CHINESE MEDICINE: NATURE VERSUS CHEMISTRY AND TECHNOLOGY

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Medical ideas that underlie the practice of Chinese medicine, have been received with increasing attention and acceptance in Europe and the United States in the last decades. The so-called scholastic medicine gets no good press at the moment; spectacular positive reports seldom make the headlines of the popular press. Instead, negative reports about the behavior of individual doctors, about the motives of drug companies, or about the alleged threat to traditional values and behavior by new possibilities of medical intervention abound.

In their totality and their continual succession, these negative reports tend to produce unrest in the population, if they do not unleash deep existential anxieties. To blame these reports for the growth in fear and anxiety with regard to modern medicine would of course be short-sighted.

On the contrary, we should ask the question whether such negative headlines are merely a visible sign of changing times, or whether they signal a deviation from unconditional faith in science and technology as good and beneficial.

The new zeitgeist manifests itself in numerous areas of our public and private life; it finds expression in electoral behavior as in individual reaction to actual or future illness, I have not chosen the examples of electoral behavior and of health and sickness by chance. The fact that some 10% of the population places its trust in the so-called "Green" Party is a clear indication for the high degree of emotional attraction which the problem of the environment and protection of nature exerts. Highly dubious elements of the Greens' policy, such as its unconcealed sexism are swallowed by voters as evidently digestible irrelevances in relation to the central promise of the Greens to deal with one of the most important causes of existential fear in the population-the environmental problem.

Since none of the traditional parties has taken the environmental issue seriously, they should not be surprised that voters for whom a health environment is a top priority are walking away.

Ladies and Gentlemen, I have made this little digression in order to impress upon you the fact that a segment of the population no long chooses the medicine taught in this faculty and practiced here in the Großhadern Clinic and that this fact is not to be seen as an isolated phenomenon but as a part of a general change in the outlook of Western civilization. The dictum of one of our colleagues that, quote, "when they really fall sick, they come back to Großhadern in the end" is true in the majority of cases. Yet, the suggestion that the people turning to Chinese medicine are hypochondriacs helps our understanding of the "rise of Chinese medicine" as little as the efforts

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of critical commentators of the past to ascribe the belief in yin and yang solely to alternative cranks.

My own involvement with Chinese medicine began in the sixties when only a discrete minority of physicians had ever even heard of acupuncture or applied the technique clinically. On own interest in Chinese medicine has consistently concentrated on the aspects of Chinese that relate to history of science, its nature, and its language; the health-policy implications of the reception and spread of Chinese medicine in the West came later.

I think I have a certain overview of two thousand years of traditional Chinese medicine, and I think over 25 stays of varying length in East Asia give me an overview of the present situation of traditional Chinese medicine in China, Taiwan, and Japan.

Prom this angle, I can state that there is no such thing as the Chinese medicine. We can distinguish between different periods in its historical development, which stretches from the beginning of medical thought and activity in Chinese just about 2000 years ago to the end of the imperial age at the beginning of this century, through a period of redefining of traditional Chinese medicine under the PRC policy of the past 50 years, finally to a period of reception of traditional Chinese medicine in the West.

In all three of these periods, Chinese medicine has meant something different. To understand this is important not least for our reaction to the increasing interest in TCM.

Let me therefore describe the three periods briefly. A healing art that involved appeal to ancestors, exorcism of demons, or the pragmatic or magical application of animal, plant, or human substance was already present in the in the prehistorical era.

By contrast, a medicine in the Hippocratic sense, that is, one based on efforts understand and treat disease in terms of natural laws, is an achievement that first appeared in the third or second century before Christ, i.e., only slightly later than in ancient Greece.

Insight into the natural laws and the application of this insight into a new picture of the organism coincided with the unification of China the foundation of the Chinese empire. Without going into this here, it is nevertheless to be noted that the structure of the body and its organs as it was understood at the time evinces both clear conceptual and terminological parallels with the Chinese imperial state.

The continuing existence of the imperial establishment over a period of two thousand years up to the beginning of the 20th century maintained the external foundations of the view of the individual body, the causes and best possible methods of treatment of disease.

Chinese medicine has by no means stagnated over these two thousand years, a point I will come back to in due course. Yet in its basic conception with regard to the individual organism, it remained essentially as unchanged as the organism of the state whose political health rested on the same principles.

If we cast a glance at Europe, then we easily see one of the causes for the continual change and often a simultaneous variety of medical constructs. Hardly once since antiquity did a political constitution last for several centuries; with change in the political constitution, there ensued a fundamental change in the conception of our bodily constitution. The continual change in basic political structures European history over the last two thousand years has manifested in manifold changes in medical thought.

Neither in Europe nor in China has man been able to interpret disease of his personal organism in a way different from than in which he interprets crises in the social organism. Neither in China nor in Europe has medicine ever stood outside the prevailing world view. Chinese medicine-and here we should place an important argument of its proponents in perspective-did not survive for two thousand years because its basic convictions were clinically so effective or correct, but rather because these basic convictions coincided with the convictions that underlay the society of the imperial age. Only when the world view of the imperial age came to a definitive end in 1911 did the fundamental plausibility of traditional Chinese medicine crumble and a new medicine that responded to the new age gain widespread acceptance.

This development did not become fully sustained until a few years after the founding of the PRC in 1949. Before assuming power, the Chinese Marxists had for decades had opposed Chinese medicine with the same vigor as they had opposed all the ideas of the imperial age with which it was inextricably tied. A well-known Marxist ideologist of the 1940s even went so far as to Chinese medicine was nothing more than a millennial dung heap. But after the founding of the PRC, communists were faced with the problem of having to recognize and utilize practitioners of Chinese medicine at least temporarily in order to meet health care needs in the absence of a sufficient number of doctors trained in the modern scientific medicine they preferred. From this time, Mao Zedong viewed traditional Chinese medicine as a "treasure chest" although it lay hidden in the jumble of unacceptable speculative trimmings, from which the pure wealth of experience of the people had first to be separated.

Since the founding of the PRC, the Communists have never at any time accepted TCM unconditionally. The aim of the PRC government has consistently been primarily to offer the people modern Western medicine, and this aim has in the meanwhile been impressively achieved and is being further through the effects of the recent economic reforms on health care.

Nevertheless, the communist leadership has paid a great deal of attention to traditional Chinese medicine, and over the years has used various political instruments to reduce the vast manifold spectrum of ideas and techniques that developed in the imperial age to a small, clearly defined segment that in modern China alone is recognized as Chinese medicine.

A feature of the development of Chinese medicine in the two thousand years of the imperial age was the increasing number of differing doctrines concerning etiology, physiology, and therapy that existed simultaneously. On the basis of a few common fundamental ideas, Chinese doctors over the centuries developed numerous approaches for dealing with sickness. Unlike the situation in Europe, there was no tendency to develop a school of opinion that was based on at least a majority, if not, ideally, on the unanimous agreement of all those involved that persisted until it was replaced by a new school of thought.

In the history of Chinese, progress from one commonly sustained paradigm to the next is not apparent; broadening of knowledge would

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interpretation of Chinese medicine fed with ceylonese folk medicine emanating from well-known Guru in Sri Lanka.

Ladies and Gentlemen, in the past, petitions have repeatedly with a certain political emphasis been placed before this faculty to open itself to Chinese medicine and provide instruction in it. Those who exert such pressure are unaware of the difficulties that such a move would involve. As I have said before, there is no such thing as the Chinese medicine, and so it would have to be agreed first what variant of the versions of Chinese medicine concocted by many individuals and interest groups would be considered as the subject of study in a medical faculty.

The question to be answered is extremely complicated. Since Chinese medicine sought as an alleged alternative to Western school medicine, the scientific argument is actually excluded. If we wanted to adopt only those elements of Chinese medicine that could be proven scientifically, not much would be left. Yet we do not have any other criterion.

We should therefore ask ourselves what the features of Chinese medicine are, and why this medicine appears so attractive to so many people.

I would like now to go back to the beginnings of Chinese medicine. Information about the earliest stage of the development of Chinese medicine is provided by the texts from the Mawangdui tomb, which was sealed in 167 B.C. Several aspects of the texts are particularly interesting.

These texts present us with an already highly developed, very pragmatic, one could almost say empirically legitimized healing art. Hundreds of substances, complex preparations of crude drugs, and a broach range of internal and external of application methods tell of high level of this pharmaceutically oriented healing art. Other methods are evidenced by the texts, e.g., massage, moxa cauterization, petty surgery, gymnastics, dietetics, therapeutic sexual practices, and exorcism techniques for the elimination of demons. Acupuncture was mentioned in neither these nor other contemporary texts. It appears for the first time in a text from the year 90 B.C., and it would appear therefore that this currently most well-known Chinese method of healing in Chinese cannot look back to as hoary a past as popular writings on the subject would suggest.

Drug therapy and acupuncture were from the very beginning two separate healing traditions in China. The pharmaceutical tradition of Chinese medicine over the centuries developed into the dominant method of treating illness. The traditional Chinese pharmaceutical literature grew very rapidly into an impressive corpus.

This body of literature includes on the one hand innumerable formularies in which prescriptions for a well-structured and easily understood categorization of diseases introduced, and on the other almost two thousand pharmaceutical books which deal primarily with individual substances and their effects. Nothing in this pharmaceutical traditional appears to esoteric or wrapped in Oriental mystique to the modern Western reader. The thinking that lies behind this Chinese drug healing is different in no way from the traditional application of drugs in Europe.

Either the Chinese authors refrained completely from naming mech-

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anisms or provided only indications and suitable prescriptions, or the drugs served to expel an evil that had penetrated the body by causing vomiting, sweating, or downward elimination from the body, or by destroying it within the body.

This approach is well-known to us, and it is not surprising that this main tradition of Chinese medicine over the last two thousand years is not at the forefront in the reception of a Chinese alternative to Western medicine. Interestingly, what the Chinese understand by the term "Chinese medicine" is the drug tradition that for two thousand years has been the dominant element, while acupuncture is considered to be a separate form of therapy.

It is exactly the other way round in the West. Here, the buzz word 'Chinese medicine" denotes almost exclusively acupuncture, a method of treatment with only a second- or third-ranking significance in China that was characterized as forgotten tradition by writers of the eighteenth century and by a decree of 1822 was considered unsuitable for use among the upper classes. Acupuncture only experiences a belated respect today because of the regard it is given in the West.

Of course, the acupuncture that is nowadays understood and applied in the West as Chinese medicine is far removed from the needle therapy of two thousand years ago. Acupuncture-as is now very clearly to be seen-developed from bloodletting. The oldest extant texts on needling show clearly how efforts to treat disease by bleeding were replaced with the attempt to influence flowing streams of pneuma deep within the body.

In contrast to the pharmaceutical tradition, which has always been explicitly dedicated to the treatment of manifest disease, the early texts of acupuncture therapy forcefully recommend early treatment of the preliminary stages of disease development as a therapeutic approach. The aim of needling should be the early treatment of minor disturbances in preliminary development of serious diseases. This approach is true to the Confucian maxim that the nobleman does not seek to impose order in political unrest, but seeks order before unrest has erupted.

Theorizing about physiology, etiology, and therapy proceeded from this goal. In acupuncture therapy there arose theoretical constructs which in the modern West exert an equally powerful fascination and which account for the attraction of Chinese medicine as an alternative, holistic medicine.

Acupuncture sees the body as being composed of twelve functional entities, which interrelated in busy functional exchange. Diseases only arise where one or more of the functions of the body is weakened. Such weakenings arise when abnormal emotions stretch the resources of a functional entity beyond their limits.

Excessive brooding damages the liver, excessive sorrow damages the spleen. When I speak of liver and spleen here, than I mean the not merely, not even primarily, the organs that are familiar to us but the functions of the organism which were associated with the organs in the sense of broad functional units. In the case of the liver, damage can also affect the function of the eyes.

To stay with the example with the excessive emotional strain, if a weakening arises, then the body becomes susceptible to harmful forces present in the environment. Cold, heat, dampness, and dryness, etc., are in themselves part of the normal environment of the organism. But when there is a weakness in the organism, then these environmental influences in harmful amounts can penetrate the body, giving rise to developments that lead to disease. This thinking is of course not in any way alien to us, and does not account for the attraction of the Chinese models.

An essential difference from Western medicine lies in how the individual functional units, i.e., the individual primary organs, and the secondary organs and functions ascribed to them are related to each other, and in what way they influence each other and interact, for example, with the harmful forces that have penetrated the body from outside or have arisen in the body itself.

Acupuncture possesses the notion of different diseases present in the body at the same time, which each gives rise to their own distinctive symptoms and which are to be treated separately. However, this is rather the exception. As a rule, it is the task of the doctor to determine an underlying disturbance in the body, from which the therapy can be automatically based. Every diagnosis ideally leads to a therapy. A diagnosis without a therapy is only possible when the doctor reaches the conclusion that the condition is too advanced.

An further feature lies in the theoretical maxim that not only are functions afflicted by harmful forces to be treated, but to observe whether this was the area of function that was previously so weakened as to allow the penetration of an evil. The spread of the evil in the body follows definite laws, and theory obliges the healer to observe the point of entry of the evil as well as the present stage and possible complications of the illness.

In the course of the first millennium, these theories underwent further elaboration culminating in Tang Dynasty in the seventh and eighth centuries when authors unknown to us today devised highly complex methods of calculation to tie the individual body, its condition, and its susceptibilities in with the course of the 60-year cycles of cosmic activity. The corresponding texts are only just being translated and analyzed, and have so far not been a part of the current reception of Chinese.

However, this indicates a feature of the reception of Chinese medicine. The cause of the current high regard for Chinese medicine in the West is not a well-founded knowledge of its history and theoretical features, but rather vague feelings and the promise of something that is allegedly different. When we look back over the history of medicine, we see that not one system of ideas about healing, including our own, stepped onto the stage in full bloom with convincing clinical success. Each new system of ideas about healing first emerged as promise that offers a certain plausibility, and which was strengthened or refuted by the the elaboration that ensued in the following decades or centuries. We did not embark on the road to our modern medicine 150 years ago because we could see antibiotics, chemotherapy, and CT ahead of us; those are things we could not even have dreamed. It was the fundamental idea that the science could be applied to healing that seemed to promising and convincing.

Even in the reception of Chinese medicine in the West, it is not so decisive that the system is known in its entirely or that it is clinically effective in every case. Much more important for modern acceptance, the promise, with which Chinese medicine is propagated. At the beginning of this speech, I spoke of the a new zeitgeist and of existential fears that make segment of the population feel insecure. The state of our civilization since the 1960s has been affected by a number of factors. The problem of environmental protection increasingly dominates public consciousness, and-whether rightly or wrong is a question I shall leave open-chemistry takes the main blame for change in the climate, in the ozone layer, in the quality of the water as far as the Antarctic. The apocalyptical reports about increasing chemical contamination of the environment encourage the fears of which I spoke at the beginning.

The catch-word 'technology' is increasingly as negative loaded as the word 'chemistry.' Despite the necessity of technology for our present way of life and the benefits its brings, it gives rise to increasing existential fears about its overpowering coldness, lack of feeling, and inexorability.

The medicine that we practice and teach here in Großhadern is closely connected with these two factors, with chemical therapy and medical technology. In a time when segment of the population is developing increasing aversion to the role of technology and chemistry, it is not surprising that these aversions extend to the medical application of chemistry and technology. The poisoning of the environment with dioxin pesticides, fluorocarbons, and other artificial substances evokes negative associations with the poisoning of the individual body through chemotherapy. The increasing subjection of human life to the cold dictates of technology evokes negative associations with the feelingless application of technology in the diagnosis and treatment of individual sickness.

And this is where the ideology of Chinese medicine comes in. Chinese medicine is justly presented by its advocates as a healing art that gets by without technology and whose basis is direct encounter between the patient and doctor. The needles that the acupuncturist inserts cannot be so harmful; they are completely removed from the body again.

Chemical effects with long-term consequences for the body do not arise when the therapists uses Chinese drugs, for here the catch-words 'natural healing' and 'natural drugs' apply. Advocates argue that the patient need not fear any pollution of the organism.

In addition, there is the catch-word 'holism'. Many people complain of the increasing splintering of the world into separate and independent entities. The loss of the center is a well-known image in our modern civilization. The freedom of the indivudal has brought loneliness to many people. In modern medicine, this development is reflected in the well-known and oft lamented growing profusion of highly specialized experts who are competent in their own small patch, but not beyond it. Many patients see themselves and their health problems confronted with a wall of experts amongst whom they find no-one to talk heart to heart with.

It is this gap that traditional Chinese medicine promises to fill. A therapist recognizes the common root of even the most diverse symptoms. While in Western medicine referrals are made to the specialist in internal diseases, to the heart specialist, or the dermatologist, traditional Chinese medicine claims a central disturbance to be the cause of apparently unrelated complaints which it promises to cure through a single approach. This points the way to the center, the heart of

suffering, that a segment of the population seeks.

Our existential state has been influenced for several decades by the energy problem. In the international arena, wars are fought to secure our sources of energy; at home, the debate as to what energy forms are the most practical, the cheapest, and the least harmful to the environment constitutes a major point of conflict. For many, the private energy balance is a constant reason for concern. Since the whole history of medicine is characterized by models explaining the threats to human organism that parallel those used to explain threats to the social environment, it is not surprising that with the expansion of the energy problem, a completely unscientific notion gains plausibility in the population in the form of the notion that energy flows within the body and disturbances of the energy economy as the cause of individual sickness.

Western literature is dominated by the idea of acupuncture as a energetic medicine. Such an idea has never existed in the history of Chinese medicine. "Energy" in acupuncture literature is used to denote the "pneuma" that both Western and Chinese antiquity understood to flow with the blood.

The habit of referring to the ancient Chinese concept of pneuma with the modern Western concept of energy makes it clear that in the reception of traditional Chinese medicine, the point would appear not to be ensuring that Chinese medicine, as historically conceived, arrives intact and undamaged like a Chinese vase or an old Chinese sculpture.

Western conditions and desires play a more decisive role in the transmission of Chinese medicine to the West than original notions and ways of the thinking of the Chinese.

Modern scientific medicine medicine is not rejected by a segment of the population because of any inefficacy; it is rejected because it is closely connected with developments that cause concern for a segment of the population.

Chinese medicine is not preferred by a segment of the population because it is more effective than Western medicine (that is definitely not the case), but because the ideas behind it respond to the needs of the sector concerned and promise relief.

I have discussed the conditions that have lead to the spread of Chinese medicine in the West. The fact that no small number of patients have reported cures or improvements in their ailments in the absence of systematic scientific proof, and have convinced other patients, neighbors and family members to try acupuncture treatment is just as much a secondary consequence of these conditions as the understable economic interest of many doctors to gain competence in this therapeutic approach.

To conclude, it is important to recognize that the problem of the adoption of Chinese medicine will not be solved by encouraging scientific confirmation of the individual concepts or therapeutic interventions of Chinese medicine. The increasing acceptance of Chinese medicine is a question of people's outlook on the world that will not disappear until the existential anxieties and fears have dissolved, or until the feeling arises that science and technology take these anxieties and fears seriously.