there are undoubtedly physicians who are not so generous in accepting the medical views of their counterparts. And there are also many doctors trained essentially in one system who mix and match diagnostic strategies and therapeutic approaches from both types of medicine. How do they explain this in terms of their medical training? Why doesn't the integration of such fundamentally different medical paradigms pose intellectual conflicts for

them? It is precisely these questions that led me to want to talk to physicians in China.

Chapter IV. Perspectives on Integration

Several common themes about China's pluralistic medical system surfaced in my talks with physicians, researchers, students and lay persons. Of primary interest is the pragmatic approach taken by patients and practitioners alike toward the use of traditional and/or Western medical systems: they use what they think will work. Illustrative of this stance is the oft-mentioned trend for young people to prefer Western medicine "because it works quicker and is more convenient," with the contingency that if a satisfactory response is not obtained with Western medications a traditional remedy will be tried. Second, although official government health policy claims traditional and Western medical practices to be equally valuable to Chinese society, there was general agreement that Western medicine has "developed much more quickly" than has traditional medicine and in actuality plays a more dominant role in the health care system than state policy might lead one to expect. As evidence for this viewpoint, various people commented on the unequal proportioning of traditional and Western medical subjects between the two medical school curricula, i.e., that biomedicine represents a larger fraction of the curriculum in traditional medical colleges than does traditional medicine in schools of Western medicine. Another generalization heard repeatedly was that Western medicine was considered more effective in acute illnesses and infectious diseases, whereas traditional medicine was the treatment of choice for chronic disorders, especially if functional in nature, such as some psychiatric and gynecologic problems. Finally, practitioners of both systems noted an increasing emphasis on the use of Western diagnostic methods. One traditional doctor I spoke with attributed this to his observation that

"Western diagnoses are usually [reached] faster" and often are "more accurate" than traditional doctors' diagnoses. This is because "traditional diagnostic techniques rely on the physician's five senses" whereas "Western techniques are more objective and reliable." A direct result of this trend, I was told, is that "combined medicine" has come to mean "Western methods of diagnosis," with "traditional or 'combined' remedies for treatment."

Everyone I spoke with had opinions about China's medical system--which were expressed with surprising freedom and candor. Although I had interesting discussions with many people, I have chosen to focus on the views of three persons with whom I had the most extensive conversations. These individuals, while not necessarily representative of China's medical profession in its entirety, eloquently comment on many of the issues mentioned above.

Dr. Wu Zhi-cheng

Dr. Wu Zhi-cheng, a 69-year-old semi-retired traditional doctor, said he has practiced traditional medicine "exclusively" for 50 years, yet even he admits to occasionally using x-rays and laboratory data to help him make a more accurate diagnosis. But the lab results, he says, are used "only as a reference"; his many years of experience have taught him that certain laboratory findings correlate with specific traditional diagnoses.

Dr. Wu obtained his medical knowledge at a time when there were no schools in existence to teach Chinese medicine. Studying Western medicine was not then an option in Dr. Wu's hometown, Jinzhou, a small city in the northeast of China, so he learned the principles and techniques of traditional medicine by apprenticing for five years with an older traditional doctor. Doctors were members of the upper class then, and Dr. Wu was attracted to

medicine because he saw it as "a way to a better life." Now, "everyone is the same" in China's socialist society, but he feels that since doctors are still respected they do enjoy some status.

Dr. Wu sees some problems with the government's current policy of recognizing three branches of medicine (Western medicine, Chinese medicine, and combined medicine). Theoretically he agrees that they should all be equal, but he observes that Western medicine has developed more quickly and "there are more Western doctors now." He informed me that the government's response has been to encourage people to study and practice Chinese medicine by founding the Academy of Traditional Chinese Medicine. Despite the increased reliance on Western medical technology and methods in recent years, Dr. Wu is very confident in the future of Chinese medicine. He predicts that each of the three branches of medicine will continue as part of China's health policy because "each has its own strengths and weaknesses."

Dr. Wu has many years of experience working with doctors of Western medicine and his attitude towards the merging of medical systems in patient care is positive. The Railroad Hospital where he works employs both Western and traditional doctors who refer patients to one another frequently; he said that, in general, Western doctors send him patients with chronic diseases, and he sends them surgical patients. He believes that for the most part, "This system works well--no problems." However, it has happened that "sometimes the doctors might disagree on the proper diagnosis or treatment. When this happens they do one of three things: (1) ask the patient or family for their treatment preference; (2) ask the hospital president to make the decision; or (3) work together as a team and treat the patient both ways." He believes that both systems can be used simultaneously because there is rarely

any conflict between Western and Chinese drugs. In his opinion, however, Chinese medicines have a distinct advantage over Western drugs in that they have "little toxicity with less side effects." At the same time he believes a disadvantage to the Chinese system is that an error in interpreting the subtleties that contribute toward a diagnosis can more easily result in a misdiagnosis and subsequently the wrong (Chinese) drug will be prescribed.

According to Dr. Wu, combining the two systems of healing in medical training is a good idea: "it is good for medical students to study both." He personally has studied a little Western medicine in his spare time and thinks it enlarges the perspective of Chinese medicine practitioners. And even though students might have "trouble [combining systems] in the beginning, it will resolve later with practice."

Dr. Wu also noted that Chinese medical theory does not correspond to Western anatomy or physiology. For ten years he taught a special class on the fundamentals of Chinese traditional medicine for Western-style doctors. At first he tried to explain Chinese medicine by Western medical parameters but "the students couldn't comprehend [this]" so he switched to teaching it in the usual Chinese medicine way. This type of course was not very successful, in Dr. Wu's opinion. "Both Western medicine and Chinese medicine doctors took the wrong path. Each thought learning a bit of the other systems would make them better doctors. Now they realize that each must learn the whole theory of the other."

Dr. Han Ji-sheng

Dr. Han is the chairman of the Physiology Department at Beijing Medical University, one of China's eight "key" medical schools, and a prominent researcher of acupuncture analgesia. His use of Western science

and modern medical technology has put Dr. Han at the forefront of his field. A highly intelligent and sophisticated man, Dr. Han speaks English fluently and has participated in several professional conferences in the United States.

Dr. Han received his medical education between 1947 and 1953 at Shanghai Medical College (the premier medical school in China at the time), just as Mao was liberating China from the Nationalists. Mao needed teachers after the revolution, consequently only two or three people from Dr. Han's class of 13 went on to do clinical work after graduation. The rest, including Dr. Han, were assigned¹ to teach basic medical sciences and do research.

Dr. Han began his research on the pain-killing effects of acupuncture in 1965. The Ministry of Health had encouraged work in this field since 1958 when acupuncture analgesia was first used in surgery. But after the onset of the Cultural Revolution in 1966, Dr. Han was sent to the countryside to provide acupuncture therapeutics for the peasants. Since 1972, when he was able to resume his research work, he has published 30 papers--18 in the last three years alone--in a variety of Chinese and international medical and scientific journals. His main focus now, he says, is "trying to correlate peripheral mechanical stimulation with peripheral conduction in the nervous system and with neurotransmitter [release] to produce an analgesic effect."

Dr. Han sees combining traditional medical principles with Western medicine as difficult. He stated, "The tendency for Chinese physicians is to combine both Western and traditional [drugs], usually herbs, but not diagnostic methods." Furthermore, "It is very difficult for the Western-trained doctor to think along the lines of traditional medicine. They can use those drugs, or herbs, or prepare a pill . . . That's easy! But to think along

¹To this day, individuals are assigned their jobs by the Chinese government based on the needs of the country.

those lines is difficult. . . . Even though I am doing acupuncture research, I still have difficulties to use the concepts of the so-called "qi"² in my research. And meridian theory doesn't explain the pain-killing effects of acupuncture."

Queried about the existence of other researchers in China who use Western methods to study traditional medicine, Dr. Han mentioned an old classmate of his who is working at Shanghai First Medical College. According to Dr. Han, his colleague is studying "qi" in the Chinese "kidney"³, but "he is having trouble uniting them with the Western kidney. And he is very well-trained in traditional medicine, too. The Western explanation credits the ACTH-pituitary-adrenal axis for enhancing "kidney" function in TCM."

Dr. Han had much to say about his government's health policy and the attitudes of some "purist" traditional doctors towards Western medicine:

The government "used to encourage Western-trained doctors to use Chinese drugs, but the current Minister of Health, I think, is trying to keep Western as itself and traditional as such. He thinks that if you try to combine both together then the good tradition will be lost. So he's afraid that those real things from ancient times will be lost during this process and it's better to try [to keep them separate]. Most doctors do not agree with this policy and they try to combine both, still. The Western-trained try to use those Chinese herbs and especially

²Acupuncture therapeutics is based on the "meridian theory" which postulates the existence of numerous meridians, or channels, in the body through which "qi" flows. Obstruction of the "qi" (often translated as "life energy") results in disease. Piercing the skin with fine needles at specific points along the meridians is thought to relieve the obstruction, permitting the "qi" to flow freely once again, and thereby restore health.

³The concept of the "kidney" in Chinese traditional medicine is very different from the anatomical structure known as kidney in the West. The Chinese "kidney" combines both urinary and reproductive functions; all of the traditional Chinese "organs" (e.g., "heart," "spleen," "liver," "lungs," etc.) represent functional entities rather than physical structures.

those pills and [medicinal] balls⁴ already mixed together in the best formula. Of course, the real Chinese doctor doesn't want to prescribe them because they like to add or subtract from the formula according to the patient's needs--so-called 'plus/minus' medicine--so the real Chinese doctors prefer to prescribe their own recipes, and one week later, they'll change the formula, plus something or minus something else. It takes a lot of time and effort to make this mixture and to boil it, but . . . real Chinese doctors don't like the balls and pills. . . .

Despite the attitudes of traditional physicians toward these medicaments, Dr. Han believes they are useful for certain conditions, implying that perhaps "real Chinese doctors" object more to the mimicry of Western-style pharmaceuticals than to the contents of the pills themselves:

You can keep your [traditional] training, okay, that's good, but actually some of the balls and pills are very effective with less side effects and better modulation and regulatory effect [than Western drugs]. Most Western-trained physicians like to use the pills and balls in chronic conditions that Western doctors are not able to cure, for example, chronic nephritis, nephrosis, and things like that. Or hepatitis--the Western approach can do nothing for that. The Chinese practice has ways to reinforce your own ability for recovery.

That a Western-trained medical scientist could support remedies whose efficacies and theoretical bases have not been scientifically proven baffled me. I was eager to hear his suggestions about how I might gain some insight into the theoretical merging of these two medical systems, so I asked Dr. Han to tell me his understanding of the relationship between Western medicine and Chinese traditional medicine. He answered:

To compare TCM and Western medicine, if you ask me, I would go to hepatitis or nephrosis or things like that. And starting from that basis, you think what you can do to compare with Western medicine and probably you can pick up something of value there. But if you go from theory, there's no way. From theory you can't get anything. The

⁴The "pills" and "balls" refer to traditional herbal remedies that have been processed and packaged similarly to Western pharmaceuticals. (The medicinal balls are black, tar-like in consistency, and taste accordingly.)

long-bearded doctors teach you a lot of things about their theory, cold and herbs and wood and water . . . to me, it's nothing. I mean, they're ideas. . . The philosophy is good because there's also balance. I think the idea [of balance] is good. And also I think it's helped me to do research on acupuncture because acupuncture releases opioids to produce analgesia . . . after awhile, too much opioid triggers . . . the anti-opioid-like cholecystokinin [CCK], which antagonizes [the opioid]--endogenous antagonists! After six to eight hours [of acupuncture], CCK production increases and you get no analgesia at all. If you abolish the CCK, the analgesia is restored. So, that's balance--yin and yang--but this is negative feedback. And you have to find out what exactly is the negative feedback substance. And we have found the anti-opioid. If you call it the yin and the yang, okay. But I'm not starting from yin-yang, I'm going from the real things. . .

Dr. Tan Xiao Lin

Dr. Lin is a 32-year-old traditional physician who practices internal medicine in the out-patient department of Yunnan Chinese Medical Hospital in Kunming, the capital of Yunnan province. Her decision to attend a traditional medical college was based on two factors: First, she was interested in Chinese historical literature and ancient Chinese language and these are both incorporated into the traditional Chinese medical education. Second, she had been taught some Western medicine while working for two years as a nurse in a Western hospital laboratory during the Cultural Revolution and she became interested in comparing traditional with Western systems. Accordingly, she attended Shanghai Traditional Chinese Medical College, one of the best colleges of TCM in the country, because "it was known for teaching Western medicine better than the other colleges." Also, its curriculum is 50% traditional, 50% Western which appealed to her as it would provide her with equal training in and maximal exposure to both medical systems.

Dr. Tan's main area of clinical interest now is heart disease (especially rheumatic heart disease), hypertension, and atherosclerosis. She uses both TCM and Western medicine while treating her patients; she thinks traditional medicine is especially beneficial for diseases that do not respond well to Western methods of treatment such as hypertension and atherosclerosis.

How she decides which system of therapy is appropriate depends in part on the severity of the patient's illness: "If the case is very serious, I think Western medicine is better than Chinese medicine. And if the period of the disease is not so acute then Chinese medicine is much better than Western medicine. But in urgent cases, we use both Chinese medicine and Western medicine and the result is much better than if we only use one kind of medicine." Why does she think that is? "Maybe both medicines affect the other."

In addition to traditional methods of assessment, Dr. Tan uses some of the technologies of Western medicine to follow a patient's progress. For example, to assess heart function in a patient taking traditional plant medicines she will use blood tests and other tests of heart activity, such as an electrocardiogram, echocardiogram, and an "STI" (?) test of left ventricular function.

Dr. Tan's desire to practice "combined medicine" puts her at odds with some members of the hospital administration whose management style, she says "is not so good." Her perception of the hospital directors is that they are "older doctors who do not want to use the combined system." Because they have been trained only in Western medicine or only in traditional medicine, she thinks "they want to keep within their own system" She also confided that "there are a lot of games between doctors of Chinese medicine and

doctors of Western medicine, especially in the older generations. But the younger generation is just like me--trying to relate both systems." She admits that it is easier to practice just one system or the other, but she thinks it is best to integrate the two: "Nowadays, more and more doctors are trying to relate both because they have observed that doing both medicines is much better than doing just one."

Part V. Conclusion

How the Chinese can accomodate such a variety of medical philosophies--some of which are in direct contradiction with one another-- is a subject of interest to many scholars. Hume describes the Chinese approach to thoughts that conflict as one of "adaptation and compromise, rather than (one of) analytical inquiry" (1940, p. 1). Porkert (1976), noting the absence of self-reflection and self-consciousness in the medical literature, concurs that Chinese thought is primarily interested in function as opposed to "substratum" and tends to be "inductive and synthetic" as opposed to "causal and analytic." Another view is expressed by Dunn:

The adaptive strength of Chinese medicine in the past would appear to lie in its eclectic diversity, which provided a wealth of diagnostic and prognostic alternatives, several sanctioned therapeutic options for any health problem, and a coherent philosophical foundation which could be applied to psychological and psychosocial disorders (1976, p. 147).

Unschuld concurs with Dunn's view of China's eclecticism. He comments repeatedly on the conceptual incongruities throughout Chinese medical history that "appear not to have constituted an epistemological problem in China at any time" (1985, p. 99). He views this lack of conflict as

one of the characteristic traits of the history of ideas in Chinese medicine. . . . The unique feature of the Chinese situation . . . is the continuous tendency toward a syncretism of all ideas that exist. . . . Somehow a way was always found in China to reconcile opposing views and to build bridges--fragile as they may appear to the outside observer--permitting thinkers and practitioners to employ liberally all the concepts available (1985, p. 57-58).

Unschuld also believes that this peculiarity of Chinese culture is the cause of much of the difficulty facing Western scholars attempting to understand Chinese medicine and society.

Indeed, by writing this thesis, it is exactly this ability of the Chinese to create syncretic structures in medicine that I sought to understand.¹ To this end, I explored the historical development of China's medical system from antiquity to the present day in an attempt to identify the major cultural, political and economic forces that allow for the integration of two such disparate medical philosophies as traditional Chinese medicine and modern Western medicine. These issues have also been addressed by Unschuld (1985) who states that the acceptance of new medical systems within a culture depends on the congruity between the particular therapeutic doctrine and the sociopolitical ideology. The evolution of Western medicine in China, with all of its ups and downs, clearly shows this to be true.

The official policy to pursue recognition of traditional medicine has undoubtedly contributed to the general raising of standards of traditional practice and to the relatively healthy state of traditional medicine in China today. Surely this has been achieved largely through scientific and organizational policies advocating integration of traditional practices with modern, but the fact that traditional pharmaceuticals are now among the top 50 of China's exports (especially to regions in Africa where Chinese health teams have worked) also makes this element of traditional medicine a valuable asset in the modernizing Chinese economy and thus one likely to receive continued government support for years to come.

¹Syncretic constructs exist in the non-medical arenas of Chinese society, as well. Nakamura (1964) discusses the syncretic tendencies of Chinese culture in regard to religious systems, Taoism and Buddhism in particular. And in any newspaper in the United States one can read daily about Deng Xiao-ping's economic modernization plan (the "personal responsibility system") which has adulterated China's socialist economic structure by incorporating into it certain aspects of capitalism.

Professionally, the two disciplines now maintain a modest degree of respect for each other, although traditional doctors are increasingly required to bolster their legitimacy by demonstrating the validity of their practice within the paradigm of Western medicine. Nevertheless, as was revealed in my interviews, in actual daily practice the eclectic and syncretic systems of therapy which have emerged are mainly goal oriented, and not cognition based. On a practical and therapeutic level, then, China successfully combines traditional and modern medical alternatives. On the theoretical level, however, major problems of synthesis remain.

A key point to remember in all this is that medical systems are social constructs, and that China's Western-trained practitioners learn "modern" medicine in the context of the rest of their culture. China's extensive histories of xenophobia and sense of cultural superiority are not likely to be conquered overnight, and traditional medicine, as a symbol of the high level to which the country has evolved in ancient times, will continue to be a focus for nationalistic pride. Thus the large-scale policies which foster the parallel development of the three "branches" of medicine illustrate, in Croizier's terms, the continued conflict between two main themes characteristic of modern developing China--"that of the drive for national strength through modern science, and the concern that this process should not betray national identity" (Croizier 1968, p. 229).

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