



# Asian Medicine Newsletter

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International Association for the Study of Traditional Asian Medicine

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## What is "traditional" about traditional Asian Medicine?

*Charles Leslie*

Perhaps we should eliminate the word "traditional" from our title and call our organization IASAM, International Association for the Study of Asian Medicine.

The idea of creating a network of scholars studying Asian medicine was first discussed at a conference that I organized in 1971, and IASTAM was founded 8 years later at a second conference organized by Prof. Basham. The central concern of both conferences was humoral medicine formulated in the classic texts of Islamic, South Asian and East Asian civilizations, and carried on in one form or another by innumerable contemporary practitioners.

I excluded ritual curing from the first conference to focus on transformations of humoral practices consequent to the emergence of a world system of biomedical institutions. The idea was to encourage comparative research by bringing historians, sociologists and anthropologists together with scholars trained in the humoral traditions and in cosmopolitan medicine.

Basham continued this idea, broadening it to include ritual curing and volunteered papers by any scholars or practitioners who wished to attend. Some academics in Europe and North America refused the open invitation Basham issued with the complaint that Asian medical practitioners misinterpreted their own historical traditions, and were out to promote themselves rather than scholarly research. Basham and I considered this attitude to be narrow minded. The professionalization of Asian medicine and large scale production of drugs involve commercial and political transformations of humoral traditions of considerable interest. We hoped to facilitate communication between all kinds of inquiry through interdisciplinary, international and multicultural activities.

Our thinking was that traditions are not fixed in ancient and medieval texts for which there is a single proper interpretation. To us, traditions were variations of practices that have endured through generations while changing as they endured by being combined with each other, or otherwise transformed, or displaced by other

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practices, or, finally, given up altogether. These historical processes were to be the subject matter of IASTAM. Yet for many people the connotations of "traditional" in our title are very different from this fluid and pluralistic conception. For them the word suggests practices that are unchanging, out-moded, irrational, or unscientific. To avoid misunderstandings I think we should drop the term, but at the same time I think we should add another to further broaden our subject, and call our organization IASAMHC, International Association for the Study of Asian Medicine and Health Care. The reason is clear, for we are concerned with practices to cultivate health as well as the larger framework of practices to cure illnesses.

(rejoinders to this article are welcome and will be published in future issues. Send your comments to the editor.)

## IASTAM Panel

Vincanne Adams

IASTAM is proposing a two-part panel for the AAA meetings in San Francisco, 1992. The panel will be entitled: Asian Medicine in Transnational Perspective: Postmodernity and Power. The panel will have two parts. The first part will examine the circulation of Asian medical practices and knowledge in the non-Asian context, asking what are the dynamics of late capitalism which enable this to occur and which are revealed by its occurrence? The second part examines the inscription of modern forms of power through medical practices in the non-Western setting. Here, we will ask how modern forms of power come to meet and integrate with history in medical systems, and how knowledge comes to be shaped, re-shaped by this interaction. The utility or lack of utility of writings of David Harvey and Michel Foucault will serve to lay out theoretical guidelines and integrate discussion for us.

## Research Reports

### Tenets of Traditional Chinese Medicine<sup>1</sup>

John Wm. Schiffeler

Medicine is that field of human endeavor that is concerned with the cure, alleviation, and prevention of disease in human beings, and with the restoration and preservation of health by human beings for each other. Disease is the absence of ease, or a state of uneasiness; it is a condition of the mind/body, or some part or organ of the body, in which the basic functions are disturbed or deranged. Health is regarded as a state of well-being in which the most basic functions of human beings are duly and efficiently discharged; health, like disease, manifests itself through symptoms.<sup>2</sup> The interpretations of what disease and health are vary within the cultural context. The approaches of medical intervention are not always uniform, since they vary in accordance with the interpretations, beliefs, and experiences associated with particular cultures.

In Chinese society the interpretations of disease and health have found expression in a system of medicine known as Zhong-yi (中醫), or "[traditional] Chinese medicine." Its approach is one in which the "view is of harmony with nature rather than conflict or conquest; the concept of man/not man... is above all one of mutuality-man is in nature and one cannot speak of man and nature."<sup>3</sup>

Based upon this philosophical premise of nature, which has been considerably influenced by Taoism, the Chinese gradually developed this system of medicine. It reflects both their empirical knowledge of nature as well as their *a priori* definitions of nature through inductive reasoning. Chinese medicine also mirrors the attitudes of the Chinese toward tradition, including mysticism (e.g., symptoms are frequently regarded as omens), and demonstrates their latitude of reasoning with regard to what we view as the "forces of nature." Their fundamental medical practices reflect both rational and religio-magical approaches which are inextricably interjoined in theoretical and technical knowledge. It is a system of medicine that formulates ethical principles, medical deontology, and discusses medical aesthetics.

The Chinese quest over the past three millennia for a harmonious union between man and his biophysical and socio-anthropological environment has given rise to a worldview in which man and his affections are viewed by the Chinese practitioner as being an integral part of the cosmos and intrinsically interjoined with the moral, physical, and spiritual "forces." This metaphysical concept is connoted by the term san-ling

(三靈), or the "three spiritual influences," appertaining, in one context, to the three-fold concept of heaven, earth, and man, each of which consecutively corresponds to the above spiritual "influences" while coincidentally comprising all of them. In accordance with this "world concept" matrix, the Chinese have developed a workable, integrated, and holistic system of inductive and synthetic reasoning which forms the basis of their system of medicine.

The philosophy of medicine or the study of the relation between philosophy and medicine was systematically first studied by the Su Wen

(素問), or "Elementary Inquiry" sect

(continued on page four)

# INVITATION TO SUBMIT

ARTICLES RESEARCH REPORTS ESSAYS

BOOK REVIEWS COMMENTARIES NEWS

TO



International Association for the Study of Traditional Asian Medicine

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of the Yin-Yang chia (陰陽家), or the "Yin-Yang 'school'" during the last century of the Eastern Zhou dynasty (771-256 B.C.). There is no known record of the names of the scholars who established this sect or any dates as to when it was founded.<sup>4</sup> However, one of the oldest Chinese medical treatises (c. 3rd century B.C.), the Huang-ti nei ching (黃帝內經素問), or

"An Elementary Inquiry into the Yellow Lord's Esoteric Classic,"<sup>5</sup> is attributed to this sect, with a portion of the title (viz., su wen) reflecting both its name and the purpose for which it was established, namely, to conduct research (or "elementary inquiries") into the psycho-physiological correlations of human beings in accordance with the philosophical theories postulated in the Yin-Yang doctrine.

This doctrine is predicated on two major theories. The first and earliest theory, from which the "school" derived its name, is the Theory of Yin and Yang. It asserts that the universe is an ordered cosmos consisting of and regulated by the primordial twin potencies of the Yin, or "principle of darkness," and the Yang, or "principle of light," both of which create all of the phenomena in the universe through their harmonious interaction and fluctuation throughout infinity. The concept of these two potencies predates the "Elementary Inquiry" sect by probably more than one millennium, having had its origin in the in the Shang-Yin dynasty (c. 1500-1027 B.C.). It was based upon the observations of the mythopoeic Shang-Yin people, who associated darkness and light as being dualistic cosmic "forces" that affected their well-being. Therefore, by the time of the establishment of the Yin-Yang "school" by the Ji-xia (稷下) academician Zou Yen (鄒衍) (fl. 350-270 B.C.) in the third century B.C., this

concept was well-permeated in Chinese society, especially among the literate population.

The second coeval theory was a metaphysical protraction of this concept of the Yin and Yang principles that was intended to explain the observable changes within nature as well as the wan-wu (萬物), or the "myriad of phenomena." This theory is called the

Wu-xing (五行), or "Five Movements/Phases" Theory. It originally referred to the observable changes within nature, namely, the seasons and the biological transitions associated with them, which, like the Yin and Yang principles that produced them, were regarded as being in a constant state of flux, flowing and discharging their respective influences throughout the passage of time. It was through this interaction of "movements/phases" between this five thermodynamic-like "force fields" that all of the phenomena of the universe was created. Furthermore, these "movements/phases," as well as the preceding Yin and Yang principles, produced an ethereal substance called qi (氣), or "pneuma" that pervaded throughout the universe and became infused into all of the phenomena within it.

This Theory of the Five Movements/Phases gradually became transformed into that of the "Five Elements," with their multifarious symbolizations. For example, in addition to the seasons of nature, spring, summer, mid-year, autumn, and winter), there were, among other of its attributes, the wu-fang (五方), or the "five cardinal directions," the wu-qi (五氣), or the "five atmospheric influences," the wu-sheng (五牲), or the "five sacrificial beasts," etc.<sup>6</sup> However, with regard to medicine, there were the wu-zang (五臟), or the "five viscera," namely, the gan

(肝), or the "liver," the xin (心), or the "heart-mind,"<sup>7</sup> the pi (脾), or the "spleen," the fei (肺), or the "lungs," and the shen (腎), or the "kidneys." Also, included was the anatomical description, the wu-ti (五體), or the "five bodily constituents," namely, the jin (筋), or the "muscles," the mai (脈), or the "vessels," the rou (肉), or the "flesh," the gu (骨), or the "bones," and the pi-mao (皮毛), or the "skin and hair." This list of attributes could be further enumerated,<sup>8</sup> however, this would go beyond the scope of this essay. It suffices to say that these "elements" were generally referred to as mu (木), or "wood," huo (火), or "fire," tu (土), or "earth," jin (金), or "metal," and shui (水), or "water." Furthermore, it should be remembered that these "elements" were not to be literally interpreted, although as this theory became more engrained within Chinese society over the passage of time its metaphysical premise became transformed by practitioners of the occult into a quasi-religious schema from that of its original designation in the Shu jing (書經), or the "Classic History" in which it is written that "The nature of water is to soak and descend; of fire, to blaze and ascend; of wood, to be crooked and to be straight; of metal, to obey and to charge; while the virtue of earth is seen in seed-sowing and ingathering. That which soaks and descends becomes salt; that which blazes and ascends becomes bitter; that which is crooked and straight becomes sour; that which obeys and charges become acrid; and from seed-sowing and ingathering comes sweetness."<sup>9</sup> This latter part of the descrip-

tive characteristics of the Five Elements gave rise to the term wu-wei (五味), or the "five flavors/tastes," namely, xian (鹹), or "salt," ku (苦), or "bitter," suan (酸), or "sour," xin (辛), or "acrid," and gan (甘), or "sweet."

"The association of saltiness with water, while natural indeed to a coastal people," according to Sir Joseph Needham, "suggests primitive experiments and observations on solution and crystallization. The association of bitterness with fire, while perhaps the least obvious of the five, may imply the use of heart in preparing decoctions of medicinal plants, which would be the bitterest substances likely to be known. There would also be a connection of "hot" and bitter in spices. The association of sourness with wood can be readily explained, since wood, as vegetal, would be connected with all kinds of plant substances which become sour on decomposition. The alkali in plant ashes would also taste sour. The association of acidity with metal points directly to smelting operations, many of which would give off highly acrid fumes, e.g. sulphur dioxide. Lastly, the association of sweetness with earth would be due to the finding of honey in bees' nests in the earth; and to the general sweet taste of cereals."<sup>10</sup>

Wu-sheng (五勝), or the "five permutations" is expressed by the phrase, Wu-xing sheng ke

(五行生剋), or "the production and destruction of the Five Movements/Phases," which are as follows: Earth generates metal, which generates water, which generates wood, which generates fire, which, in turn, generates earth and so on in a continuing cycle of productivity; the counterpart being that earth destroys water, which destroys fire, which destroys metal, which destroys wood, which, in turn, destroys earth and so on in a continuing cycle of destructiveness. It can be inferred from these cycles of permutations the importance of the agrarian economy to the mainstay

of the Chinese livelihood, since both of them "begin" and "end" with the earth element."<sup>11</sup>

This synchronistic alternation of the "Five Movements/Phases" (i.e., all phenomena) by the dualistic "force" of the Yin and Yang potencies throughout the infinite cosmos reflected the overall aspect of the Chinese "world concept."<sup>12</sup> This holism is symbolized by the word dao (道), which connotes an all-pervading harmony in the universe and throughout time.<sup>13</sup> If we were to transpose this process of dynamic harmony by internalizing it in the body of man, as practitioners of traditional Chinese do, then we could say that the Occidental concept of the human metabolism is synonymous to the Dao, which, in this example, acts as a "governor" or "regulator" of life. The productive and destructive cycles of the "Five Movements/Phases" can also be likened to the biochemical process of anabolism and catabolism by which, according to our reasoning, life is sustained. Furthermore, the thermogenic energy which is associated with the process of metabolism is similar in scope to the Chinese concept of qi or "pneuma," which, in its medical application, "regulates the circulation of the blood, ingestion, and the autoprotection of the organism."<sup>14</sup>

In traditional Chinese medicine, the human being is regarded as the microcosmic counterpart of the macrocosmic universe, both of which are the creations of the dualistic "forces" of the Yin and Yang principles, which, in turn, are supposed to function in accordance with the harmonious principle of the Dao (This metaphysical concept is expressed by the phrase, Yi yin yi yang zhi wei dao

(一陰一陽之謂道)

or "The unity of the Yin and the Yang is called, 'Dao'.")<sup>15</sup> In the field of traditional medicine, therefore, good health may be interpreted, to paraphrase Jerome D. Frank's article on faith healing, as the "harmonious integration of the person

within himself and with his society, nature, and the cosmos. Illness and suffering are indications that this harmony has been disrupted, a disruption for which the patient himself is considered partly responsible—that is, he has fallen ill because he has in some way transgressed the laws of nature, society...and therefore he must actively participate in the healing process. The task of the healer is to rest the disrupted harmony by activities which involve participation by persons close to the patient as well as spiritual exercises."<sup>16</sup> The Chinese, therefore, turn to their practitioners of traditional Chinese medicine not just because of their empirical medical knowledge and techniques, but because they are regarded as "philosopher-physicians" who understand the proper medico-philosophical therapy essential to recovery in a culture where health and disease are based on rational propositions of experience and convictions of faith.<sup>17</sup>

The philosophy of medicine is a discipline that considers medicine in its totality by examining the position of medicine in humanity, in society, and in the different medical sects and schools. For by contrasting the relations between the different facets of medicine itself, humankind affirms medicine's essential being and acknowledges its finitude and dependence on the contingencies of time and space.<sup>18</sup> As G.E.R. Lloyd states, "It was indeed partly by contrasting itself with magic and philosophy that medicine began to define its own identity and methods: but if it is important to see what was new in that development, it is equally important not to misconstrue or overstate the nature of that contrast or to neglect the continuing links of medicine with both."<sup>19</sup> And, as Ludwig Edelstein has concluded, "... medicine did not influence philosophy to find a solution of ethical questions. But medicine did serve philosophy as a means of explaining and of making acceptable to men that conclusion which philosophy itself had reached, that man can live with philosophy as little as he can live without medicine."<sup>20</sup>

## Notes

1. I wish to give special appreciation and acknowledgment to the late Dr. Otto E. Gutentag, Samuel Hahnemann Professor of Medical Philosophy at the University of California in San Francisco.
2. N.B. the definitions of "disease," "health," and "medicine" in Dorland's Illustrated Medical Dictionary, 25th ed. (Philadelphia: W.B. Saunders, 1974), pp. 453, 682, and 922.
3. R. Redfield, The Primitive World and Its Transformation (Ithaca: Cornell University Press, 1953), p. 107.
4. J. Needham, History of Scientific Thought, Vol. II of Science and Civilisation in China (Cambridge: Cambridge University Press, 1956), p. 265.
5. N.B. Manfred Porkert, The Theoretical Foundations of Chinese Medicine, Vol. III of M.I.T. East Asian Science Series (Cambridge: The MIT Press, 1974), Chs. 1&2 *et passim*.
6. W. F. Meyers, The Chinese Reader's Manual, Repr. (Taipei: Ch'eng Wen Publishing Co., 1971), pp. 311-321.
7. The heart is regarded in traditional Chinese medicine as being both the seat of intelligence and emotional feeling, thus, *xin* can be translated as either "heart" or "mind." To express this two-fold characteristic, I have translated it in a binomial form as "heart-mind." N.B. the definitions of "liver," "heart," "spleen," "lungs," and "kidneys" in Charles A.S. Williams' Encyclopedia of Chinese Symbolism and Art Motives, Repr. (New York: The Julian Press, 1960), pp. 253, 219, 361, 257, and 238.
8. I. Veith, trans., Huang Ti Nei Ching Su Wen: The Yellow Emperor's Classic of Internal Medicine, 2nd ed. (Berkeley: University of California Press, 1973), pp. 18-25.
9. J. Legge, The Shoo King, Vol. III of The Chinese Classics, 5 Vols. (London: Trubner, 1865), pp. 325-326.
10. Needham, *op. cit.*, p. 244.
11. N.B. the various interpretations of this cyclic ordering of the "Five Movements/Phases" in Wolfram Eberhard's article, "Beitrag zur kosmologischen Spekulation Chinas in der Han Zeit," Baessler Archiv, Vol. 16, No. 1 (1933), pp. 44ff.
12. Needham, *op. cit.*, pp. 290-291.
13. J. Wm. Schifffeler, "The Origin of Chinese Folklore Medicine," Asian Folklore Studies, Vol. XXXV-1 (1976), 17-34 and "An Essay on the Traditional Concept of Soul in Chinese Society," Chinese Culture,

Vol. XVII; No. 2 (June, 1976).

14. S. Palos, The Chinese Art of Healing, Bantam Book (New York: Herder and Herder, 1971), p. 45.
15. Porkert, *op. cit.*, pp. 9-43 *et passim*.
16. Jerome D. Frank, "The Faith That Heals," The Johns Hopkins Medical Journal, Vol. 137, No. 3 (September, 1975), 128.
17. N.B. the section on primitive medicine in Henry E. Sigerist's Primitive and Archaic Medicine, Vol. I of A History of Medicine (New York: Oxford University Press, 1951-1961), pp. 105-213; Joseph Needham's "Medicine in Chinese Culture," Ch. 14 of Clerks and Craftsmen in China and the West (Cambridge: At the University Press, 1970), pp. 263-293; and Owsei Temkin's "On the Interrelationship of the History and the Philosophy of Medicine," Bulletin of the History of Medicine, Vol. XXX, No. 3 (May-June, 1956), 241-251.
18. P. Tillich, "Moralisms and Morality from the Point of View of the Ethicist," in Ministry and Medicine in Human Relations, ed. by Iago Galdstone (New York: International Universities Press, 1955), p. 3.
19. G.E.R. Lloyd, "Aspects of the Interrelations of Medicine, Magic and Philosophy in Ancient Greece," Apeiron, Vol. IX, No. 1 (1975), 11.
20. L. Edelstein, Ancient Medicine, ed. by Owsei Temkin and C. Lilian Temkin (Baltimore: The Johns Hopkins Press, 1967), p. 366.

## IASTAM Meeting at AAA Conference

There will be an informal meeting of IASTAM members at the annual conference of the American Anthropological Association. The conference will take place in San Francisco this November. Please check the bulletin boards for announcements of time and place.

At the meeting, we will discuss plans for IASTAM panels at the 1993 conference; the 4th ICTAM in Tokyo; and the proposed meeting of the North American and European chapters in London in 1994.

We will also appoint a new treasurer, to assume the position vacated by Phil Zarrelli.

## Birth, Marriage and Death in Peking:

### Popular Culture and Elite Culture from the 19th Century to the Present

Mechthild Leutner

The societal changes in China of the last century are reflected in the customs surrounding the central social events of birth, marriage and death. This study presents the changing traditions and customs in these three areas, showing how they are embodied within the context of family economics and the corresponding deep-rooted patterns of action and thought. The aspects of birth, marriage and death are understood and interpreted from the perspective of socio-historical research of popular culture as integral components of not only the popular culture, but of the old and new elite cultures as well.

The major shift from an agrarian to an industrial society in China began in the late imperial era and is still ongoing. Parallel to this development, the old Confucian elite was replaced by a new elite dedicated to industrial interests and economically rational patterns of thought. Traditional family structures marked by an agrarian logic and lifestyle, however, continue to predominate and have even experienced a reactivation during the reform period of the last decade. At the end of the imperial period, practices of birth, marriage and death were basically the same for both the popular and the old elite cultures because of similar interests regarding family structures. This is not the case in the People's Republic, where a divergence can be identified between the family-oriented practices of the populace and the more industrially-oriented practices of the new elite, emphasizing the strength of the resistance of the popular culture to the modernization initiated by the new elite.

The modes of behavior and of perception, with their respective magic-religious (dominant among the populace), moral-ethical (dominant among the old elite), or economic-rational (dominant among the new elite) explanations can be clarified within the context of the family economy. Family, utilitarian and other support groups (i.e. those involving a public-social exchange of gifts, services and other material or nonmaterial relationships) and the rest of the public sphere are the focus of the customs and traditions, giving them their function. According to this socio-historical approach, the observed practice and its respective logic (sometimes clearly, sometimes vaguely and sometimes not at all defined) is always presented in an interpretative manner, refraining from making "humanistic" derivations of the practice based on philosophical patterns of thought from earlier eras.

Such a procedure requires the evaluation of numerous different sources, some of which have been made available for the first time for this presentation. Historical references in a "classical" sense have been included: written texts of the old and new elites which have a multiple programmatic character. Ethnographic writings and recent sociological and anthropological research -- primarily studies of the family or so-called village studies in which the subjects of birth, marriage and death, among others, are considered -- have also been mentioned, as well as fictional and autobiographical literature relevant to this topic. Several field studies were indispensable, such as the weddings and funeral services in which I was able to participate during the 1980's in the Peking area.

In the area of birth, for example, medical texts with traditional information regarding children's health and birthing, essays on Chinese and western medicine, popular birthing and midwifery advice manuals and encyclopedias on the family and childrearing were analyzed, as well as descriptions of everyday life and ethnographic records.

Numerous interviews with women of various ages and classes, including gynecologists and family planning workers, filled the gaps regarding current statistics. It was only due to this relatively complex collection of reference sources that the basic lines of development could be illustrated. In addition, in the area of birth, not only is the question of the relationship between the elite and the populace important, but, especially for old China, also that of the relationship between women's practices and the male-determined system of explanation, which didn't start showing signs of deterioration until after the formation of the People's Republic. In old Peking, women were primarily concerned during all stages of pregnancy, birth and postnatal care with the mobilization of all nonmaterial resources in the interest of the survival of the mother and (depending on the interests of the family economy) also the child. But even doctors tried -- in the struggle, not only against the gods and the devil, but also against the midwives -- to save lives, taking their instructions for proper behavior partially from Daoist ideology and demonic concepts and partially from the appropriate system of medicine.

Among the new elite, the spread of western medical practices led to a new sense of reasoning which was, however, well-integrated with traditional behavioral procedures. The criticism of superstition, heresy and so-called fetal education, as well as the growth of prenatal care, has found broad support among women, at least as far as the "public" sphere is concerned. The practices of women which are determined by the family, outside of the public domain, however, remain far removed from the newly developing medical standards.

\*Geburt, H. und Tod in Peking. Volkskultur und Elitekultur vom 19. Jahrhundert bis zur Gegenwart. Belin: D. Reimer Verlag, 1989, 394 S.

## Comfrey in the Chinese Materia Medica:

Robert Anderson  
(Mills College, CA)

Comfrey (*Symphytum officinale*) is a perennial plant native to Europe and the British Isles where it has been long established as a medicinal herb.<sup>12</sup> At issue in this essay is an important question. Will it one day be added to the materia medica of traditional Chinese medicine? The possibility that practitioners of TCM might prescribe it for internal use raises justifiable fears, because, as will be documented below, comfrey contains dangerous alkaloids that can cause severe disease and death.

From its place of origin in Europe and Great Britain, comfrey traveled easily to North America, where it constitutes a predictable entry in books that list herbal remedies.<sup>3,4</sup> It became a part of the practice of naturopathic medicine in both Europe and America.<sup>5,6</sup> It is now advocated by New Age enthusiasts such as the founder of Ekankar.<sup>7</sup> Comfrey showed a remarkable capacity to gain acceptance in ethnic folk medicine in the United States, including that of Hispanic-Americans. It is well integrated into Amish folk healing.<sup>8,9</sup> It can be found in the practice of Hawaiian *lomilomi*.<sup>10</sup>

This peripatetic plant has also spread beyond Europe and North America. It is not unknown to practitioners of Unani Tibb, the traditional medicine of the Middle East and South Asia.<sup>11</sup> Will it continue its travels as far as China?

Chinese traditional medicine (TCM) and modern biomedicine have been very open to each other in recent years. Chinese methods for reducing bone fractures have influenced orthopedic practice in the Western world.<sup>12</sup> Bio-

medicine acquired other beneficial applications from TCM as well. In China, blood-invigorating herbs, for example, have been found useful in cardiology and gastroenterology.<sup>13</sup>

This mutual openness of two medical systems has also brought Western practices into Chinese medicine. Will it bring comfrey to practitioners of TCM? One possible scenario is that comfrey might come into use in American schools of TCM. In exploring the library of one school of traditional Chinese medicine a few months ago, I found two handbooks of Chinese herbs that were much used by clinic interns busily in training.<sup>14,15</sup> It is notable that neither of these works contains comfrey as an entry, even though both were published in English and in the United States. Yet, directly next to these two works on the library shelf stood *A Modern Herbal*. Based upon traditional Euro-American herbalism, the latter book does include a lengthy entry on the healing benefits of comfrey, devoid of any indication that it has harmful side effects.<sup>16</sup> Is it too much to assume that a bookish student of TCM might one day move from the one book to the next and decide that comfrey should be included in his or her practice?

Comfrey has moved closer than simply to a place on the library shelf of a school of TCM. One widely read American practitioner of TCM, who does not otherwise refer to comfrey and who makes no mention of internal use, nonetheless, in addressing an American audience on the use of TCM for the management of musculo-skeletal injuries, recommends comfrey as beneficial when used externally for the treatment of skin burns. "If possible," he writes, "it is always advisable to cover any point treated by Direct Moxa with a burn ointment such as Ching Wan Burn Ointment or with Aloe Vera or a comfrey ointment available at most American health food stores."<sup>17</sup> If it is recommended for external use, which is probably safe, how long before an unwary reader might decide to prescribe it also for internal use?

Comfrey has penetrated still

further. A book called *Heinennan's Encyclopedia of Fruits, Vegetables and Herbs* was recently reviewed in a widely read TCM publication dedicated to "exploring new horizons in East/West medicine." The reviewer concludes, "This is not exactly a TCM classic but a valuable and amusing addition to the reference shelf or 'coffee' table."<sup>18</sup> Whatever the value of this book, it is far from amusing that it includes dangerous advice to Western practitioners of TCM. Heinerman recommends comfrey tea to be given internally, without limits or cautions.<sup>19</sup> This is certainly getting close to the American practice of TCM!

In fact, comfrey is now included in the materia medica of at least two American texts that advocate it as a Euro-American herb that can be effectively integrated with traditional Chinese herbs for the treatment of Western patients. One of these books provides no information about the dangers of comfrey ingestion.<sup>20</sup> The other includes more than a dozen references to the use of comfrey with no indication that it is dangerous, although it does include as a loose leaf insert of addenda and errata, a statement that use should be limited "for safety reasons."<sup>21</sup>

It appears that comfrey has even acquired a toehold in China itself. Jan de Vries, a Netherlands born practitioner of traditional European herbal medicine, worked for a time in China. De Vries became acquainted with a Chinese doctor known for his success in using acupuncture as an anti-smoking treatment. In return for information on the acupuncture points used for that purpose, de Vries taught the Chinese doctor what he knew about comfrey, including how it can be grown, but apparently not how it might be harmful. "Since that time," de Vries writes, "we have been in regular correspondence and he has informed me that he has followed my advice regarding the way to grow comfrey and he has also told me about the successes he has achieved with his patients for whom comfrey was prescribed."<sup>22</sup>

Comfrey seems to be on the doorstep of traditional Chinese medi-

cine. It is appropriate that the herb be examined carefully with the prospect of wider acceptance in mind.

Publications that describe comfrey provide uniformly laudatory recommendations for its medicinal use in the treatment of a diversity of diseases. Comfrey is recommended by many herbalists for a congeries of musculoskeletal, infectious, pulmonary, gastrointestinal, dermatological and miscellaneous conditions.

Nearly all herbal authorities recommend it for cuts, bruises and sores in the belief that it has antiseptic and hemostatic properties. A few continue to recommend it for the healing of fractured bones, a medieval usage that has declined in competition with modern medical and surgical technology. Many writers advocate its use for arthritis, rheumatism, and painful, swollen joints. Widely, it is recommended for pulmonary conditions, including asthma, pleurisy, bronchitis, tuberculosis, and colds. Equally common is to recommend it for gastrointestinal problems, especially gastric and duodenal ulcers, diarrhea, and dysentery. Not the least, a number of authors advocate it for skin conditions, including eczema, boils, and wrinkles. Here and there one sees that it has been used in addition for many other problems, including kidney disease, cancer, anemia, athlete's foot, and burns.<sup>19,11,16,22-26</sup>

A few writers describe it also in terms of chemical constituents. Analysis indicates that it contains mucilage, allantoin, tannin, resin, sugars, essential oil, choline and alkaloids.<sup>1,16,26</sup> Much of its healing action is attributed to the mucilage content. A mucilaginous medicine is thought to provide a beneficial emollient action helpful for intestinal troubles, including diarrhea and dysentery.<sup>16</sup> Some attention has been given to the healing properties of allantoin, which is thought to strengthen epithelial formation in the skin by means of a cell proliferate action. This reputed action recommends it for the healing of ulcers, chronic wounds and burns.

Still another way in which com-



frey has been discussed is to describe its action as that of a demulcent, a mild astringent, a diaphoretic, and an expectorant.<sup>1,16</sup>

Its reputation as an herb with diverse uses is suggested by its designation in superlatives. In one book it is listed as, "One of the highest rated plants in the modern herbal calendar."<sup>23</sup> In another book, the author notes that, "Comfrey has received much attention in recent years..."<sup>26</sup> One reads of comfrey in the popular press as, "being good for almost every ill of mankind."<sup>27</sup> A religious leader reveres, "... the wonder herb known as comfrey."<sup>7</sup> Jan de Vries speaks of it almost mystically. "When opening the root we see rich and thick liquid oozing from it and with the use of our imagination we can visualize its strong healing powers."<sup>22</sup>

Does it work? Perhaps in some ways, but the evidence is entirely anecdotal, based upon its extensive use through time and across geographic space. One cannot rely on widespread, long-term usage as proof. Remember that snake oil was a sought after ingredient of many apparently useless multi-ingredient panaceas (theriacs) that were highly prized in Western medicine from the time of Galen in the 3rd century until their obsolescence in the 18th century. One would be hard-pressed to claim medicinal value for snake oil today.<sup>23</sup> Is the evidence for the efficacy of comfrey any better? The published laboratory studies of comfrey are inadequate.<sup>16</sup> The value of mucilage, allantoin and other chemical constituents has not been adequately evaluated. In the arena of patient care, no clinical trials at all have been carried out to investigate the healing value of the herb. Comfrey, in short, is unproven as an efficacious herbal remedy.

It has been determined in many different studies that comfrey contains unsaturated pyrrolizidine alkaloids.<sup>29,31</sup> That these alkaloids are toxic has been established in several ways. Several common range plants which contain them in high concentrations have long been known to cause the slow death of horses

and cattle due to severe liver damage. Feeding experiments with range animals and rats have clearly established cause and effect. Many cases of human poisoning by pyrrolizidine alkaloids have been reported, but it seems safe to assume that many others have gone undetected for lack of complete analysis.<sup>31</sup>

In humans, pyrrolizidine alkaloids are ingested most commonly by accidentally eating contaminated cereal or by using medicinal herbs. Excellent reviews of the human health hazard from pyrrolizidine alkaloids are available.<sup>31</sup> The acute effect of pyrrolizidine alkaloid poisoning is liver damage which may result in death. Chronic exposure over a long period may result in cirrhosis of the liver which can also cause death. Pyrrolizidine alkaloids are known to cause Budd-Chiari syndrome, a potentially fatal hepatic veno-occlusive disease characterized by hepatomegaly, pain, ascites and portal hypertension. In addition, they have also been implicated in pulmonary endothelial hyperplasia and cor pulmonale, a potentially fatal form of congestive heart failure. Thus, ironically, an herb often prescribed for chest conditions is, in fact, a devastating pulmonary toxin.

Comfrey is also identified as a carcinogen. The pyrrolizidine alkaloid symphytine apparently causes hepatocellular tumors. Other consequences of these alkaloids include renal glomerular, pancreatic and gastrointestinal tract lesions, again evincing toxicity for the very organ systems for which it is sometimes prescribed.<sup>32,33</sup>

The toxicity of comfrey has also been established independently. Feeding experiments with rats have shown conclusively that comfrey is toxic to the liver and causes cancer of the liver.<sup>31</sup> Human testing of comfrey by feeding experiments is clearly not acceptable. But in a recent case, a woman with severe liver damage was found to have consumed comfrey root capsules as a regular food supplement. In a similar case in New Zealand, a young man died from liver collapse after ingesting comfrey leaves on a regular basis.<sup>31</sup>

With herbal preparations as well as with modern pharmaceuticals, the physician must undertake a therapeutic cost-benefit analysis. What health benefit does the drug provide for the patient, and is this sufficiently important to make unwanted side-effects acceptable?

Aspirin, the contemporary descendant of an old herbal medication (willow bark), may be taken to illustrate this principle. The analgesic, antipyretic and anti-inflammatory benefits of aspirin are sufficiently valued to make transient gastritis an acceptable side-effect for many patients, although not for those with a tendency to ulcer formation. In the last two decades, however, we have become aware that aspirin can cause encephalopathy and fatty metamorphosis of the liver (Reye's syndrome) leading to permanent impairment and death in infants and children. This sinister adverse reaction required a dramatic re-evaluation of the cost-benefit status of aspirin, which is now contraindicated for the treatment of infants and children suffering from viral infections such as in Quenza or chicken pox.<sup>34</sup>

The world literature contains many other examples of the use of folk remedies which are toxic. "The use of such preparations sometimes continues even when the poisonous effects are immediate, dramatic, and fatal!"<sup>35</sup> In Nigeria, for example, small children and infants are treated for convulsions with *agbo tutu*, of which the active ingredient is green tobacco leaves that have been soaked in urine, sometimes with a splash of Gordon's Gin. The resultant strong solution of nicotine is a central nervous system stimulant in small doses, but in large doses can depress brain activity to the extent of coma and death. Despite disastrous consequences comparable in severity to Reye's syndrome in the use of aspirin, *agbo tutu* continues to serve as a widely used remedy in Nigeria, and is even administered as a prophylactic when a child is thought to be susceptible to convulsions despite the absence of a history of seizures.<sup>35,36</sup>

Among Mexican Americans,

folk healers are known to prescribe a preparation called azarcon or greta. It is ingested as a bright orange powder which on chemical analysis proves to consist of lead tetroxide (PbO) with an elemental lead content of more than 90 percent. It is used to treat stomach complaints of indigestion and constipation known to Mexican Americans as empacho. The adverse effects include encephalopathy with cognitive deficits in children and progressive renal disease in adults. Its use as a folk remedy came to the attention of the U.S. Public Health Service by means of emergency room reports that several children had been admitted for acute lead poisoning. An investigation eventually revealed that a wholesale distributor in Texas was supplying this popular compound to more than 120 herb shops (herberias) throughout the Southwest.<sup>37</sup>

Comfrey is an example of a traditional Euro-American herb that is as dangerous as aspirin for childhood influenza, *abgo tutu* for infantile seizures, or *azarcon/greta* for indigestion.

In what dosages is comfrey dangerous? Venous-occlusive disease in infants has occurred after exposure for less than one week, and one infant born to a woman who consumed herbal teas during her pregnancy was diagnosed with congenital venous-occlusive disease that probably resulted from transplacental pyrrolizidine poisoning. Infants are particularly susceptible to these alkaloids. Adverse reactions in older children and adults usually appear only after several months of exposure.<sup>32</sup>

How is comfrey prescribed? Often, it is recommended as a poultice to be applied externally. In such usage, side effects are possibly not a problem. It should be noted that when comfrey was applied to the skin of experimental rats, alkaloids in the urine provided evidence that it had entered systemic circulation. External use is possibly not hazardous, however, since it appears that pyrrolizidines are only converted by liver enzymes to toxic pyrroles when they have been ingested.<sup>38,39</sup>

The most widespread recom-

mendations are that it be taken internally, most frequently as a tea. Some writers recommend at least one teaspoon or one ounce of leaves to a cup of boiling water.<sup>1,5,6,8,16</sup> The number of cups of comfrey tea to be consumed, when stated, ranges from two or three to four or more per day.<sup>5,6,8,25</sup>

Most commonly, no limits are indicated for the amount of tea that may be drunk.<sup>4,9,23</sup> Gunn's *New Family Physician* from the nineteenth century, merely says, "it may be taken freely in the form of infusion, or in syrup; or may be used in the form of wine bitters. . . ."<sup>3</sup> A contemporary author recommends that comfrey be used recreationally as a tea substitute.<sup>26</sup> Truly large amounts of comfrey may be consumed when one follows advice to eat it as a leafy salad.<sup>4,25,26</sup> Only one herbal author identified a time limit for the consumption of comfrey. In recommending comfrey for internal hemorrhage of the lungs, stomach, bowels, or piles he noted with regrettable vagueness, "One wine glassful every two hours until relief is obtained is suggested."<sup>24</sup>

Experiments have shown that one cup of tea brewed from comfrey root contains approximately 8.5 mg of toxic alkaloids.<sup>39</sup> These levels of consumption, then, are 4 to 13 times as great as the amount of pyrrolizidine alkaloids accidentally consumed in contaminated wheat by a population of 7,200 people in Afghanistan. Within two years, 23 percent of that population were found to have experienced severe liver damage.<sup>39,40</sup> The regular consumption of cups of comfrey tea, one must conclude, is a dangerous practice.

Herbal writers demonstrate a consistent and frightening indifference in referring to the amount of comfrey that may be consumed. What is worse, they usually fail to indicate that comfrey is dangerous.<sup>1,9,11,23-26</sup> Some recent literature now does include warnings.<sup>41-43</sup> However, the most conscientious statement that we encountered in regular herbals collected from popular book stores was remarkably blase about the

dangers of pyrrolizidine alkaloids. "Note: comfrey has been reported to cause serious liver damage if taken in large amounts over a long period of time. Although this effect is in dispute it would be best to err on the cautious side when taking comfrey internally."<sup>44</sup> We know of no scientific dispute concerning the toxicity of comfrey, and no sources for this statement are cited. This warning is inadequate and reprehensible.

One must acknowledge the possibility that comfrey may commend itself to contemporary practitioners of traditional Chinese medicine, whether in China or abroad. In adopting an herb deriving from the Euro-American herbal literature, the physician needs to realize that the herbal literature is in significant ways unreliable and misleading. This is demonstrably so for comfrey. "A very wide chasm now exists between the scientific study of plant drugs -- a part of the discipline known as pharmacognosy -- and the field of popular herbal medicine," one authority has written. "The former is an exact science . . . The latter is . . . composed of varying parts of outdated information, folklore, superstition, wishful thinking, hokum, and even hoax."<sup>45</sup> Popular herbal medicine, we would add, is also composed of some excellent herbs. It would be shortsighted to agree that all herbal remedies in the West should be aborted. It would be equally shortsighted, however, not to insist that careful pharmacologic evaluation be undertaken before such herbs are added to the practice of traditional Chinese medicine.

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## North American Chapter News

Members of the North American Chapter of IASTAM are urged to send their 1992 dues of \$20 to Mark Nichter, Chapter President.

The address is: Department of Anthropology, University of Arizona, Building 30, Tucson, AZ 85721.

Mark will be acting as treasurer until a replacement for Phil Zarrelli can be found.

Please note that it will not be possible to maintain the Newsletter or any other chapter activities unless members send in their dues.

Thank you!

Also note: A new address for Vincanne Adams, Secretary General: Dept. of Anthropology, Princeton University, 100 Aaron Burr Hall, Princeton, NJ 08544-1011.

## THE AMERICANIZATION OF ASIAN HERBAL MEDICINE

John Heinerman

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Some years ago Hollywood made a movie starring James Garner and Julie Andrews, entitled, "The Americanization of Emily." It told about a woman from Europe falling in love with and marrying an American service man. In time, she had to learn how to become an American.

A similar thing has been quietly happening to Oriental herbal medicine in the last decade or so. American and Canadian manufacturers of herbal products had been looking for something new and different with which to appeal to their respective consumers, who were in the mood for change. They began "rediscovering" the inherent virtues of traditional Asian herbs and soon were incorporating such items as *ginseng*, *tang kwei*, *ho-shou-wu*, *astragalus*, and *ginkgo* into their own lines.

But, unfortunately, along the way something got lost in the translation of decidedly Oriental drugs into health food products intended for everyday consumption. That was the matter of therapeutic potency vs. nutritive benefits. Anyone well acquainted with Oriental medicine in general and the dynamics of such herbs in particular, readily knows you simply cannot combine natural drugs like these with those mild and harmless Western herbs considered to be foods and meant for regular and lengthy consumptions.

The philosophy behind true Asian medicine is this: powerful herbal drugs are judiciously prescribed by experienced health-care providers for specific reasons. But in the mad scramble for introducing new products into the health food market place, North American herb

