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## **9. Medicine in Twentieth Century China** (pp.229-262).

### **9.1. A SURVEY OF INTELLECTUAL CURRENTS IN THE TWENTIETH CENTURY**

The establishment of the Republic of China in late 1911 and the formal abdication of the last Chinese emperor several weeks later; the "iconoclastic" movement of May 4, 1919, for a radical renewal of China along Western lines, which grew out of a protest against provisions of the Versailles treaties that ceded former German colonial possessions in China to Japan; the establishment of the Chinese Communist Party in 1921; the slow rise of communism and its struggle with the Kuomintang nationalists, which culminated in the civil war of the 1940s; the founding of the People's Republic of China in 1949; the "Great Leap Forward" of 1958 and the "Great Proletarian Cultural Revolution" of 1966, as well as more recently the seizure of power and "Smashing of the Gang of Four"; these events in the recent history of Chinese civilization represent only the most obvious politically and historically significant indications of a long-term metamorphosis, encompassing much more than the transition of a particular state from one political order to another. It is pointless to speculate on how politics and philosophy in China might have developed without the powerful military, technological, and ideological influence of Western culture beginning in the mid-nineteenth century. It should be remembered, however, that at the time of its momentous encounter with the West, China had become so impotent internally that it was completely unable—politically, economically, or intellectually—to cope with an external threat totally unlike any of the earlier "barbarian invasions." The encounter with Western civilization, unlike previous contacts with foreign peoples, expanded the Chinese world view, leading some thinkers to revise the belief prevailing for many centuries "in the uniqueness of indigenous culture and in the universality of its underlying principles."<sup>1</sup>

The impulse behind this highly painful and still ongoing process of adaptation to the new situation arose in China at a point in history when the search by individuals and groups for a new ideological orientation had already produced a multiplicity of diverse and competing approaches and beliefs. Western civilization—completely unexpected and uninvited as well—stepped as a mediator into internal debates, opening a number of possible solutions to the Chinese. Christian missionaries were the first to arrive, but they achieved no lasting success. A magic word, however, soon appeared in China and promised, in the eyes of numerous influential thinkers, a better future; this word was science. Within a few decades this initially alien concept of the dynamics of knowledge, of the methodical search for objectively reproducible truth, exerted such a fascination in China among those seeking both a renewal of Chinese culture and an adaptation to the changed realities of internal and international political circumstances, that Hu Shih, in a subsequently oft-cited remark, could declare in 1923:

Ever since the beginning of reformist tendencies in China, there is not a single person who calls himself a modern man and yet dares openly to belittle science.<sup>2</sup>

The concept of "science" thus proved to be the first influential contribution of Western civilization to Chinese intellectual development. An ideological gulf subsequently opened between proponents of a Western and adherents to a Chinese course for the future. But the persuasive force generated by conservatives, who sought guidelines and values for the solution of modern social, economic, and technological problems in China's past, was apparently so weak that yet another Western philosophical system, Marxism, found acceptance and, in its Chinese form, was able to shape recent history decisively. If the older Chinese world view continued to play a certain role, it was evident, as Bauer has shown, in various epistemological concepts with which Mao Tse-tung modified Marxism, as well as in political consequences that he derived from them, primarily the notion of a permanent revolution.<sup>3</sup>

The concepts of Chinese medicine and pharmacology faithfully followed the historical developments sketched here. The polarizations and tensions generated by the clash of Chinese tradition, modern science, and Marxism were also reflected in medical thought, particularly in discussions concerning the fate of traditional "Chinese medicine."

## **9.2. THE APPEARANCE AND SPREAD OF WESTERN MEDICINE IN CHINA**

### **9.2.1. Concepts of Modern Western Medicine**

The history of Chinese ideas about the nature of illness and the optimal treatment of physical and mental suffering is only comprehensible when perceived as an integral component of the larger context of sociopolitical objectives and developments. The reflective character of therapeutic conceptual systems also clearly reveals modern Western medicine to be the product of social and economic factors in the history of Western civilization. Despite its sometimes extremely close ties to "neutral" discoveries of modern natural science, Western medicine, especially etiology and therapy, is shaped by the prevailing values of modern European society. It is important to bear this fact in mind as we seek to understand the reactions of social groups in China to what may be the most potent healing system of all time and the difficulties that stood in the way of its general acceptance from the very beginning.

An important feature of modern Western medicine is its true freedom to seek solutions to medico-therapeutic problems without obvious ideological restraints. This freedom, which we regard as both a necessary prerequisite and the point of departure for the development of a diagnostic and therapeutic system whose effectiveness, despite numerous inadequacies, is unique, grew out of a historical compromise that ended centuries of conflict between seemingly ideologically irreconcilable opponents.

On one side stood natural scientists requiring only their own empirical observations, who since the time of Hippocrates had increasingly recognized the connections between the organism and its natural environment as a primary source of illness. They had noted the significance of diet, physical exertion, and climatic factors for the maintenance of well-being and began to systematize this knowledge as a basis for therapeutic efforts. At approximately the same time that the concept of "wind" in China found acceptance as the primary cause of all illnesses, the Hippocratic author of the work *Peri physion*

attributed all suffering to this same natural element.<sup>4</sup> The overriding theory that developed out of this was the so-called humoral pathology, that is, the doctrine of body humors, which permitted the inclusion of an empirically validated materia medica from older times as well as more recent drug discoveries.

This development of a purely natural healing—free of any metaphysics—was significantly impeded during the first half of the European Middle Ages by the rise of Christianity to a dominant political force. Christian dogmatists recognized in natural conceptions about the origin and cure of illness a threat to the success of their teachings. In the Bible itself, only three causes of illness are identified—transgressions by the victims themselves (or their ancestors), acts of God that reveal His omnipotence, without the victim having committed any offence, and demonic possession.<sup>5</sup> The sole procedure to prevent illness, according to biblical etiology, was a life free from sin, that is, a life in accordance with Christian morality; similarly, the only course of therapy was the plea for God's infinite mercy, a remedy to which even demons must yield. Belief in the natural origin of illness and the medicinal efficacy of natural substances, as well as the emphasis on a dietetically regulated life for the avoidance of illness, liberated man from the fear of any consequences of "sin," removing any obligation to preserve well-being by pursuing a life based on Christian doctrine. This antagonism explains the hostility with which influential proponents of the Christian Church viewed natural healing. Tatian (120-173), for example, perceived in the apparent efficacy of medicinal drugs nothing more than the deceitful machinations of demons to take from man his fear of God and replace it with a faith in herbs and roots.<sup>6</sup> In a similar vein, Justin (100?-165) compared drugs to thieves, who demand from their victims not ransom, but rather their belief in God.<sup>7</sup> The use of plants and other medicaments was tolerated (and even supported) by the Church only when an ideologically satisfactory procedure had been developed to raise, by means of blessings, inherently worthless substances to agents of divine healing power.<sup>8</sup> Christian notions of the efficacy of drugs thus by no means required actually taking them; it was fully sufficient to carry on one's person consecrated substances as phylacteries or amulets, to keep them in the house or stall, or bury them in the fields. Only with the gradual weakening of ecclesiastic power and the increased influence exerted by secular groups on daily life and the developing structure of knowledge was natural medicine slowly able to regain its position. At the same time, from approximately the twelfth century on, those within Christianity who regarded the conflict between natural science and religious belief as reconcilable and thus strove for a "compromise" that we have termed "conceptual diversity,"<sup>9</sup> gained in persuasive power. Natural explanations of the mutual interaction of phenomena were accorded a fundamental reality while, at the same time, the hand of God, or even the actions of demons, were recognized in all things. This prepared the foundation for the harmonious coexistence of natural investigation and Christian doctrine, for it removed the almost paralyzing effect of two irreconcilable ideological alternatives on the free cultivation of knowledge. For the first time, it was now possible for Christian, Jew, or atheist, either collectively or individually, to deal with the same scientific or, in this case, medical problem and to exchange results without the fear that their views might conflict with those of certain ideologically fixed and politically influential groups. It is true, for instance, that in 1772 several priests in England initiated a movement against Boyer's smallpox inoculation as a

"dangerous and sinful practice," and "the work of the devil,"<sup>10</sup> and that shortly after Jenner's discovery of the smallpox vaccine, a group of physicians and priests in the United States formed an Anti-Vaccination Society in 1782, claiming that God's Law prohibited such practices.<sup>11</sup> As late as the mid-nineteenth century, English and Scottish clerics rejected as sacrilegious Simpson's discovery that chloroform facilitated birth, since such assistance alleviated the consequences of the original curse on women.<sup>12</sup> But these occurrences are only isolated examples of a waning conflict that illuminate the expansion of medicine into unknown and previously unthinkable areas of knowledge and therapy. It is no coincidence that the evolution of a harmonious plurality of Christian and non-Christian beliefs fostered in the nineteenth century—first in England and France and, after 1850, in Germany as well—a historically unique period of medical progress. In the space of a century, until the 1950s, intensive and broad-based fundamental scientific research produced all the achievements that have brought Western medicine to its unchallenged preeminence in world health care. The compromise produced by conceptual diversity permitted the fruitful exchange of ideas between all those in Western societies seeking solutions to acute health problems and those interested in expanding the boundaries of scientific knowledge. The medical system that evolved out of these conditions incorporated certain experiences, concepts, remedies, and vocabularies from the past, but its recent innovations derived solely from the application of the four fundamental principles of scientific method. These are: (1) the empirical principle, in which observation precedes hypothesis, hypothesis precedes experiment, and experiment, in turn, is followed by renewed observation; (2) the quantitative principle, based on a belief in the measurability of real processes and, consequently, on the need for precise measurements; (3) the mechanical principle, expressed in the search for regularity among causal relationships and the formal abstraction of these relationships; (4) the principle of progress, which rests on an understanding of the incompleteness of present knowledge and the accompanying belief in the need for research.<sup>13</sup> Yet despite such seemingly objective methods, the newly developed etiological concepts and therapeutic concerns incorporated values and structures that appear to mirror the industrial society of the nineteenth and early twentieth centuries. The free economic system, with an emphasis by all significant groups on the individual and on individual achievement, and the concept of free competition, in which the industrious individual thrives while the less capable must assume a socially inferior position, not only rendered Darwin's ideas of the "survival of the fittest" plausible but also made germ theory, which regarded the physical condition of the individual and hygienic efforts as decisive for illness and well-being, the most popular explanation of individual suffering. Just as it was necessary in daily life to defend oneself constantly against the efforts of competitors in order to ensure economic survival, the individual faced a constant struggle with the ever-present germs in order to preserve physical well-being. The decline of holistic thought, evident in so many areas of modern civilization, led medical thinkers step by step from the theory of humors, with its notion of the unity of somatic and emotional processes (which was accepted in some circles until the beginning of the nineteenth century), to the primarily isolated and individual observation of organs and processes in the body.

Before I turn to the arrival and spread of this system of healing in China, it should be noted that what I term here "Western" medicine has undoubtedly been pre-eminent in the West for a century, but

nonetheless has been unable to dislodge all competing systems. Just as can be documented for many centuries in China, there existed (and still exists) in modern industrial nations of Europe and the United States a diverse plurality of therapeutic approaches. Orthodox Jews and Christian fundamentalists still follow faithfully the precepts of their holy scriptures; for the Catholic church, the demonic origin of suffering—now as then—remains an unshakable element of its faith; tens of thousands of healers practice folk medicine outside of any official control, utilizing in part concepts of magic. In addition, new systems have evolved, which appear to correspond to the personal and social objectives of more or less large segments of the population, such as Christian Science, or in Central Europe, the healing art of anthroposophy. Yet none of these alternative systems appears sufficiently adapted to the modern industrial age, in terms of values and structures, to provide any serious competition to biochemical/ biophysical medicine and the corresponding chemical, physical, and surgical treatment of illnesses. It therefore becomes understandable why it was biochemical/ biophysical medicine that became identified as "Western" medicine and began its impressive march throughout the entire world. This phenomenon is undoubtedly in part due to the system's unparalleled ability to influence the processes of the organism in a desired and predictable manner. In addition, however, the rise of "Western" medicine to world medicine is an indication that the universal efforts of virtually all states to industrialize and match living standards in the West, including mortality and morbidity statistics, require a universal healing system as well. When to the present day in China, groups have repeatedly rejected Western medicine, or at the very least, sought to relativize its significance, this reaction must also be understood as resistance to Western economic models and their accompanying social structures.

### **9.2.2. The Medical Missionaries: Objectives and Methods**

It is not completely without irony that it was Christian missionaries who brought Western medicine to China, utilizing it to demonstrate the superiority of their beliefs and the uniqueness of their God. Following unsuccessful efforts by Jesuits in the seventeenth century to disseminate European anatomical and physiological concepts, it remained for Protestant physicians and missionaries in the nineteenth century to introduce Western healing to all provinces of the Chinese Empire. At first, Western medicine had precious little to offer. Robert Morrison, the first Protestant missionary in China, and J. Livingston, a physician of the East India Company, opened an apothecary shop together in Macao in 1820, in which they treated patients for one or two hours daily. Morrison had attended medical lectures in addition to his theological studies in London and had received brief clinical training in Saint Bartholomew's Hospital so that he could treat himself and colleagues in case of illness. Average life expectancy among missionaries in East Asia was still approximately five years in 1835,<sup>14</sup> a situation that underscored the necessity of equipping some of them with the rudiments of healing skills. When Morrison and Livingston opened their practice, the primary objective, according to their own words, had been to establish friendlier relations between the Chinese and foreigners. Since therapeutic knowledge available to Western physicians at the time was still not yet sufficient to occasion an attitude of superiority, Morrison and Livingston immediately sought the assistance of a respected Chinese practitioner, as well as a native apothecary, whose entire

stock of drugs they purchased. In addition, the two compiled a library containing some 800 works of Chinese medicine, demonstrating their special interest in learning native healing techniques.<sup>15</sup>

Only a few years later the situation had changed markedly. The dynamics of the expansion of Western medical knowledge characterizing the entire century from the 1840s through to the 1940s showed an immediate influence on the attitude of Western medical men toward Chinese health care theories and practices. Between 1851 and 1858, Benjamin Hobson, an English physician, together with his Chinese collaborator Kuan Mao-ts'ai, published in Shanghai in Chinese language a series of four titles on anatomy (1851), internal medicine (two volumes, including materia medica) (1858), gynecology/pediatrics (1858), as well as on Western medicine in general (1857). A fifth book (1855) was devoted to the sciences; its subjects included physics, optics, astronomy, and zoology. The demand for such materials, all of which were skillfully illustrated, is demonstrated by Chinese reprints. Dr. Hobson's books were introduced to Japan as well; a first facsimile edition appeared there as early as 1858.

A translation of two paragraphs from the first chapter of Hobson's "Summary of Western Medicine" (Hsi-i lüeh-lun) of 1857 should be of interest here. Hobson's assessment of the standards of health care in his host country may be seen as an early indication of an antagonism which has marked the relationship between Western and Chinese medicine ever since:

#### On Chinese and Western Medicine:

The sciences of today, as for instance the writings on astronomy, mathematics, and geography, are more sophisticated than in former times; why should medicine be an exception? Two centuries ago the principles of vascular blood circulation were not yet fully understood by Western medicine. Nowadays one understands this clearly. And there are further [areas], including cerebral nerves and pancreas duct, about which men of former times had nothing to say. When I asked my Chinese friends [I was told that] Chinese medicine is worse today than in ancient times. Two reasons account for this. In the West, medical scholars must pass a series of examinations. Those who take a degree will have a title and may then go out to practice. The value [of such a degree] is similar to the Chinese titles of chü-jen or chin-shih; and its regulations resemble the example of Chinese literary scholars who earn it through an examination. This is why those who practice [medicine in the West or literary scholarship in China] ever seek refinement in what they do. Medical scholars in China are men who train themselves. They do not pass any official examination and they do not add any tokens of distinction [to their names]. This is the first reason of their being unsophisticated. The human body, the organs and the entire organism are like a clockwork. If one does not open it and take it apart, there is no way of knowing how it functions and what are the reasons for its failure. This is why Western countries permit the dissection of corpses. If in any home for the aged, for the insane, or for the deaf and mute there is someone who dies without any [person] to whom he could be returned, the Bureau of Medicine is authorized to dissect [the corpse] for the purpose of teaching students. Once an examination has been completed, someone is ordered to dress and bury [the corpse] in accordance with the regulations. As a result, all Western physicians comprehend the mysteries of the organs and of the blood vessels. Chinese who study medicine do not even have one single such [experience]. Old physicians who have [practiced for] decades still do not know the shape of the organs. If they are confronted with a strange and incurable symptom, they will never know where the origin of the illness was. This is the second reason of their being unsophisticated. I wish China would establish a Bureau of Medicine authorizing medical scholars to dissect and examine criminals who were sentenced to death. As a result, medicine in China would inevitably become more sophisticated than [the medicine] of the men in the past.<sup>16</sup>

#### On Drugs:

I have heard in China Shen-nung's materia medica included 360 drugs. Through the ages these were amended until, at the time of the Ming, Li Shih-chen wrote the Pen-ts'ao kang mu, listing almost two thousand samples. This represents, indeed, a highly complete materia medica. But when I take a close look at it, it includes some items of great use, such as ginseng and rhubarb, and some of no use at all, like dragon or tiger bones. The commentaries and explanations of all authors, in

general, take the association of the colors and tastes with the Five Phases to differentiate their correspondences with the organs. How could they know that drugs must first enter the stomach where anything colored is transformed into something without color, and where anything with taste is transformed into something without taste. There is no reason [for drugs] to enter different organs each according to their color and taste. There are those who say that a consumption of pork-loin strengthens the inner kidney, that a consumption of brain strengthens the head, and that a consumption of legs strengthens the feet. These are definitely prejudices. Food must first of all enter the stomach where it is digested. From the stomach it proceeds toward the small intestine where it meets with bile and pancreas secretions. Its essential liquids are squeezed out and absorbed by small ducts which move them to the hui-kuan [?]. They reach the heart and become blood. If the items eaten have any beneficial contents, their effects are distributed throughout the entire body; there is no reason why they should benefit only one particular place. As to statements to the effect that tortoise urine nourishes the kidneys, that the placenta nourishes the water, that metals and minerals reduce deficiencies and that hares' droppings warm the blood, I do still less know what might be a concrete basis of such claims.<sup>17</sup>

As a consequence of their increasing self-confidence and of their general inability to gain access to more fundamental concepts and theories underlying Chinese health care, Western physicians saw little attraction in a cooperation with their Chinese colleagues. Furthermore, those who, in the coming decades, practiced Western medicine in China as medical missionaries, either honestly considered or pragmatically utilized Western medical knowledge as a direct manifestation of a superior civilization based on Christian faith. It could not be in their missionary interest to support any doubts about that superiority by seriously investigating traditional Chinese medicine as a possibly preferable alternative. The actual age of the so-called medical missionaries began in 1835 when Peter Parker, the first Protestant missionary with complete medical training, opened a clinic in Canton and, in a space of a few years, treated thousands of patients solely utilizing techniques of Western medicine. At the time, the development of chemotherapy still lay decades in the future. Although European pharmacology was already familiar with some reliable, efficacious natural substances, such as digitalis and, since the isolation of morphine in 1804, various pure alkaloids, it is doubtful whether this represented any fundamental advance over Chinese healing. At the beginning of his activity, Parker was also unfamiliar with antisepsis and anesthesia, so that it was primarily minor surgical procedures, such as the removal of external tumors and the treatment of superficial ailments, as well as spectacular cataract operations, that quickly made him famous and brought an incessant stream of patients from near and far.

As welcome as such successes were for Parker as a practitioner, they hampered his effectiveness as a missionary, an objective he regarded as primary.<sup>18</sup> The directives of the American Board of Commissioners for Foreign Missions, Parker's sponsoring organization in the United States, expressly permitted medical activity only to the extent required for the dissemination of religion.<sup>19</sup> The medical missionary was not to concentrate on the Chinese body, but rather on the Chinese mind;<sup>20</sup> it was not the number of patients cured that mattered, but the number of Chinese converted.<sup>21</sup> When it eventually became known in America that Parker had devoted too little time to his real task, the missionary society withdrew its financial support.<sup>22</sup> Nevertheless, observers saw in Parker's work a clear indication of the possibilities inherent in a combination of medical and missionary efforts, if both elements were kept in the proper proportions. After a visit to Parker in 1847, a representative of the Missionary Society of the Church of England reported enthusiastically:

at the present time the Missionary Hospital is the most hopeful agency for effecting good on an extensive scale by disposing the minds of rulers and people most favorably towards foreign teachers.<sup>23</sup>

This conclusion did not go unheard. In 1850, 10 missionary hospitals had already opened; by 1889 the number had risen to 61,<sup>24</sup> and shortly after the turn of the century, medical missionaries were active in 362 hospitals with fixed treatment facilities and in an additional 244 devoted solely to ambulatory care.<sup>25</sup>

So as not to neglect their spiritual obligations and the desire for conversions because of the heavy medical burdens, some missionaries devised detailed procedures for the integration of both objectives. The following plan was deemed highly promising and had already proved its practical worth in at least one hospital when the author published and recommended it to his colleagues:

As the out-patients begin to gather, the evangelist and his helpers, instead of keeping up a continuous preaching performance as is so often the case, mingle with the patients, and get into general conversation with them one by one. They find out where they have each come from, and what it is that has brought them to the hospital, at the same time explaining to them, in a simple way, the procedure that is to follow— how long it will be before the doctor comes; in what order they will be seen; where they will get their medicines; what they will have to do if they need to be admitted to the wards, etc. In these and similar ways they gain the confidence of the patients, and make them feel that they have their interests at heart.

About twenty minutes before the clinic is to open a bell is rung, and an announcement is then made that a short service will be held, at which all are asked to sit quietly, special stewards being appointed to show into their seats any fresh patients who may arrive during this time. The service opens with a brief introduction, in which the evangelist, or better still the doctor himself, explains simply why such a gathering is held. He tells them of the great Gift which the hospital tries to represent, and points them in simple language to the Father who cares for them all.

Having made this introduction, and shown them how that Father may be approached by all who care to do so through the use of prayer, he asks them all to stand reverently in their places while he offers up an intercession on their behalf. Prayer concluded, an earnest address is given, usually on some incident in the life and teaching of Jesus Christ, and a strong appeal is made to all to study for themselves the truths of the gospel.

As the hour for the opening of medical work strikes, a second bell is rung, and at this signal the evangelist and his helpers leave the platform and mingle once more with the people. The early-comers, whose registration number will entitle them to be seen first, are directed to the proper door, while the evangelist sits with those who have some time to wait, explaining in more detail what has been said during the service, offering portions of the Scriptures or other books for sale, and attempting to draw them into conversation. In this way he soon learns to recognize those who are coming regularly for treatment, and in some cases is able to obtain an invitation to visit them in their own homes, there to follow up the impression that has been formed.<sup>26</sup>

It may appear that the difficulties of combining missionary objectives and medical activity were solved here in a harmonious fashion, but a fundamental conflict between theologians and medical practitioners nonetheless marked the efforts of medical missionaries in China during the entire nineteenth century and well into the second decade of the twentieth. The missionary societies and Christian congregations in Europe and the United States who provided the financial support for the establishment of hospitals were not particularly interested in providing exemplary models of Western healing to China. The attitude of these groups was expressed by the medical missionary J. L. Maxwell in 1905 in the following words to his colleagues:

It does not matter very much in what kind of building your medical and surgical work is performed, provided it gives you an opportunity of preaching the gospel to your patients; and,

further, that seeing that the spiritual results are the chief thing, there is no special call to lay yourself out for and to be ready to deal with difficult cases. Such cases will take up a lot of time, and will give the medical missionary a good deal of anxiety and trouble; therefore, it would be well to cultivate only those cases that can be easily and quickly managed.<sup>27</sup>

But the majority of medical missionaries active in China, as well as the medical societies in Europe and the United States, to the extent they were able to observe the activities of their colleagues in East Asia, were of a different mind. They saw in the practice of the medical missionaries first and foremost a chance to demonstrate the benefits and effectiveness of modern medicine, whose almost daily advances in these decades must have inspired every physician. A widespread enthusiasm about the future role of healing in politics and society, coupled with the related possibility, for the first time in history, of the medical profession to achieve social prominence on the basis of actual achievement and not solely because of purported motivations, caused representatives of the medical profession to view with suspicion any development that resembled a renewed subordination of medicine to theology. Thus as early as 1855, the editor of the British medical journal *Lancet* entitled an editorial in which he criticized the linking of missionary and medical activities "Medicine Independent of Theology."<sup>28</sup> But China was located far away, and European and American professional organizations were much too occupied with overcoming the shadows of the past in their own lands, solidifying their new status, reforming the system of medical training, and controlling structurally the rapid advancement in specialized fields, for Chinese problems to play a significant role. Until about 1920, financial support by missionary societies determined the image of Western medicine in China, an image that only rarely corresponded to medical standards in Europe and the United States. The results of a 1920 study by the China Medical Missionary Association, which encompassed some 80 percent of all missionary hospitals in rural and urban areas, revealed some startling deficiencies:

92% of the hospitals have no pure water supply and only 6% have running water in all suitable rooms.

73 % of the hospitals have no means of sterilizing bedding or mattresses.

50% of the hospitals seldom or never bathe their patients.

43% of the hospitals have no laundries, or only inadequate facilities for dealing with hospital linen.

34% of the hospitals have no pressure sterilizer for their dressings.

31% of the hospitals have no laboratory of any kind.

82% of the hospitals have no bacteriological incubator.

87% of the hospitals have no x-ray machine.<sup>29</sup>

The fact that the China Medical Missionary Association was forced to call public attention to this unfortunate situation, in order to bring pressure on European and American missionary societies to reconsider their policies, was owing primarily to two developments. First,

mission hospitals are now no longer the only hospitals known to the educated classes in China. Hundreds of students and merchants who have travelled in Europe, in America, or in Japan, have had personal experience of modern hospital treatment in those countries, and are increasingly conscious of how far away many mission hospitals fall short in scientific equipment and modern nursing methods.<sup>30</sup>

Second, hospitals that met the highest contemporary standards were now also being built in China by both national and foreign secular agencies, in particular the Rockefeller Foundation, making the

contrast to the majority of mission hospitals obvious to all. Some mission hospitals were therefore closed in 1920, and when Yale University, at about the same time, decided to establish a modern medical school to "train [Chinese students] in science, humanities, and medicine, and bring them closer to God," because it was still generally felt that "medical work . . . is in general the surest and strongest way of introducing missionary operations in any part of China," Dr. Hume, in charge of planning for the undertaking, warned the trustees in New Haven: ". . . it would be a great mistake for medical work to be done on any but the most scientific lines; for us that means the standards of Johns Hopkins!"<sup>31</sup>

At this point, the history of Western medicine in China finally entered a new phase. The anachronistic attempt to combine a primitive variety of modern healing with Christian dogma and thereby render it useful for the missions was replaced by the progressive alliance of the newest medical achievements with modern science, which for an untold number of Chinese signalled the philosophy of the future.

### 9.2.3. Science and Scientific Medicine in Twentieth-Century China

Decades of humiliation by Western powers and, ultimately, by Japan— which despite the numerical inferiority of its forces, easily emerged victorious from the war of 1895—as well as the increasingly obvious fact that China's own intellectual and material resources were inadequate to resist the threat from without and ensure the national existence, led a steadily growing number of Chinese politicians and intellectuals, beginning in the final third of the nineteenth century, to focus their attention beyond the borders of their own civilization. More and more, the view prevailed that it was not enough to imitate Western techniques of arms production, but rather that a serious confrontation with the intellectual, social, and political principles underlying this technology was unavoidable.<sup>32</sup> Christianity had been able to secure only a small number of Chinese followers; it was, however, another "religion" of the West—that is, the promise of scientism—to which the vast majority of those skeptical about the intellectual traditions of China would turn. The force of these tidings of modern civilization could not remain hidden to anyone who turned his eye to Europe. The fervor of Western scholars to search for ultimate truths with the aid of scientific methods had, by the mid-nineteenth century, crossed beyond the bounds of natural science, culminating in the conviction that it must be possible to uncover these same truths in every other field of endeavor, including, of course, the harmonious coexistence of men. Virchow, possibly the most prominent advocate of scientism in Germany, ascribed to the scientific method in law, economics, health-care, education, morality, and conscience, the role that "in earlier times had fallen to the transcendental strivings of the various churches."<sup>33</sup> At last, happiness and freedom no longer appeared to be concepts of a distant utopia. The power of this gospel reached China undiminished and remained influential during the first two or three decades of the twentieth century, at a time when a more sober assessment of the potential and limits of science for human existence had long since regained the upper hand in Europe. But how can one explain the unparalleled attraction and persuasive force that the concept of modern science, which was so foreign to the Chinese, exerted on reformers of all possible political beliefs at the beginning of this century, such that for a period of time the term science was synonymous with "modern civilization"?<sup>34</sup> Certainly the desires of many to adopt Western values and even the entire

Western culture, in order to restore to China the international greatness that had marked its foreign relations during past periods of glory, was just as decisive as the model of Japan, which in a short time had been able to assimilate significant elements of Western civilization. Yet the speed with which scientific salvation became the philosophy of so many and gained influential adherents among those in public life can be understood only in light of the centuries-long uncertainty among Chinese thinkers regarding the limitless diversity of interpretations of Confucian doctrine and fragmentation of the Chinese world view in general. At a time of highly threatening national humiliation, searchers encountered the fascinating illusion of a new doctrine, whose comprehensive validity encompassed all natural and social dimensions of existence and whose apparent universality fulfilled the same requirements as the old Chinese doctrine of the correspondence of all phenomena, but in an incomparably more promising fashion. The motto on the frontispiece of the first issue of the journal *Young China*, which appeared in 1919, was programmatic of the hopes of both reformers and revolutionaries: "In service to society, under the guidance of the scientific spirit, for the realization of our ideal of the creation of a New China."<sup>35</sup>

At the same time, however, the outbreak of World War I raised the first doubts about the suitability of "science" as a social theory. Critics of a total Westernization pointed to the catastrophe of the war as evidence of the bankruptcy of Western culture, calling for a return to the intellectual values of China. Subjectivity instead of cold objectivity, a synthetic world view in place of the analytic dissection of the universe, intuition instead of logical methods, as well as freedom of the will and belief in the uniqueness of each individual instead of in the uniformity of all of nature and its processes—these were the values that conservative circles called for the Chinese youth to restore.<sup>36</sup> Opponents of this philosophy of life and proponents of a fundamental break with the past found it not difficult, on the basis of the past 2,000 years, to demonstrate the failure of these values to ensure China an honorable existence. The conservative argument that China possessed a humanistic tradition while Western civilization was purely materialistic caused Ting Wen-chiang, the best-known spokesman of adherents of scientism in the 1920s, to recall the facts from his perspective for his contemporaries:

From Confucius to Mencius to the thinkers of the Li schools of Sung and Ming times, the accent was on the cultivation of inner life with the result being a kind of "spiritual civilization." Let us now see the result of this kind of spiritual civilization in history.

The Sung had more than just one of these Li scholars who advocated the art of inner control; the most obvious was the school of Lu Hsiang-shan. The scholars of the time, fortunately, still emphasized learning and had not yet become entirely addicted to empty talk. During the Southern Sung, though, it was alarming how the scholar-literati lacked ability and common sense. The result was that we were for a hundred years controlled by the barbarian Mongols, and the southern people were butchered by the millions, and the Han culture all but died.... Toward the end of the Ming, the schools of Lu [Hsiang-shan] and Wang [Yang-ming] were popular everywhere. They were even more backward than the people of the Southern Sung. In their eyes, to study was a frivolous affair and a wasting away of the ambition, to attend to affairs was injurious to the dilettante ideal.... The scholar-literati did not know the present or the past . . . like insane people they became completely ineffective in time of need. The two bandits of Shensi became the vanguards for the Manchus. The slaughtering in Szechuan by Chang Hsien-chung alone amounted to more than the total deaths in the first World War, not to speak of the atrocities of the Manchus in a few of the southern provinces. Let us ask ourselves fairly what price this spiritual civilization!<sup>37</sup>

But the price appeared to be too high, and by the end of the 1920s, the few remaining voices that continued to call for a philosophy based on humanistic civilization once again lost the attention they

had enjoyed for a brief period. The desire for a fundamental revolution and for an alternative completely removed from the values of the past only increased, shaping the intellectual situation until the 1940s. Increasingly, the debate focused on the concept of dialectical materialism, whose attraction was by no means restricted to members of the Chinese Communist party, which had been founded in Shanghai in 1921.<sup>38</sup> Not only avowed communists, but central theoreticians of the nationalist party of the Kuomintang, as well as other groups of the nonaligned intelligentsia, had finally found the doctrine that provided a kind of final building block for erecting a complete antithesis to the past. It constituted a comprehensive conceptual structure, which in all of its individual aspects stood in radical contrast to tradition, but which perhaps found such rapid and persuasive acceptance in Chinese thought because it paralleled so faithfully the familiar superstructure of the Confucian era. Modern science assumed the role of the doctrine of systematic correspondence, whose magic-derived concepts of yinyang and the Five Phases were now spurned as fully inadequate for the solution of new technological problems. Marxism, which appeared in China claiming to be a scientific social theory, replaced Confucianism, whose socio-theoretical concepts and view of history had been closely associated with the old "natural science" of systematic correspondence. Imperial rule, which had been legitimized in the notion of the "Son of Heaven" and the desirable harmony of man with universal nature by both Confucianism and systematic correspondence, was now inevitably replaced by democracy, whose ideals of man's control over his own destiny and his environment appeared to offer the hope of turning the concepts of Marxism and modern science into political reality. Science, Marxism, and democracy—these were the key elements of the formula to which one wished to entrust the shape of the future. Mao Tse-tung expressed this in 1940:

New-democratic culture is scientific. Opposed as it is to all feudal and superstitious ideas, it stands for seeking truth from facts, for objective truth and for the unity of theory and practice. On this point, the possibility exists of a united front against imperialism, feudalism and superstition between the scientific thought of the Chinese proletariat and those Chinese bourgeois materialists and natural scientists who are progressive, but in no case is there a possibility of a united front with any reactionary idealism.<sup>39</sup>

The primacy of the sciences in the superstructure of the "New Democracy" initially meant an unrestricted esteem for the scientific medicine of the West as well. The early reformers K'ang Yu-wei and Liang Ch'i-ch'ao were already aware of the significance of a modernized medicine for the renewal of society that they sought. Their writings laid the foundation before the turn of the century for a radical reassessment of professional medical activity, castigating the traditional disinterest of the Chinese state in institutionalized healing. Viewed from our own perspective, Western medicine at the turn of the century was still far removed from the diagnostic and therapeutic achievements of today; it appears that reform-minded Chinese found two aspects of scientific healing in particular to be superior to their own medical traditions. The first of these was health-care policy and public hygiene. Liang Ch'i-ch'ao, haunted by the vision of a possible annihilation of the Chinese race in a struggle for survival among nations, regarded governmental support for medical sciences and the establishment of public health programs as a basic prerequisite for the strength of Western nations. Liang therefore called for an improvement in both the mental and physical circumstances in China.

K'ang Yu-wei, repeating Virchow's boldest demands, even went so far as to entrust medical officials in the new society with the supervision of all spheres of human life.<sup>40</sup>

The second aspect that made Western medicine so attractive during those decades at the turn of the century was actually grounded more in expectations than in actual medical reality. As with the natural sciences themselves, medicine was also buoyed by a certain conviction in the fantastic potential that a consistent application of scientific methods held for the future. Traditional medicine, in contrast, whose progress was evident only in centuries of debate among an ever-growing number of authors concerning the correct interpretation of the ancient classics, offered no such optimistic perspective. This contrast became readily apparent when, at the end of the epoch of medical missionaries, the actual capabilities of Western medicine were impressively demonstrated in China itself in highly modern training facilities and hospitals. Ch'en Tu-hsiu, one of the most prolific advocates of scientific-modernization in China (and later the first secretary-general of the Communist party), unmistakably summarized his faith in the new and contempt for the old in 1919 in his famous "Appeal to the Youth":

Our men of learning do not understand science; thus they make use of yin-yang signs and beliefs in the five elements to confuse the world.... Our doctors do not understand science: they not only know nothing of human anatomy, but also know nothing of the analysis of medicines; as for bacterial poisoning and infections, they have not even heard of them.... The height of their wondrous illusions is the theory of ch'i which really applies to the professional acrobats and Taoist priests. We will never comprehend this ch'i even if we were to search everywhere in the universe. All of these fanciful notions and irrational beliefs can be corrected at their roots by science, because to explain truth by science we must prove everything with fact.<sup>41</sup>

The subsequent fate of Western medicine in China has experienced two phases. The unconditional support of scientific-medical practice and research by reformers and radicals continued until the mid-1950s. By 1920, 900 Chinese doctors with modern training were already practicing, including a number of outstanding specialists, in addition to some 600 foreign colleagues.<sup>42</sup> By 1927, the number of Chinese physicians had grown to nearly 3,000; two years later the total reached 9,000 Chinese practitioners of Western medicine.<sup>43</sup> Much of the ideological support for these practitioners came from the early Marxists, such as Lu Hsün, Pa Chin, and Lao She, who expressed in particularly drastic literary form the senselessness and disastrous dangers they associated with traditional medicine.<sup>44</sup> Not until 1954 was there an indication of any revision in the political assessment of Western medicine, when in conjunction with the campaign against bourgeois attitudes, extensive skepticism was directed against the unaltered appropriation of Western medical practice for the formation of a socialist society. As early as 1940, Yang Ch'ao and T'an Chuang had pointed to the "capitalist, imperialist, and colonialist" context of Western medicine and, perceiving traditional Chinese medicine as inseparably linked with the feudalism of the past, called for the creation of a "new democratic medicine."<sup>45</sup> These impulses were picked up again in 1954/55. The fact that Western medicine had aided the missionaries in promoting their own goals of conversion was as clear to the Chinese as the concrete economic motivation underlying the medical activities of the Rockefeller Foundation in China.<sup>46</sup>

As the first difficulties in controlling the political views of Western-educated doctors became evident,<sup>47</sup> suspicion arose regarding the circumstances of initial Chinese contact with modern

medicine and about the ideological reliability of its present representatives, a significant percentage of whom had studied at European and American universities. Criticism of Western-trained practitioners was, at least initially, limited to such trivial concerns as the purported insufficient preparation for dealing with health problems of the masses. Not until the beginning of the 1970s, perhaps encouraged by the prevailing political influence of the radical leftist Shanghai faction, did analyses appear in which, as far as can be determined from available sources, the central core of Western medicine, namely its therapeutic concepts, was subjected to an epistemological critique from a Marxist-Maoist perspective. In his well-known essay of 1937, "On Contradiction," Mao Tse-tung, drawing upon corresponding statements of Marx and Engels, had defined the epistemology of dialectical materialism primarily through its contrast to "bourgeois metaphysics", arguing:

The metaphysical . . . world outlook sees things as isolated, static and one-sided. It regards all things in the universe, their forms and their species, as eternally isolated from one another and immutable. Such change as there is can only be an increase or decrease in quantity or a change of place.... Metaphysicians ascribe the causes of social development to factors external to society, such as geography and climate. They search in an over-simplified way outside a thing for the causes of its development, and they deny the theory of materialist dialectics which holds that development arises from the contradictions inside a thing.<sup>48</sup>

In various contributions to the journal *Dialectic of Nature* (Tzu-jan pien-cheng-fa), which—significantly—appeared in Shanghai from 1973 to 1976, these socio-theoretical concepts were transferred to the medical sphere. Thus, many aspects of Western medicine had to be condemned as bourgeois and metaphysical, including modern diagnostics, which treats individual organs and organic functions as well as associated illnesses in an isolated manner; modern etiology, which virtually without exception seeks the sources of illness in external pathogenic agents; and the medicamentous, physical, and surgical therapy of Western medicine, which is based less on the principle of the combined efforts of a therapist and an active patient to stimulate the inner defensive forces of the body in the struggle against disease than of using external measures to produce changes in a passive patient, that is, to discover and remove or destroy pathogenic agents that have penetrated from outside. Thus, a quarter-century after the founding of the People's Republic of China, at least a small number of Maoist dogmatists had recognized in contradictions between Western concepts of the origin, nature, and treatment of organic crises, on the one hand, and the views of Mao Tse-tung on the rise, nature, and solution of social crises, on the other hand, the fallaciousness of the unconditional equation of Marxism with science and science with modern medicine that had taken place during the 1920s and 1930s. Both equations are inaccurate. The "scientific" principle of Marxism, dialectical materialism, is not the basis of natural sciences, and although modern medicine utilizes numerous scientific discoveries, its fundamental concepts of etiology, prophylaxis, and therapy are by no means as neutral as may at first appear. It still remains to be seen whether the critical voices in China that demonstrated this have— with the fall of the Shanghai "Gang of Four"—been permanently silenced.

### 9.3. TRADITIONAL MEDICINE IN THE TWENTIETH CENTURY:

#### CHANGES IN CONCEPTUAL LEGITIMATION

Following the collapse of imperial China, which marked the official end of the Confucian era, traditional Chinese medicine was faced with the problem of establishing a new ideological legitimacy. The strength of a healing system in society rests only partly on objective successes; equally important for its continuing acceptance and support is the anchoring of its medical notions in the world view and, especially, in the socio-theoretical concepts of a population or individual political groups. Such an assertion is supported by the fact that there has not yet been a system of healing that, detached from the values and structures of a specific culture or subculture, would have been objectively able to deal successfully with the entire spectrum of "health" problems as defined by a specific population. Even the success of Western medicine is only partial, and although in this respect it appears superior to all other existing healing systems, there nevertheless remains a considerable void, that is, problem areas in which Western medicine is helpless. Into such voids, whose extent, in turn, is dependent on ideological definitions of illness, step competing systems—in part with the justified claim of better results—thus contributing to the overall plurality of medical approaches in the world. The practical successes of historically documented and existing healing systems may justify claims for support, but not, however, for exclusivity. History teaches us that exclusive attitudes in the support and legal recognition of medical systems by political groups was, and remains in many places today, the rule. The fact that in the United States, for instance, hundreds of thousands of patients continue to seek—and find, according to their own testimony—sympathy and treatment in alternative systems is not reflected in governmental support for medicine. The enormous sums that flow year after year into medical research and practice benefit only orthodox medical doctrine.

A similarly exclusive policy toward Western medicine is evident in China as early as 1914, when the minister of education—responsible for such matters—made the following declaration to a group of traditional practitioners seeking official recognition for their medicine: "I have decided to abolish Chinese medicine and to use no more Chinese remedies as well."<sup>49</sup> This shocking revelation must have convinced the traditionalists of the true dimensions of their present situation, and it did not remain without repercussions. First, it was now necessary to close ranks and face the opponent united; second, it was imperative, following the loss of ties to Confucianism, so frequently invoked in past centuries,<sup>50</sup> to forge a new conceptual alliance. For this, several courses lay open. Initially, the external threat reduced the internal spectrum of competing Chinese interpretations of the classics. When the first voices were raised in defense of the indigenous medical tradition, the increasingly obvious lack of direction exhibited by Chinese medical practitioners since the Sung-Chin-Yüan period, apparent in the steadily growing number of competing and frequently antagonistic doctrines, seemed suddenly forgotten. The great diversity of individual efforts to reconcile insights from personal experience with the ancient theories of yinyang and the Five Phases, as well as with other older views about the structure of the body, disappeared behind the illusion of a so-called Chinese medicine (chung-i), supposedly well-defined and with theory easily converted into practice. This term thus lumped together the basic principles and therapeutic techniques of the medicine of systematic correspondence, practical drug therapy as recorded in prescription literature

and in the purely pharmaceutical pen-ts'ao works, as well as certain other pragmatic techniques, such as the traditional treatment of injuries. This situation, in turn, has given rise to the historically misleading impression that these diverse elements, like the concepts and practices of Western medicine, constituted a unified, coherent system. Demonic medicine, whose influence continued uninterrupted at least until the 1940s<sup>51</sup> and whose concepts corresponded to the attitudes and socioeconomic conditions of broad segments of the Chinese people, particularly among the rural population, was as ignored as "Chinese medicine" as the Buddhist oracle medicine practiced by the faithful in innumerable temples.

Traditional practitioners and conservatives, who opposed the Westernizing tendencies of their culture, were in accord that Chinese medicine should be preserved from destruction, but the question of future legitimation for this healing system was marked by disagreement. Some sought to demonstrate that all Western discoveries had already been anticipated in classical Chinese theories and that the lack of any surgery since the time of Hua T'o could be explained by the fact that medicine had advanced beyond this particular phase of therapy and that such problems could be treated with medication. Other authors stressed that Chinese medicine expressed the "spirit of the nation" (kuo-ts'ui); they condemned Western medicine as "materialistic," viewing Chinese medicine as an integral component of the supposedly humanistic civilization of China that was to be preserved. More moderate conservatives attempted to differentiate the practice of Chinese medicine from the older theories by arguing that the former was empirically grounded while the latter were faulty interpretations of later times.<sup>52</sup> Representatives of such a differentiated approach consequently had no reservations about using scientific methods to analyze the practices of Chinese medicine, so as to retain that which was useful while eliminating harmful or meaningless aspects. Although highly conservative circles protested such attempts, claiming that Chinese medicine was degraded in this manner to a mere component of Western medicine, the "scientization" of Chinese medicine constituted the compromise reached after 1929 by the nationalist party of the Kuomintang and after 1950 by the Chinese Communist party as well.<sup>53</sup>

Despite the clear preference of Marxist thinkers for natural science and scientific therapy during the 1920s, 1930s, and 1940s, the fate of traditional medicine had by no means been determined when the Communists assumed power in China in 1949. Only seventeen years after the Marxist T'an Chuang had termed Chinese medicine the "collected garbage of several thousand years" in 1941,<sup>54</sup> Mao Tse-tung formulated his famous dictum of 1958: "Chinese medicine is a great treasure-house! We must make all efforts to uncover it and raise its standards!"

Western secondary literature generally suspects the reasons for this rehabilitation of those elements of medical tradition that—unlike demonic medicine and Buddhist temple medicine—were not disqualified from the very beginning as "superstition" and thus remained outside the bounds of discussion, to lie in quantitative considerations by the Chinese leadership. Indeed, until recently, modern medicine—in part because of the still relatively small number of its practitioners—was unable to offer the entire Chinese population one or another form of health care. But to resolve this dilemma, other political solutions would have been conceivable; the intensive ideological support for Chinese medicine since the 1950s cannot be explained solely by the numerical indispensability of its

practitioners. Perhaps, in substituting "treasure-house" for "collected garbage" in the internal party debate, Mao Tsetung had come to the conclusion, inconceivable for early Marxists, that certain essential elements of both theory and practice in Chinese medicine were significantly closer to Marxist notions of epistemology and social practice than was the case for Western medicine. To be sure, Mao Tse-tung was unable to provide Chinese medicine with an unqualified statement of support; the call to "uncover the treasure-house and raise its standards" clearly indicated this while simultaneously containing a program for the future, namely, a combination of the positive elements of Western and Chinese medicine with the establishment, along Marxist lines, of a "new medicine."

### **9.3.1. The Combination of Western and Chinese Medicine and the Emergence of a New Therapy**

At first, the desired synthesis of Western and Chinese medicine appears to have consisted solely of various gradual attempts to integrate traditional drugs and techniques into the theoretical framework of modern natural sciences. Such investigations from the 1950s to the present are directed primarily to an explanation of acupuncture as well as a pharmacological analysis of active ingredients in the traditional materia medica. Only since the beginning of the 1970s, as a result of the rejection of "bourgeois" and Western influences compelled by the Shanghai faction, are there publications that redefine theory and practice of Chinese medicine from a Marxist-Maoist viewpoint, introducing a "new medicine" freed of the bourgeois "metaphysical" values of Western medicine.

Such articles and books apparently first stressed the contribution of Chinese medicine to the new therapy, but already this involved an "uncovered" core, increasingly removed qualitatively from the substance of its earlier basis in systematic correspondence. Accordingly, the doctrines of yinyang and the Five Phases experienced a reassessment:

The [doctrines underlying] the theory of Chinese medicine—yinyang and the Five Phases—represent a kind of original materialism and spontaneous dialectic. They are an expression of opposition to the religious and superstitious doctrine of the existence of spirits; they incorporate the understanding that the world is composed of matter; they include the knowledge that all things are related to one another and that in all things the two forces yin and yang are present in mutual dependence and mutual conflict. By adopting such perspectives to provide information about the prevention and treatment of illnesses, Chinese medicine has—over the course of history—been of enormous benefit for the development of our native medicine. This fact must be acknowledged. Chairman Mao teaches us: "The dialectic of antiquity, however, possesses a spontaneous, primitive character; in accordance with the social and historical conditions of the time, it could not yet assume the form of a complete theory and was unable to provide a comprehensive interpretation of the world." The same is true for the doctrines of yinyang and the Five Phases. They constitute but one comprehensive explanation arising from a general mode of perception of the diverse contradictions within the human body, but not, however, a concrete and exact overview that would result from a scientific analysis of even the most minute details. Thus there exists between the doctrines of yinyang and Five Phases, on the one hand, and the dialectical materialism of present-day science, on the other hand, a distinction that is fraught with contradictions, and we must deal with these doctrines from the perspective of "dividing one into two." This is especially true for the doctrine of the Five Phases. Although it acknowledges the reciprocal relationships existing between all inner elements of the body and the entire external world, the limitations of the historical situation [in which it was conceived] have prevented it from adequately portraying the true character of these relationships. The conclusions and deductions derived from the Five Phases that result in the formation of associative categories, the mechanical conclusions produced [by this doctrine even in] complex situations, as well as the subjective guessing games [associated with this doctrine] inevitably lead [those who utilize it] to sink into idealism and metaphysics.

We must therefore strive to comprehend the original significance of the doctrines of yinyang and the Five Phases and develop it critically from the perspective of dialectical and historical materialism, in order to uncover the medical treasure-house of our homeland even better.<sup>55</sup>

Not only were the primary theories of traditional medicine re-evaluated during the rule of the extreme leftist Shanghai faction; the entire development of healing was viewed in the context of what was now propagated as a central aspect of imperial Chinese history, namely, the purported 2,000-year struggle between the (evil) Confucians and the (good) Legalists. The latter, it was now proclaimed, had continually striven for a "progressive and materialist" medicine, while the former, because of their social interests, had always endeavored to suppress such efforts. Such a facile interpretation, which virtually ignores the diversity of conceptual systems in Chinese medical history, was possible in part only through the gross manipulation of available source material, a procedure demonstrated by a document published in 1974 in the Shanghai journal *Dialectic of Nature* (Tzu-jan pien-cheng-fa). The complete text is included in the appendix of this volume as a particularly striking example of questionable historical writing.<sup>56</sup>

After such arguments had largely removed from traditional therapy its conceptual basis in systematic correspondence and in the formerly so obvious link to the prevailing world view of imperial China, a changed legitimation manifested itself in the emphasis on those precepts of Chinese medicine that corresponded to Marxist-Maoist values and were foreign to Western medicine. Several examples will illustrate this process.

One of the central features of the "New Medicine" became the activation of the patient and his internal bodily defense mechanisms. Mao Tse-tung had written:

Dialectical materialism . . . holds that external causes are the condition of change and internal causes are the basis of change, and that external causes become operative through internal causes. In a suitable temperature an egg changes into a chicken, but no temperature can change a stone into a chicken, because each has a different basis.<sup>57</sup>

On the basis of this insight, it was now necessary for practitioners to consider the internal causes of illness and healing as the "basis" of the transformation from well-being to sickness and from sickness to well-being again, and to view external pathogenic agents that penetrate the body as well as therapies applied from outside as the "essential conditions" for this metamorphosis, which produce their specific effects only by means of the "basis." The etiology familiar from classical literature, in which irregularities among the vital "correct" influences (cheng-ch'i) enable "evil" influences to penetrate from outside, could be integrated with little difficulty into the dialectical perspective:

The course of illness in the human body is in reality a two-sided struggle between the forces opposing illness, that is, the correct influences, the internal causes, on the one hand, and the elements that bring forth illness, namely, the evil influences, the external causes, on the other hand. The treatment of illnesses is nothing more than a struggle, in which drugs and similar therapeutic measures—as external agents—are employed to assist the organism itself—as internal agent—to overcome disease, resolve the contradiction, and restore well-being. Thus clinical work requires complete concentration on the inner causes, a recognition of the counter-effects of this so-called soul, the full activation of the body's own potential energy, and the precise arrangement of the dialectical relationships between correct and evil [influences].<sup>58</sup>

Virtually no other therapeutic technique fulfilled these requirements—namely, the application of a purely external stimulus for transformations that were to occur within the organism—as did acupuncture. This is particularly evident in the so-called acupuncture anesthesia which, unlike the medicinal narcosis of the West, neither rendered the patient passive through sleep nor introduced any foreign substances into the organism that produced the pain-killing effect. This view was expressed by the author of an essay that appeared, in 1974, under the title "Dialectics in Acupuncture Anesthesia":

The most important characteristic of acupuncture anesthesia is that it transforms the functional potentiality of all body regions into actual energy and activity, that it stimulates personal desire in the struggle of the victim with his illness, and that it arouses the body's own defensive elements against disease and pain.... Acupuncture anesthesia grew out of the struggle with the metaphysical doctrines of external cause and passivity. The creation of acupuncture anesthesia does not, of course, signify the end of medicamentous anesthesia, which will continue to be refined. Our efforts must be directed against the metaphysical world view and methodology, which hinder the progressive development of anesthesiology; we have no quarrel with medicinal anesthesia as such. Acupuncture anesthesia and medicinal anesthesia should complement and refine each other. But we should also bear in mind that the birth of acupuncture anesthesiology represents a tremendous victory for dialectical materialism over the doctrine of external cause and the doctrine of passivity that will exert a fundamental influence on the further development of anesthesiology.<sup>59</sup>

In addition to the call for the patient's personal responsibility for his own cure and the emphasis on internal causes for illness and healing, the "New Medicine" is to be characterized by a holistic approach as well, which some authors found lacking in Western medicine:

It should be acknowledged that the current state of knowledge concerning anatomy, physiology, and biochemistry, compared with what was known in antiquity about the human body, is much more detailed and complete. We should take full advantage of these discoveries. But the circumstances here are the same as those once described by Engels: "Although in the first half of the eighteenth century the level of scientific knowledge and material production was far superior to that prevailing during Greek antiquity, our theoretical control of these materials and the general comprehension of nature were not equal to the Greeks" (Nature-Dialectic). We must therefore also direct our attention to the influence that bourgeois metaphysics has exerted on modern medical thought. As a result of isolated research devoted to individual organs, investigations based on the physiological changes and illnesses in the entire body have all too often been ignored and, instead, a relatively large value has been placed on research into locally restricted pathogenic sources. The cellular-pathological concepts of Virchow are an example of this approach.<sup>60</sup>

To correct these deficiencies of Western medicine, practitioners of the "New Medicine" were to orient themselves on the following saying of Mao Tse-tung: "When a Marxist confronts a problem, he must not view only part of it, but consider it in its entirety."<sup>61</sup> Applied to the diagnosis and therapy of medical problems, the following considerations are involved:

The parts and the whole together form a relationship, in which they oppose one another, but yet at the same time constitute a homogeneous entity. If there are no parts, there is also no whole, if there is no whole, there are also no parts. In therapy it is not permissible to concentrate solely on the partial factor of pathological changes, losing sight of the whole in the process, such as in the case of headache to treat only the head, or in the case of foot pains to treat only the foot. Similarly, one cannot view only the whole and ignore the partial factor of pathological changes, by carrying out a general course of treatment of the entire body while neglecting, at the same time, the individual elements of the nidus. The correct approach is as follows: Proceed from a consideration of the whole; concentrate not only on the parts, but put an even greater emphasis on the entire situation, combining both aspects dialectically. In this manner, a treatment of the parts can be implemented

that will also influence the entire body; moreover, a treatment of the entire body can be carried out in such a manner that will, at the same time, affect the parts.<sup>62</sup>

Traditional Chinese conceptions of the mutual relationships and interactions in the body between the "depots" and "palaces," between "outer" and "inner," and between "depots" and "officials" were easily integrated with notions of the dialectical connections between the parts of the body and the whole. Traditional belief in, for example, the mutual bringing forth of the five depots permitted a therapy that not only focused specifically on the affected organ but also took into consideration its position within the nexus of the entire body:

When one of the depots is afflicted with a condition of deficiency and weakness, one can, in addition to replenishing and strengthening the affected storage facility directly, proceed from the perspective of the entire body, replenishing and nourishing a closely associated depot, namely the mother-depot. Such treatments are known as "For deficiencies, replenish the mother." When, for example, the treatment of a victim of tuberculosis has continued for a long period of time without success, additional therapy can be based [on the fact] that a restoration of the spleen fortifies the lungs. This is the procedure of creating metal by turning over soil; a relatively high rate of success is possible.<sup>63</sup>

An additional Marxist-Maoist value that found its way into "New Medicine" is the importance of experience, "practice," as the source of all knowledge. Mao Tse-tung had expressed this clearly in his well-known 1937 essay "On Practice":

Knowledge begins with experience—this is the materialism of the theory of knowledge.<sup>64</sup>  
Knowledge begins with practice, and theoretical knowledge is acquired through practice and must then return to practice.<sup>65</sup>

These are precisely the conditions fulfilled by traditional drug therapy, according to those of its present-day apologists who have largely rejected the doctrines of yinyang and the Five Phases. One of these proponents is Chiao Shu-te, whose book *Yung-yao hsin-te shih-chiang* (Ten Lessons on My Experiences with the Use of Drugs) first appeared in 1977 (second edition 1978). The lessons had originally appeared in the *Journal for Barefoot Physicians* (Ch'ih-chiao i-sheng tsa-chih) before the author, "in response to the requests of numerous readers," revised and collected the material in one volume.<sup>66</sup> Chiao Shu-te does not refer to the Five Phases, and yinyang terminology is used only for the traditional designation of certain organic structures in the body; "practice" and "experience" are the sole criteria for the legitimacy of the old drug therapy in modern times. This is also true for prescriptions composed of several drugs, whose collective properties cannot be explained by Western pharmacology:

The men of earlier times went through a long period of medical practice, in which they continually collected experiences in the struggle against illnesses. Gradually, they discovered that when several individual drugs are combined systematically and applied medicinally, the specific virtues of the drug masses are concentrated, the combination of these drugs producing new effective properties that release new forces, improving the rate of success; they also learned that such a systematic combination enables the specific merits of individual drugs to develop even more effectively, and that in this way certain deficiencies or even harmful properties can be corrected, and that [certain ingredients] can be added to or removed from systematically prepared prescriptions, in accordance with the specific symptoms, that is, flexible changes, thereby enormously extending the areas of application. As a result, these men gradually began to use drugs systematically in prescriptions, accumulating in a long-term process a wealth of possible procedures and valuable experiences. It

can therefore be stated that the creation of medicinal preparations for the use of drugs was a tremendous achievement and represented a great step forward.<sup>67</sup>

I know of no other source in which an author has so systematically attempted to erase traces of the past from drug therapy and replace them with a Marxist-Maoist orientation.

Of central importance for an understanding of compound prescriptions is the concept of "differential diagnostic therapy" (pien-cheng lun chih). This approach necessitates the careful and individual composition of each prescription in daily practice, in order to deal effectively with all differences from patient to patient and in the specific course of each illness. It is no coincidence that the old term pien-cheng ("diagnosis") was employed here, for phonetically, substantively, and orthographically it is closely related to the Chinese term for "dialectic" (pien-cheng fa). The attempt to modify terminology is characteristic of Chiao Shu-te's efforts. The Chinese term for the concept "drug masses" cited in the passage above—ch'ün-yao—is reminiscent of ch'ün-chung, a character combination used by the Chinese communists to designate the "folk masses." A similar intention is apparent behind the use of the term p'ei-wu, which in the past few years has replaced the previously customary combination p'ei-ho to signify the "combination" of drugs in a prescription. The character wu originated in military terminology, symbolizing a combat group of five. Today, the term is closely associated with the concepts "companion" and "comrade." In the theoretical-programmatic context of the passage cited above, Chiao Shu-te used the combination p'ei-wu; at another point in his work, in a more technical context, the term p'ei-ho is still found.

Perhaps the most significant terminological modification in Chiao Shu-te's work is to be found in a re-labelling of the four classes of drugs in prescriptions as originally defined in the Nei-ching. The 2,000-yearold classic had differentiated among chün ("ruler"), ch'en ("minister"), tso ("assistant"), and shih ("emissary") in the drug hierarchy of a prescription; Chiao Shu-te eliminated the first two of these terms, which were too obviously tied to the old society, replacing chün with chu ("leader," as in chu-hsi—"chairman") and ch'en with fu ("helper"). Chiao Shu-te illustrated the meaning of "leading drugs" with a topical reference:

Leading drugs are those [elements] in a prescription that are aimed directly at the illness or the cause of an illness, that are used in treating the primary symptoms, that resolve the main contradictions, and whose medicinal potency plays the greatest role.<sup>68</sup>

Chiao Shu-te's pharmaceutical handbook reads like a manifesto for collectivism and against individualism. The structure that the author desired for the combination of drugs mirrors that of the future socialist society sought by Mao Tse-tung for China. Chiao made no attempt to elucidate theoretically, either through systematic correspondence or modern biochemical concepts, how drugs function in the organism, an explanation that may not have been necessary in a work prepared for the readers of the Journal for Barefoot Physicians. The few available sources from the era of the Cultural Revolution (including the period of the "Gang of Four"), however, indicate an attempt, in accordance with the changed political circumstances, to provide traditional drug therapy in China with the third legitimization in its approximately 2,000-year history. Originally based on notions of magic and, then, motivated by the search of certain Taoists for the so-called herb of immortality, the development of Chinese drug therapy from the Han to the Sung continued to rest primarily on Taoist contributions,

but it also relied on the completely pragmatic search for remedies by individuals who were not necessarily close to Taoism. During the Sung-Chin-Yüan period, the use of drugs was given additional legitimation by the development of the first Chinese pharmacology, that is, the doctrine of the properties of drugs in the body as explained by systematic correspondence. This process legitimized drug therapy to a certain extent for Confucian circles as well. The opposition of traditional practitioners and conservative groups to an integration of Chinese drug therapy with Western medicine by means of modern scientific analysis, as well as the concomitant inability of modern pharmacologists to explain the collective properties of compound prescriptions have gradually led, in recent years, to a new attempt at legitimation. The emphasis on the practical experience of the population with traditional drug therapy over the course of thousands of years and the adaptation of traditional pharmaceutical values and terminology to the socio-structural circumstances of the present should ensure the traditional pharmacy in socialist society of a chance for survival, as an equal partner with Western pharmacological therapy. Although it initially appeared as though the traditional elements in "New Medicine" might assume a pre-eminent position, owing to their Marxist-Maoist reassessment, before scientific medicine, which seemed inseparably linked with its "bourgeois-metaphysical" theories, this advantage was, with the demise of the "Gang of Four" immediately neutralized. At first some publications appeared in which the authors strove for "New Medicine" with a marked emphasis on scientific therapy. An example of this tendency is a pamphlet by Tuan Chen-li, which was published by the People's Publishing House of Honan in 1978, entitled *How to Overcome Chronic Illnesses* (Tsen-yang chan-sheng man-hsing chi-ping). In his deliberations, which read like an apologetical eulogy on science, the author cites only discoveries of scientific medicine, which he has elucidated on a dialectical basis. In addition, the author's interpretation of modern knowledge includes concepts taken from traditional medicine. Even in this context, however, the theories of yinyang and the Five Phases, based on concepts of systematic correspondence, were not mentioned. A revealing passage from Tuan Chen-li's pamphlet is included in the appendix to this volume. In the meantime, however, "New Medicine" is no longer a central goal of health care planning in the People's Republic of China.

#### **9.4. THERAPEUTIC PLURALITY IN PRESENT-DAY CHINA**

Chinese medicine of today is characterized by a plurality of concepts and practical approaches; thus, it mirrors the multiplicity of ideological tendencies in Chinese society itself. There is evidence indicating that the systems of demonological therapy and of Buddhist temple medicine, still flourishing outside of the People's Republic primarily among the Chinese populations of Hong Kong and Taiwan,<sup>69</sup> survive also on the mainland itself.<sup>70</sup> But even apart from these conceptual systems, the therapeutic spectrum in the People's Republic is diverse and by no means unified in its conceptual orientation. Scientific medicine continues to set the standard, expanding its significance in research, teaching, and practice, particularly since the fall of the "Gang of Four." At the other end of the spectrum is the by-no-means-homogeneous group advocating traditional Chinese medicine. One of its many unresolved issues is the degree of "modernization" that should be attempted in order to compete successfully with Western medicine. The debate concerning this problem is highly reminiscent of its

beginnings in the twenties. Current publications reflect the old positions of extreme national conservatism which rejects and deems unnecessary all efforts toward modernization, of cautious reformism which seeks to maintain the unique nature of traditional Chinese medicine while at the same time advocating assimilation of valuable knowledge from modern science, and finally of radical reformism and internationalism which does not believe in the necessity to preserve the old and Chinese if a new idea or technique—wherever it may have originated—proves to be superior.<sup>71</sup> The efforts of the past decade for a Marxist-Maoist legitimation of certain practices (i.e., acupuncture, application of drugs, and various other techniques) and the flight by some dogmatists forward into the so-called "New Medicine" may, in the long run, have provided more harm to the interests of traditional practitioners than benefit. The elimination of the original theoretical background of systematic correspondence threatened the existence of traditional Chinese medicine as a conceptually independent alternative, thereby contributing to a further, and potentially final, stagnation of this ancient knowledge. This trend, though, has been halted more recently (1980-1981) with the adoption, by the administration, of the policy of the "Three Roads." Under this policy both Western and so-called Chinese medicine are granted the freedom to exist or develop along their respective lines. A third "road" is seen in a conjunction of Western and Chinese medicine wherever this appears feasible. For the time being it seems as if the "New Medicine" demanded by the Marxist-Maoist thinkers of the seventies remains only an ideal which cannot be expanded into a realizable program of practice and research. Two tendencies are discernible in the actual practice of the structured coexistence of Western and traditional Chinese therapy, both of which do not correspond to the requirements of "New Medicine" for a genuine dialectical synthesis of contradictory healing systems. The first of these tendencies consists of the continuation of efforts, begun at the turn of the century, to analyze the effective properties of traditional Chinese therapeutic techniques and drugs with the aid of modern scientific concepts and research. Thus, there have been frequent attempts to explain acupuncture in terms of biochemical and biophysical concepts; modern pharmacological and pharmaco-biological investigations of traditional drugs have produced significant results. In addition to this one-sidedly integrative trend of coexistence, there is a second, which can be termed cooperative, meaning that a therapeutic procedure combines Western and traditional techniques or drugs, without any common theoretical basis. Orthopedics and anesthesia are the most well-known areas where Western and traditional insights have been combined successfully in actual practice. The role of acupuncture in the control of pain during surgery, though, is seen more soberly today than in the seventies when so-called acupuncture anesthesia was actively promoted, on purely ideological grounds, in surgical interventions for which it was rather unsuited. The final text in the appendix to the present book reflects this latest tendency; the slogan "Seek truth from facts"<sup>72</sup> indicates a return to a more cautious assessment of the potential of traditional techniques in a modern medical context. The presently discernible boundaries for the future development of healing in China encompass traditional medicine, which exists on the basis of both a traditional and a modified theoretical legitimation, modern medicine, which is supported on purely scientific grounds by some groups as well as, to a much lesser extent, on a dialectical basis by others, and, finally, the indicated approach of practical coexistence. Which of these perspectives in such a heterogeneous spectrum will

eventually prevail, must ultimately depend, as in the past, on factors that lie outside of what are generally termed "purely technical criteria."

**Unschuld's Footnotes** (from Unschuld, 1985, pp. 380-382).

1. Opitz 1972, p. 9.
2. Ibid., p. 6; Croizier 1968, p. 64; Kwok 1965, p. 12.
3. Bauer 1976, pp. 395-396.
4. Sigerist 1963, p. 706.
5. Mark 9, 17-28; John 5, 14; 9, 3.
6. Harnack 1892, p. 54.
7. Ibid., p. 56.
8. Franz 1909.
9. P. Unschuld 1978a, pp. 509ff.
10. White 1897, p. 55.
11. Ibid., p. 58.
12. Ibid., p. 62-63.
13. Kwok 1965, p. 21.
14. ABC Archive Harvard, 8.5, III; Gulick 1973, p. 48.
15. Thomson 1887.
16. Hsi-i lüeh-lun, 1857, pp. 1b-2b.
17. Ibid., pp. 4a-4b.
18. Gulick 1973, p. 133; Young 1973, p. 254.
19. Gulick 1973, p. 20; Spence 1969, p. 39.
20. Gulick 1973, p. 71.
21. Balme 1921, p. 99.
22. Gulick 1973, pp. 133-137.
23. Young 1973, p. 256.
24. Balme 1921, p. 85.
25. Hume 1922, p. 90.
26. Balme 1921, pp. 72-74.
27. Ibid., p. 98; on ethical conflicts resulting from such views see P. Unschuld, 1983b.
28. Young 1973, p. 267.
29. Balme 1921, pp. 104-105.
30. Ibid., p. 102.
31. Spence 1969, p. 165; for details of the circumstances leading to the establishment of another "American transplant in China," the Peking Union Medical College, see Bullock 1980.
32. Opitz 1972, p. 56.
33. In a speech on the occasion of the thirty-fifth Convention of German Scientists in 1860; Schipperges 1977, pp. 320-321.
34. Kwok 1965, p. 135.

35. Ibid., p. 140.
36. Ibid., p. 141.
37. Ibid., p. 145.
38. Ibid., pp. 165-166.
39. Mao Tse-tung 1967, 2:381.
40. Croizier 1968, pp. 60-67.
41. Kwok 1965, p. 65.
42. Balme 1921, p. 181.
43. Croizier 1968, p. 54.
44. Ibid., pp. 72-75.
45. Ibid., pp. 154-155.
46. F. T. Gates in a letter to J. D. Rockefeller, January 31, 1905: "Quite apart from the question of persons converted, the mere commercial results of missionary efforts to our own land is worth, I had almost said, a thousand fold every year of what is spent on missions.... Missionary enterprise, viewed solely from a commercial standpoint, is immensely profitable. From the point of view of means of subsistence for Americans, our import trade, traceable mainly to the channels opened up by missionaries, is enormous." Brown 1976, p. 899.
47. Lampton 1974, pp. 49-91.
48. Mao Tse-tung 1967, 1:312.
49. Ch'en Pang-hsien 1920, p. 137b.
50. P. Unschuld 1978a, pp. 37-38, 53, 58, 78.
51. For example, Hsu 1973.
52. Croizier 1968, pp. 81-104.
53. Ibid., pp. 92-93, 129.
54. Ibid., p. 155.
55. Committee of the Department of Hygiene of the Department of Logistics of the Army Unit Canton 1972, p. 7.
56. Cf. Li Lun 1975.
57. Mao Tse-tung 1967, 1:314.
58. Committee of the Department of Hygiene 1972, p. 131.
59. Jen K'ang-t'ung 1974, pp. 63-64.
60. Ibid., p. 78.
61. Committee of the Department of Hygiene 1972, p. 129.
62. Ibid.
63. Ibid., p. 130.
64. Mao Tse-tung 1967, 1:303.
65. Ibid., p. 304.
66. Frontispiece, no pagination.
67. Yung-yao hsin-te shih-chiang, 1978, p. 281.
68. Ibid., p. 282.

69. As one example from a voluminous literature published in Taiwan and Hong Kong, explaining and advocating demonological therapy, see Fu-chou ch'üan-shu ("Complete Compilation of Amulets and Spells"), 1977; see also ethnographic field studies by Ahern, Gould-Martin, and Topley in Kleinman et al., eds., 1978; Topley 1970; Keupers 1977 and Hou Ching-lang 1979.

70. Personal communication by health administration officials in the People's Republic of China; see also Pascoe 1980.

71. For recent contributions to this debate see Chao Kuei-hsin 1982, and Yang Shou-i 1982.

72. This maxim appeared in Mao Tse-tung's definition of China's "new-democratic culture" of 1940; see above p. 246.