

EIGHTY YEARS OF CHINESE MEDICAL LEXICOGRAPHY:
RESPONSE TO MODERN CHALLENGES

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May 1995 saw the publication of the *Zhonglyi da4ci2dian3* (ZYDCD-95), exactly 74 years after the appearance of the first major comprehensive Chinese medical dictionary, Hsieh Kuan's *Zhong1guo2 yi1xue2 da4ci2dian3* (ZGYXD-21). Chinese medical lexicography is a specific field of scholarship that has only appeared in this century, and reflects a Western influence in the transmission of traditional medical knowledge. The development of Chinese medical lexicography sheds interesting light on nascent awareness of the technical nature of specialist expression and on the evolution of Chinese medicine in the modern era.

Origins and development of Chinese medical lexicography

The first extant Chinese dictionary is the *Er3 ya3* (“Approaching Elegance”), which is generally thought to have appeared in the third century B.C., slightly later than word lists produced in Greece, and two and half millennia after the first Sumerian word lists. Although lexicography developed later in China than in other civilizations, it assumed an importance in linguistic investigations that is observed nowhere else. The absence of morphological paradigms discouraged the early study of grammar which assumed importance in the early linguistic investigations of Greece and Rome. Despite advances in grammar in the study of grammar in the Yuan period, the first systematic grammar of Chinese, the Ma3 *shi4 wen2 tong1*, did not appear until 1898 and was the result of Western influence. The complex—and its early stages radically changing-script formed the center of linguistic interest. With the Confucianist dominance in scholarship that stressed the importance of elucidating ancient canons of Confucian learning, linguistic investigations focused on morphological and semantic investigation of characters. Lexicography therefore became a central focus of linguistic study (Norman 1988; Malmqvist 1994). Furthermore, the largely monosyllabic nature of classical Chinese focused interest on the individual character rather than on compounds.

A ‘dictionary is a book that explains words for those who do not know their meaning. It represents an act of translation involving the explanation of partly or wholly obscure terms in terms understood by the reader. Not surprisingly, an early function of dictionaries was to provide a bridge between languages’ The clay tablets of circa 2,500 BC explaining the Sumerian words in Akkadian provided the Akkadians with access to the language and culture of the Sumerian civilization they conquered. The first dictionaries in English and other European languages were glosses of Latin terms. Likewise, the first dictionaries of China provided explanations of meanings used in classical texts for a readership whose everyday language was no longer the same as that of the authors of the classics.

The *Er3 ya3* was essentially a thematic classification similar to the Onomasticon that appeared in Greece in 121 A.D. It is thought to have served as a gloss to the classics rather than—as the thematic order might suggest—as a technical dictionary. The thematic order was

possibly chosen not out of any technical concern about the natural order of phenomena that dominates, say, modern botanical and zoological terminography, but because of the absence of a script-based ordering system at the time. When the system of ordering by classifiers introduced by Xu³ Shen⁴ (58-147 AD) in the *Shuol wen² jie² zi⁴* (“Explanation of Simple and Compound Characters”), this became the preferred method of ordering. Classifier ordering therefore became dominant in China long before alphabetic ordering in Europe. During the Sui, Tang, and Song periods (581-1279), scholars developed a new method of ordering based on tone and sound as represented by the fun³ *qie⁴* system of representing initials and finals. Dictionaries ordered in this way, the so-called *rhyme dictionaries*, included notably the *Qie¹yun⁴* and *Guang³yun⁴*. Finally, after the founding of the People’s Republic of China (PRC), the Pinyin system of transcription into Roman characters has led to the publication of some alphabetically ordered dictionaries.

The *Er²ya³* defines words primarily by a series of synonyms. By contrast, the *Shuol wen²* provides a short definition of each character in a few words together with a comment on the construction of the character. The definitions are generally terse, somewhat crude, but nonetheless practical. The word *yi⁴*, ‘epidemic’, for example, is defined as “all the people sick” *mint jie¹ ji²*.¹ The *Shuol wen²*’s definitions were expanded in the *Yu⁴pian¹* (“Jade Slips”) of 547-549 AD, compiled by Gu Ye-Wang. The *Kang¹xi¹zi⁴dian³* (“[Emperor] Kangxi’s Dictionary”) of 1716, compiled under the direction of Zhang¹ Yu⁴-Shu¹ and Chen² Ting¹-Jing¹, drew its definitions from the *Shuol wen²*, and other earlier dictionaries, and illustrated usage through quotations from a variety of classical sources. Although multiple definitions covered different meanings of characters, the *Zhong¹hua²zi⁴dian³* (“China Dictionary”) of 1915, compiled under the direction of Lu⁴ Fei⁴-Kui² (Lu 1915), was apparently the first to separate and number distinct senses.

A final development in lexicography that came with the *Ci²yuan²* (“Source of Words”) edited by Lu⁴ Er³-Kui² (1862-1935) was the practice of defining character compounds (*ci²*) as well as individual characters (*zi⁴*). This development reflected the abandonment of the predominantly monosyllabic classical language as the model for writing and the development of a written style based primarily on the highly polysyllabic vernacular. Spoken Chinese had started to become increasingly polysyllabic before the end of the Old Chinese period on which classical literary writing was based, and the development of compound-character dictionaries was delayed by two thousand years for the simple reason that lexicographers traditionally described the written classical language rather than the vernacular.

Despite the importance of lexicography in Chinese linguistic investigations, and despite the vast and complex body of medical knowledge that relied, as modern medicine does, on the written word for its transmission between individuals and through time, the utility of a Chinese medical dictionary providing access to meanings of single and compound terms in a continually evolving and expanding terminology was apparently not perceived before the modern age. This

¹ *The Random House Dictionary of the English Language (second unabridged edition) defines the English word epidemic as: “(of a disease) affecting many persons at the same time, and spreading from person to person in a locality where the disease is not permanently prevalent.”*

is actually not surprising since the full development of the notion of the technical dictionary did not come until after the birth of modern science in the West when the increasing volume, abstraction, specialization and systematization of knowledge began to pose a growing need for terminological management to ensure unequivocal communication between growing numbers of individuals in the generation and use of knowledge. In the Western world, the technical dictionary serves the purpose of translation that general dictionaries have perennially served. With the growing complexity of scientific and technical knowledge and a tendency in most European languages to derive new technical vocabulary from Latin and Greek, technical terms are often opaque, and the technical dictionary, giving the etymology of terms and their specific definitions, provides the link necessary link between the literal meaning of a term and its specific technical meaning.

It would be a mistake if we were to assume that Chinese medicine had no dictionaries of its own because it had no terminology. The modern terminologist would have no doubts about classifying the language of Chinese medicine as a “language for special purposes” (LSP) both on the social criterion that it is used by a limited group of people engaged in a common activity and on the linguistic criterion that it uses terms not used in the “language for general purposes” (LGP) and uses LGP expressions in technical senses.

Yet, since the Chinese were familiar with the notion of the dictionary from the earliest times, it is quite pertinent to ask why dictionaries of Chinese medical terms were such a late development. There would appear to be two main reasons for this. The first is that like other premodern disciplines Chinese medical knowledge was the product of reasoning and speculation about phenomena that could be observed by the lay. Its observations were supplied by the naked human senses without any technologically sophisticated instrumentation as used in the modern sciences. Accordingly, the lexis of Chinese medicine is close to that of the LGP. Many Chinese medical terms are specific or metaphorical uses of expressions in the lay language. As terminologists know, many terms in all languages for special purposes LSPs, are, despite semantic differences, morphologically indistinguishable from LGP expressions. In Chinese medical terminology, the morphological overlap between LSP and LGP is extremely high. Chinese rarely borrows from foreign languages and meets new vocabulary needs with its own resources. Technical terms are special usages or special collocations of monosyllabic morphemes (the unit written with a single character) of the LGP, and given the traditional focus in general lexicography to regard the individual character as the basic unit of vocabulary (equivalent to our “word”) rather than on collocations, the technical nature lay partly outside the focus of scrutiny. Consequently, although expressions were understood to have a “technical significance,” this did not lead to categorical differentiation of “technical terms” from “ordinary expressions.”

A second reason for the absence of Chinese medical dictionaries is that the technical meaning of words and expressions was not isolated from context. Medicine was understood through the study of medical texts of the past, especially those that came to be canonized. Human authority naturally played the central role in judging what was sound knowledge in the absence of our modern notions of demonstration by experiment as the arbiter of scientific fact. Authors of the

past were traditionally read for their insights and experience, and the earliest texts continued to be revered alongside later texts. Therefore the “technical significance” of expressions was to be understood through their *loci classici*. In pre-modern China, there was no distinction between “humanities” and “science”, and Chinese medicine was essentially a “humanity,” studied in manner to the way in which philosophy is studied today in the West.

Thus, while we can see the reasons for the failure of Chinese medicine to develop the notion of the technical dictionary before the modern era, the reasons why a prompt from the West has given rise to a considerable flurry of lexicographical activity in the field of Chinese medicine in this century are equally apparent.

If one discounts the various compilations of the *Bencao* (materia medica) and systematized presentations such as the *Zhuibing yuanzhoulun* (“On the Origin and Manifestations of Disease”) that clearly possessed a germ of lexicographical value, Hsieh Kuan’s *Zhongguo yixue daqi dian* (ZGYXDCD-21) published in 1921 was the first compilation of Chinese medical terms including general terms of basic theory, disease names, symptom names, drug names, formula names, etc., listed in script-based order. The original edition spans 4,700 pages and in terms of the total number of characters, it is comparable in size to the 1995 *Zhongguo yixue daqi dian* (ZYDCD-95), and considerably larger than earlier PRC general Chinese medical dictionaries. Hsieh Kuan’s work was obviously inspired by the existence of technical dictionaries in Western disciplines, and it was no half-hearted effort to Chinese medicine abreast of times by providing a new means of access to knowledge.

Hsieh Kuan wrote at a time when the impact of Western scientific and technical knowledge and economic power had undermined the foundations of the imperial age, and had set China on a course of modernization that involved the adoption of Western learning in every sphere. A major consequence of the impact on Western learning for Chinese medicine lay in new criteria governing what was acceptable knowledge. Chinese medicine had never been a monolithic body of knowledge and practice like modern Western medicine. Rather, it was an array of different healing practices based to a varying degree on a set of loosely interrelated ideas concerning human health and sickness. As different ideas and approaches to healing arose, they were added to the corpus of Chinese medical knowledge. The Chinese medical world as a whole always had a high tolerance of different ideas about any one given phenomenon (Unschuld 1988). A classic example of this is seen in two different schools of thought concerning febrile disease: the cold damage (*shanghan*) and warm disease (*wenbing*) schools that have continued into the modern era. The Chinese medical world never developed the notion of progress towards an ever clearer understanding of reality.

When Hsieh Kuan stated in the preface to his dictionary that “To establish a continuity of thought, preserve the essentials, and eliminate superfluities, nothing equals a dictionary,” he was not merely commenting on the value of dictionaries; he was hinting at the problem of what elements of the vast accumulation of Chinese medical knowledge would be acceptable to the Chinese of a new era who were to receive in their general education the knowledge not of their own forefathers but of a distant, yet increasingly familiar, irresistibly potent, Western civilization.

Since the impact of Western culture, there has been continual debate about the merits and failings of Chinese medicine, and whether it should undergo reform in order to survive in the modern era (Unschuld 1985). One view that has been consistently dominant not only in China but also Japan and Korea is that effort must be made to establish the scientific bases of traditional medicine, and eliminate from practice those elements not found to be scientifically substantiable. The governments of these countries have all adopted Western medicine as the main form of healing, and their support for or tolerance of traditional Chinese medicine has to a greater or lesser extent been contingent upon the scientization of Chinese medicine. Modern research has provided considerable evidence to substantiate the efficacy of traditional therapies, but has found little proof for the basic theories of Chinese medicine. A completely scientific explanation of Chinese theory at this point seems unlikely. Nevertheless, a considerable amount of rationalization has been achieved in extracting deterministic elements and by excluding from school curricula all demonological, metaphysical, or fanciful strains that were omnipresent in the traditional arena since time immemorial.

The urge to scientization does not wholly explain the changes Chinese medicine has undergone in the modern era. The challenge of Western medicine was met after 1949 with the apparent realization that Chinese medical treatment is largely based on pathologies that can be identified macroscopically, without the aid of laboratory equipment. Chinese medicine's approach is based on a differential diagnosis of multiple gross phenomena such as the pulse, complexion, tongue, etc. While its disease categories are found to be imprecise, the pathological patterns (*zheng₄*) that characterize different stages and etiologies of illness and that can be deduced directly from gross manifestations of diseases represent a holistic approach to healing absent in Western medicine. The capacity to provide holistic style of therapy tailored to individual has been vigorously developed in order to recast the role of Chinese medicine as a complement to that of Western medicine.

The development of Chinese medicine in the 20th century has been closely related to changes in the mode of transmission and presentation. The master-apprenticeship relationship has been almost completely replaced by the modern methods of mass education, and modern carefully structured textbooks have to a large extent replaced direct study of the classics. Furthermore, control of education by the central government has encouraged a uniformity of curricula that has considerably reduced the variety of practice.

It is within this modern academic environment that the technical dictionary has its *raison d'être*. With the insertion of Chinese medicine in the modern framework of transmission and exchange of knowledge, the notion of a Chinese medical dictionary obviously is of immediate appeal. On a practical level, a Chinese medical dictionary not only serves the purpose of providing definitions of terms, but also provides an excellent means of access to a vast corpus of medical literature. Potentially, it also offers possibilities for terminological management by being able to promote standardized usage. From a purely esthetic point of view, no technical discipline of any rank is considered complete in the modern world unless it has its own dictionary.

Lexicographical works have proliferated over the past thirty years.

There are several general dictionaries of Chinese medicine, some with over ten thousand terms. In addition, there a number of specialist dictionaries devoted to types of therapy, specific schools of thought, and specific works. There are pharmacopoeia,¹ dictionaries of acupuncture, dictionaries of the ‘cold damage’ (*shang1han2*), and ‘warm diseases’ (*wen1bing4*) schools of thought, concordances listing single characters and collocations appearing in the *Nei4jing1*, the first major surviving text of Chinese medicine, revered for centuries as the first authority in matters of medicine. The nature of specialist dictionaries appears to reflect the unique role that dictionaries can play in a retrospective discipline. Given the importance of the single Chinese character in the makeup of a terminology of a technical rooted in the more purely monosyllabic classical language, it is not surprising that we find a number of single-character dictionaries.

In the following paragraphs, I would like to compare various Chinese medical dictionaries including the *Zhong1guo2yi1xue2ci2dian3* (ZGYXDCD-21) of 1921 and some of the dictionaries that began to appear in the PRC 50 years later, in particular the most recent publication, the *Zhong1yi1Da4ci2dian2* (ZYDCD-95) in order to understand the trends in Chinese medical terminography. A comprehensive list of general Chinese medical works is given at the end of this discussion. Dictionaries examined for the purpose of this study and mentioned in the discussion by abbreviation of the Pinyin name with the last two digits of the date are marked with an asterisk in the list.

Selection of entries

One of the first tasks in writing a dictionary lies in deciding the range of terms to be defined. Considerable differences between dictionaries in the choice of entries reflect the nature of Chinese medicine and its development in time.

In view of the immensity of human language in its synchronic and diachronic dimensions, all dictionaries have to be carefully trimmed to a manageable size and suitably tailored to the needs of a particular readership. The lexicographer of Chinese medicine faces a particularly daunting problem since a comprehensive dictionary of Chinese medical terms that have accumulated over two thousand years could potentially spread to multiple volumes of Bible paper. He has to therefore to decide what to include and perhaps more importantly what to exclude. He naturally bases his choice on what he considers to be useful to the reader. A statement contained in the *Plan for the Compilation of the Zhonglyil Ci2dian* (subsequently renamed as the *Zhonglyil Da4ci2dian*) that characterizes term selection not only of this work but all previous PRC dictionaries and even ZGYXDCD-21 too: “Term selection should center on the terms consistently used by successive generations of physicians, including commonly used Chinese medical terms, and the same time paying attention to terminology that has arisen in the modern development of Chinese medicine.”

In focusing on “terms consistently used by successive generations of physicians” and “commonly used terms,” dictionaries of Chinese medicine have neglected an inestimable number of “less commonly used” terms. For example, many of the disease categories of the *Zhu1bing4yuan2hou2lun4* are not included, and notably most of vast

¹Notably Jiang1su1Xin1yi1xue2yuan4, *Zhong1yao4da4ci2dian3*, Shanghai3
1ke1ji4Chulban3she4, 1977.

terminology relating to categorization of sores and eyes disease are ignored. These terms are no longer in common use, and have been natural targets for exclusion. Yet given the retrospective nature of Chinese medicine, no dictionary that does not include a comprehensive range of past terms can be called complete.

Certain commonly used terms have been excluded from the dictionaries examined. This may have happened through oversight or because they are not considered to be technical terms or to at least be self-explanatory. For example, of all the dictionaries examined, all those published since 1949 do not include *bing4*, 'illness' or 'disease', *ji2*, 'disease', *zheng4*, 'pattern' or 'manifestation of illness', *tong4*, 'pain', and *suan1*, 'aching' or 'soreness'. Only ZGYXDCD-21 included them. Modern lexicography generally recognizes that even simple words everyone knows should be included in a dictionary. Even concepts that are naturally most effectively explained by ostensive definition (showing the learner the thing denoted by the word) are given a lexical definition on the grounds that "It is precisely this interplay between lexical and ostensive definition that refines and specifies our knowledge" (Landau 1984). General Chinese dictionaries from the earliest times have always included simple words as a matter of course, probably for the same reason. According Li Jing-Wei, the one of the chief editors of the ZYDCD-95, his team omitted these words because they are largely self-explanatory, and in any event can be found in single-character dictionaries.³ However, the fact that most of them are all used in more than one sense, and, in particular, the meaning of *zheng4* has been a matter of considerable debate would ideally warrant their inclusion.

Also omitted are certain terms whose technical nature is beyond dispute. It is noteworthy that ZGYXDCD-21 excludes virtually all therapeutic terms such as *qing1 re4*, 'clear heat', *xie4 huo3*, 'drain fire', *jie3 biao3*, 'resolve the exterior', and *jian4 pi2*, 'fortify the spleen'. These terms first appeared in the later PRC dictionaries. They are by no means new interventions since they appear in commonly used formula names such as e.g., *qing1 re4 jie3 du2 wan2*, Heat-Clearing Toxin-Resolving Pill, which the ZGYXDCD-21 includes. If it is admitted that since most of these terms are generally unfamiliar to the lay person, they are "strictly technical" terms, it seems strange that they should have been omitted. One can only assume that Hsieh Kuan considered them to be self-explanatory. However, the terminology of therapeutic actions sometimes implies subtle distinctions that cannot be deduced from the lexical meaning alone. The unfamiliar reader might assume that 'to transform dampness' and 'to dry dampness' both loosely mean 'to eliminate dampness', and would be unlikely to guess that the former connotes elimination of dampness in the upper burner (chest) while the latter connotes elimination of dampness in the middle burner (stomach and spleen). Modern terminologists continue to stress that technical terms include not only terms unfamiliar to the lay (such as Greek or Latin-derived terms in English), but also many lay words used in a technical sense. Given the tendency to judge those lexical items as technical that are unfamiliar to us, it is not surprising that the first dictionaries of Chinese medicine should contain oversights of this kind. Indeed, as I have already said, that fact most of the characters used Chinese medical terminology are commonly used by in the LGP probably accounts for

³Personal communication.

late development of Chinese medical dictionaries.

Chinese medical lexicographers are relatively conservative in their term selection. Terms are largely chosen from a limited gamut of authoritative works of the past. Even the most cursory glance at any of the works in hand suffices to detect the prominence of terms contained in canonized texts such as the *Nei4jing1*, *Nan4jing1*, *Jing1gui4 yao4lue4* and *Shang1han2lun4*, *Zhu1bing4 yuan2hou2lun4*, *Jing1yue4 quan2shu1*, and *Wen1bing4 tiao2bian4*, etc. A preference for classical terms still continues to this day, and would appear to be in keeping with the traditional classic-oriented approach to learning that is observed in traditional Chinese lexicography, and that reflects the essential dependence of Chinese medicine on human authority. The continuing emphasis on classical terms is further reflected in the existence of dictionaries and glossaries on specific classics such as the *Nei4jing1* and *Shang1han2lun4*. A corollary of such a preference is the neglect of non-classical latterday terms, even of those frequently encountered in modern and premodern texts. For example, *ming2 mu4*, ‘brighten the eyes’ (or ‘enhance vision’), a commonly used term in traditional literature, does not appear in any of the dictionaries examined, despite the fact that it is a technical term whose literal meaning is not as precise as its definition. Again, *da4 bian4 bu4 shuang3*, ‘ungratifying defecation’, appears in none of the dictionaries examined, despite its frequent use in modern texts, and despite its clinical significance. A further example, *chi3 yin2 jie2 ban4*, ‘petaled gums’, a term appearing in the work of Ye4 Tianl-Shi4, and not uncommon in modern texts, is not self-explanatory, and yet despite this, of all the dictionaries examined, the ZYDCD-95 is the first to include it. Omissions of this kind can only be explained by insufficient textual analysis in term selection and misjudgment of what constitutes self-explanatoriness.

Certain differences in terms included in ZGYXD-21 and the PRC works in the latter half of this century reflect Chinese medicine’s response to the challenge of Western medicine in this century. There is evidence to show that Hsieh Kuan, writing his work at a time when the cognitive basis of Chinese medicine had already been severely weakened, screened concepts for their estimated viability in the modern age. Western medicine’s focus on the physical body and microorganisms that cause disease may possibly have influenced his decision to omit *hun2*, the ethereal soul, and *po4*, the corporeal soul,⁴ and to include descriptions and illustrations of the “worms” (*chong2*) that he believed to cause *chuan2 shil lao2*, ‘corpse-transmitted taxation’. Hsieh Kuan included *tian1 Zing2 gai4*, “celestial spirit cover,” the pharmaceutical name traditionally given the human skull used as a drug, in the ZGYXD-21, as did the 1934 *Zhong1guo2 yao4xue2 da4ci2dian3* (“Chinese Pharmaceutical Dictionary”) (Chen 1934). After the founding of the PRC, standard materia medica such as the *Zhong1yao4 Da4ci2dian3* (JSCXIXY 1978) and all the general dictionaries examined have excluded this term, although the ZYDCD-95 includes as an anatomical item rather than a drug. Thus, there is clear evidence that the need to represent the history of Chinese medicine faithfully is sacrificed to the imperative of grooming Chinese medicine to the taste and sense of reason of a modern readership.

Certain new inclusions also reflect new developments in practice of

⁴These concepts were to reappear later in PRC dictionaries despite the influence of dialectical materialism.

Chinese medicine. The ZYDCD-95 contains, for example, 24 pathologies associated with the liver, many of which will be familiar to Western readers: *gan1 qi4 yu4 jie2*, 'binding depression of liver qi', *gan1 yang2 shang4 kang4*, 'ascendant hyperactivity of liver yang', etc. Hsieh Kuan's work only contained a quarter of the number, not even half of which coincide with the modern 24. A similar state of affairs is to be noted in pathologies associated with the other major organs lying within the Chinese purview, and the pathologies associated with the major *xie2*, 'evils'. Despite the large number of terms included in both the ZGYXDCD-21 and the ZYDCD-95, the importance of the terms "added" to the modern dictionary cannot be overlooked: they are among the most commonly encountered terms in modern Chinese medical texts. Chinese medicine is now expressing itself in terms which only eighty years ago either did not exist or which were not considered to be conceptual or terminological entities eligible for inclusion in a dictionary.

None of these "new" terms represents a newly discovered etiology and many if not most do not constitute new linguistic expressions. What has happened is that etiological descriptions, or more precisely, the final stage of an etiological description, has been raised from the level of a description component to that of a solid concept. It has become a thing, an entity that is now the end-product of diagnosis upon which a treatment strategy can be based. In terms of Western languages, we see a stride from a verbal or adjectival description (e.g., 'liver fire flames upward') to a nominal or substantive consolidation ('liver fire flaming upward' or 'the upward flaming of liver fire'). In none of these cases is the conceptualization marked linguistically in Chinese since a descriptive statement can be used as a nominal concept.⁵ However, the inclusion of such terms in a dictionary per se is evidence of the conceptual transformation, given their previous absence.

In this context, it is also of interest to note that the term 'administering treatment in accordance with patterns identified' (*bian4 zheng4 lun4 zhi4*), now commonly used to label the approach of treatment based on differential diagnosis of symptom complexes, did not appear until the 16th century, and 'determining treatment in according with patterns' (*bian4 zheng4 lun4 zhi4*) not until 1825 (Zhen 1994), although *bian4 zheng4* is considerably earlier. Neither of these terms were in Hsieh Kuan's work; it is only over the last 50 years that the terms have been commonly used, and the notions they represent have been clearly conceived as central features of Chinese medicine. Although pattern identification dates back to beginnings of Chinese medicine as an approach to healing, it is only in this century that it has been consciously developed as one if not the essential feature of China's healing art now always viewed in comparison with or in contrast to, in any event, in relationship to Western medicine which is now the sole arbitrator of medical matters. It has also been pointed out that the term *bian4 zheng4*, homophonous with the Chinese equivalent of the term 'dialectics', may have been brought into currency by a desire to make Chinese medicine politically acceptable (Unschuld 1985).

⁵The conceptualization of noun + adjective descriptions is sometimes parallel with a switch in the order. This is observed historically in the terminology of pulse conditions. In the Jin-Yuan period terms such 'floating pulse' came to replace pulse [is] floating when they were considered to represent fixed categories.

Term selections narrowed markedly in the works of the earlier dictionaries of the PRC. On the subject of menstruation, the ZGYXDCD-21 includes simple descriptive terms such as *jing1 shui3 xian1qi2*, ‘advanced menstruation’ (early periods), *jing1 shui3 hou4qi2*, ‘delayed menstruation’ (overdue periods), and *jing1hou4 fu4tong4*, ‘post-menstrual abdominal pain’, as well as more fanciful terms such as *jing1 ru2 yu2 nao3*, ‘menstrual flow like fish brains’, *jing1 ru2 wu1 lou4 shui3*, ‘menstrual flow like a leaky roof’, *jing1ru2 qin2 shou4xing2*, ‘menstrual flow with animal-shaped lumps’, and *jing1 ru2 ha2 ma2 zi3*, ‘toad-egg menses’ denoting less easily determinable conditions. This gamut was reduced in the earlier PRC dictionaries, and the sober analytical diagnostic categories *jing1 zhi4*, ‘consistency of menstrual flow’, *jing1 se4*, ‘color of menstrual flow’, and *jing1 liang4*, ‘volume of menstrual flow’, were added. In the ZYDCD-95, however, we see the reappearance of the older terms, and this would appear to be illustrative of a general trend in term selection. The ZGYXDCD-21 was written at a time when the influence of Western medicine, although quite definitely present, had not yet unleashed the response to its challenge that Chinese medicine was to give. The terms it includes are largely those chosen by a Chinese medical man in a traditional Chinese medical environment. The early dictionaries of the PRC period reflect a pruning of Chinese medical concepts and terms to a reduced set that could represent Chinese medicine as a “rational alternative” to Western medicine. Of course, a total reduction to scientifically valid concepts was not-and indeed is still not-possible (to discard the speculative concepts of qi and the channels along which it is said to flow would be to discard the theoretical foundations of Chinese medicine altogether). The rationalization process also involved the development of “new” concepts and terms out of the traditional fabric of Chinese medicine to fit a more systematized approach to diagnosis and treatment. The latest dictionary includes both old and new terms. It evidences a greater tolerance of the past that is undoubtedly the result of an abatement of Marxist fervor that had once led to a purge on bourgeois terminology in which, for example, *san1 zi3 yang3 qing1tang1*, ‘Three-Seed Filial Devotion Decoction’ was changed to ‘Three-Seed Decoction’; it may reflect the recent widening of medical interest in an increasingly affluent China to consider the cognitive roots of knowledge and the influence of general cultural factors on the development of medical systems.

Definitions

Definitions are often classified by modern lexicographers as intensional, extensional, and contextual (Picht 1985). An intensional definition gives all the essential distinguishing attributes of the concept (e.g., *dysentery*: a disease characterized by blood and pus in the stool and tenesmus). It is generally considered ideal insofar as it covers all the extralinguistic referents. An extensional definition lists all the specific things denoted by the concept (e.g., *the five viscera*: the liver, spleen, heart, lung, and kidney). It is generally considered inferior to the intensional definition insofar as a complete list of objects covered would often be too long (e.g., *fruit*: apple, orange, banana, gooseberry, papaya, kumquat, strawberry, raspberry, kiwi.. .), and does not specify what characteristics unite the various extensions. A contextual definition is one in which the term is defined by way of an actual usage. The term to be defined is shown in a sentence the

whole meaning of which is known or may be guessed (e.g., aircraft: “He went from Europe to America in 6 hours in an N.” The contextual definition is the poorest because it presumes that the reader is familiar with the concept, and does increase his knowledge, although as a complement to an intensional definition it can provide useful examples of usage.

It has become standard practice in general and technical lexicography in the West to give each term an intensional definition as a bare minimum, and to add extensional definitions and examples of usage where deemed necessary. Chinese medical lexicography appears to be moving toward this approach, but is still some way from it. Although most terms are defined intensionally, extensional definitions are common, and, especially in the ZGYXDCD-21, contextual definitions comprising quotations from *Nei4jing1* in which the term appears are also seen. In addition, a number of terms are given faulty definitions and some are given no definition at all. Over recent years, attention has been given to the problem of defining Chinese terms in the context of discussion about Chinese medical education (e.g., Wang 1993). Effort is being made to bring definitions of Chinese medicinal terms in line with the principles of defining that modern lexicographers apply. Difficulties in achieving such an alignment are attributable to traditional habits of defining, to the nature of Chinese medical concepts, and to overestimation of the degree to which words are self-explanatory.

Intensional definitions have increased over the history of Chinese medical lexicography. In the ZYDCD-95, 痢4 jì2, ‘dysentery’, is defined as “a disease characterized by abdominal pain, with frequent passing of small amounts of stool, tenesmus, and passing of stool containing mucus and pus and blood”; 霍4 luan4, ‘cholera’, as “a disease characterized by sudden acute vomiting and diarrhea with gripping abdominal pain,” and 疟94 ji2, ‘malaria’, as “a contagious disease characterized by intermittent shivering, high fever, and sweating.” These definitions, though somewhat modern in flavor, reflect characteristics by which these diseases were traditionally diagnosed.⁶ The ZGYXDCD-21 provides a clear intensional definition for ‘dysentery’, but defines the other two by a quotation from the *Nei4jing1* in which the terms appear. Similarly, methods of treatment such as 润4 fei4 hua4 tan2, ‘moisten the lung and transform phlegm’, 理3 qi4, ‘rectify qi’, and 补3 xue4, ‘supplement the blood’, which are defined intensionally in recent dictionaries, do not even appear in ZGYXDCD-21.

Extensional definitions are numerous. Many of these, observed primarily in the many Chinese medical terms that include numerals, such as 七4 qiao4, the ‘seven orifices’. This particular example shows how an extensional definition can avoid a difficulty in writing an intensional definition. The seven orifices are normally taken to mean the two eyes, two ears, two nostrils, the mouth, anterior yin (urethra), and posterior yin (anus), all of which, with the eyes possibly as a partial example, can be understood as ‘orifices’. However the *Lingtsul*, 两4 du4 also uses the same term to denote the two ears, two eyes, two nostrils, mouth, tongue, and throat. Here the notion of the ‘tongue’ as an ‘orifice’ is more difficult to understand, since the lexical meaning of orifice clashes with the objective mean-

⁶Of these three terms, the *Shuo1 wen2 jie2 zi4* contains only malaria, which it defines as “a disease of intermittent cold and heat.”

ing. An intensional definition of ‘orifice’ that explained the meaning clearly while remaining within the traditional Chinese medical frame of reference would be virtually impossible (“any of a variable set of body parts considered as openings”?). The extensional definition, by contrast, establishes a general pattern of denotation in the relationship between lexical and objective meanings (the ears, nostrils, and anus etc., are all holes) that enables the reader to accommodate the exception (the tongue as an “orifice”) by his own powers of abstraction, without tedious explanation. ‘Another classic example is the extension definition of the *wu3 zang4*, ‘the five viscera’, and *liu4 fu3*, ‘the six bowels’. Dictionaries do quote the *Su4 Wen4*’s intensional distinction, “The so-called five viscera store essential qi and do not discharge waste. Thus they are full, but cannot be filled. The six bowels process and convey matter, and do not store. Thus they are filled, yet are not full.” However, these intensional hints would not enable readers to identify the organs of either class with any unanimity. Like so many classical statements, this offers food for thought, but no conclusive definition.

The widespread use of extensional definitions reflects the nature of Chinese medical concepts. The same is true of contextual definitions. The term *shen4 kai1 qiao4 yu2 er4 yin1*, ‘the kidney opens into the two yin’, only appears in SYCD-79 and ZYCS-83, and in both it is given a contextual definition for the obvious reason that while the kidney has a direct ontological relationship with the anterior yin (the opening of the urethra), it has only a functional relationship to the posterior yin (the anus). An intensional definition of the term reflecting all the elements of the term, and its significance would be difficult.

Definitions that would be considered defective by modern lexicographical standards continue to appear, although with decreasing frequency as lexicographers become aware of the pitfalls. Definitions that are excessively restrictive, circular or that do not ensure sufficient differentiation of one concept from others are all observed in the dictionaries examined.

An excessively restrictive definition is one which does not cover all the extensions of a term. Defining *qi4 yu4*, ‘qi depression’, as “depression due to constrainedness among the seven affects” (ZYDCD-95), quite apart from the introducing a circularity (defining depression as depression) and failing to define all components of the term (qi is not accounted for in the definition), is an excessively restrictive definition in that it fails to reflect the fact that ‘qi depression’, is often used in the sense of qi stagnation due to causes other than emotional disturbance. Defining *chan3 men2* as the “external opening of the vagina” (orificium vaginae) (ZYDCD-95) would not appear to apply in all contexts. Zhang1 Jie4-Bin1, for example, appears to use the term in the sense of cervix.⁷ An excessively restrictive definition of this kind may be the result of failure to analyze the meanings of terms in multiple contexts; it may be motivated by the need to save space or by the desire to enhance the image of Chinese medical concepts by giving them a specificity they do not actually have.

Circular definition, i.e., a definition which includes the definiendum, is seen in *er3 yang3*, ‘itchy ear’ (lit. ‘ear itching’), which, in the

⁷In *Lei4jing1 fu4yi4, qiu2zheng4 lu4, san1jiaol bao1luo4 ming2men2 bian4*: “Below the uterus is a gate that in women can be felt with the hand and which is commonly called the birth-gate.” Any description of an exterior part of the body would not require the qualification “can be felt with the hand”

dictionaries that include the term, is given a circular definition that involves explaining *yang3*, 'itching', as *qi2 yang3*, 'strange itching', whereby the addition of the word 'strange' merely averts attention away from the fact that 'itching' is defined as 'itching'. Similarly, in Hsieh Kuan's definition of *xuan4 yun1*, 'dizziness', as *tou2 mu4 hun1 xuan4 er2 yun1 jue2*, both *xuan4*, 'dizziness of the eyes', and *yun1*, 'dizziness of the head', appear in the definition. This kind of circularity, more often seen in clinical and pedagogical texts, has been criticized,⁸ not entirely without justification, although it is easy to forget that it is rooted in the Chinese speech habit of identifying a character among multiple homophones by commonly used character combinations. The difference between specifying a sense of a word and defining a word in one or more of its senses is finely drawn. Furthermore, since most Chinese medical dictionaries are to a greater or lesser degree encyclopedic, and the reason for including terms is to provide practical information about the concepts they represent. The circularity in the definition for 'itchy ear' is largely irrelevant since the clinical information about associated symptoms, causes, and methods of treatment is actually much more important for most readers.

In some areas, definitions are lacking in system. At *bi2 gan1 chuang1*, 'gan sores of the nose' are given the synonyms *bi2 ni4 chuang1*, 'invisible-worms sores of the nose', and *ni4 bi2*, 'invisible worms in the nose'. At the entries of these names, instead of references to *bi2 ni4 chuang1* as one might expect, there are definitions that are similar but not identical to the definition of *bi2 ni4 chuang1*. Problems of this nature are most likely attributable to the use multiple sources amongst which there is disagreement over the definition and hence over the synonymy of terms. Chinese medical terms often lack objective definitions or definitions generally accepted by the medical community as a whole, and when they do, the only definition possible is the one offered by the original author of the concept.

This insufficient clarity in the system of definitions affects a number of commonly used terms. What the exact meanings of *qi4 shao3*, 'qi shortage', *shao3 qi4*, 'diminished qi', *qi4 duan3*, 'shortness of breath', *chuan3*, 'panting', *chuan3 ni4*, 'panting counterflow', *qi4 cu4*, 'hasty breathing', and *qi4 ji2*, 'rapid breathing', and how these concepts relate to each other insofar as they are not complete synonyms is not clarified by any of the dictionaries examined. The same problem applies to *shui3 zhong3*, 'water swelling', *fu2 zhong3*, 'puffy swelling', *qi4 zhong3*, 'qi swelling', *xu1 zhong3*, 'vacuity swelling', and *xu1 fu2*, 'vacuity puffiness'. Insufficient definitions are essentially ones that are not complete. A high proportion of disease definitions comprising manifestation and causes tell us that the disease is "usually caused by X" without describing less frequent causes. Unclear definitions conform to a traditional tendency observed among medical writers not to consider the the problems of decoding a written text created by faulty encoding. It seemed always to be taken for granted that the reader had to rely on his own experience and intuition ("epidemic: the people all sick").

A good number of terms are left undefined in all the dictionaries examined. This is presumably due to their assumed self-explanatoriness.

⁸ An example of commentary of on the problem is *Guan1 yu2 wu3 ban3 jiao4 cai2* "Zhong1 yi1 nei4 ke1 xue2" zhong1 "lei4 zheng4 jian4 bie2" de shang1 tao3, an article By Wang2 Zhi4-Tan3 discussing the problems of definition in Chinese medical concepts by giving them a specificity they do not actually have.

Compound terms comprising the names of signs such as *tong4* ‘pain’, *tong4* ‘aching’, or *zhang4* ‘distention’ with the names of the affected body part are often simply left undefined, and as stated, these symptom names usually not defined in separate entries. The modern lexicographer’s principle that even self-explanatory terms should be defined rests on the notion that all self-explanatoriness is often illusory and hence vulnerable to scrutiny. Although a difference in meaning *tong4*, ‘pain’ and *suan1*, ‘aching’ or ‘soreness’, that is of diagnostic significance is consistently reported by native speakers of Chinese, it is not made explicitly clear in dictionaries. Of course, as has already been stated, many terms are included to provide the reader with practical information rather than a fairly obvious definition. However, there is some evidence to suggest that Chinese medical lexicographers could set themselves higher standards in the matter of definition. Some terms left undefined pose the problem of incongruence between lexical meaning and denotative meaning. The lexical meaning of term *si4 zhi1*, lit. “four limbs,” suggests “all four limbs,” the term is often used to denote simply ‘limbs’, and the compound *si4 zhi1 tong4*, lit. “four limb pain,” denotes pain in one or more of the limbs. The same phenomenon is observed in *nei4 shang1 qi1 qing2*, lit. “internal damage [by the] seven affects,” where in actual fact the term may denote internal damage by one or more of the seven affects, rarely in practice by all seven at once.

Information

All the dictionaries examined are to a greater or lesser extent encyclopedic. Many if not most of the entries contain more than a mere definition of the term. For classical terms, a source book is usually included. Symptom term entries usually include the diagnostic significance, and disease term entries often include information about treatment. In dictionaries that include them, drug and formula entries include actions and indications, formulas further including ingredients.

Unfortunately, the practice of giving sources is restricted to terms from the major classics. Modern terms that have assumed a high frequency of usage, such as the organ pattern names (heart qi vacuity, ascendant hyperactivity of liver yang, kidney yang vacuity, etc.) do not include such references. In view of the prevalence of such terms in modern literature and the importance of the historical perspective in traditional Chinese medical knowledge, such information would be of potential value to readers. Its exclusion hides from the reader the mechanisms underlying modern developments in Chinese medicine, which, given its continuing authority-based structure, are not always dictated by technical considerations.

All the dictionaries examined mark pronunciation only for terms considered difficult, but by no means for the full gamut of characters whose pronunciation by students and practitioners deviates from the standard pronunciation given in general dictionaries. Thus they do not follow recent trends in Chinese general lexicography to impose standard pronunciations on the multiplicity of possible renderings once recognized by authorities of the past.

Despite the influence of Western medicine, very few Western medical terms are included as entries. A notable exception is a *jing1 qian2 qi2 jin3 zhang1 zong4 he2 zheng4*, premenstrual syndrome in the
Nevertheless, numerous Western medical terms appear

both in definitions and in the clinical information provided: spasm, hydrothorax, ascites, high fever, loss of visual acuity, digestion, and atrophy, but it marks the attrition of the conceptual foundations of Chinese medicine. In most cases, the encroachment of Western medical terms seems insignificant, but the explanation of Chinese medical terms in the language of Western medicine nevertheless reflects greater currency of Western medical terms in Chinese society. All PRC dictionaries give Latin scientific names for the animal, vegetable, and mineral sources of drugs. The ZYDCD-95 introduced a novelty, hitherto unobserved in general Chinese medical dictionaries although of course widespread in modern pharmaceutical works, of including the principal chemical constituents of Chinese drugs. Anatomical entities are often defined by a simple correspondence to Western anatomical entities. The above-mentioned example of 'birth gate', which, defined as the 'external opening of the vagina', may be introducing a simplification of the matter, is not an isolated example. Disease entities often include correspondences in Western medicine. The format of this latter trend, interestingly, does not specify the Western medical disease entity as being a Western medical name, even when the Western name is a term used in Chinese medicine. The significance of this is that the Western medical term for the modern Chinese reader embodies the true identity of the condition, and that the traditional Chinese concept is only a primitive approximation. This loss of faith in traditional concepts, observed even among proponents of Chinese medicine, is reflected in the fact that the Chinese themselves now refer to their traditional healing arts as "Chinese medicine" (*zhong1yi1*), reserving the term *yi1xue2*, medicine, to denote specifically modern, or Western, medicine.

Etymology

An interesting feature of Chinese medical dictionaries is the complete absence of etymology. Dictionaries of Western medicine and other modern sciences in English and other European languages often provide etymologies, largely because many technical words are derived from Latin and Greek. An elucidation of the literal meaning of the terms is helpful to the understanding of the concepts they denote. Chinese differs from European languages in that it rarely borrows from other languages. Although much of the terminology of Chinese medicine is two thousand or more years old, many if not most of the characters it uses are still commonly used today and require no elucidation. In general, the meaning of technical compound terms not used in the LGP can often be easily guessed from derives from the literal meaning of the component characters. Thus, the terminology of Chinese medicine has the transparency of meaning that Greek terms of Western medicine have for the modern Greek student.

Nevertheless, the literal meanings of certain single-character and multi-character terms are problematic. Single-character terms that we can call "strictly technical" insofar as we can assume that the lay are not sufficiently familiar with them have no LGP meaning to speak of. In such cases, the composition of the character gives us some idea of the notion in the mind of the its creator. Most Chinese characters are composed of a meaning component combined with another meaning component that is used only for its phonetic value. Thus *mei3* meaning each is combined with a wood (tree) classifier to denote 'plum (tree)'. Another kind of character composition

is to use two meaning components both for their meaning. For example, *ri4*, 'sun', and *yue4*, 'moon', are combined to form to form a character meaning 'bright(ness)', which is read as *ming2*, a sound associated with neither of the components characters. The distinction between these two methods is not always clear, since characters used for their phonetic value also have a meaning which may be operant in the character. For example, the *Shuo1wen2* tells us that the character *wei3* denoting a disease characterized by weakness and atrophy of the limbs is composed of the illness classifier with a phonetic element. The phonetic element in question serves as a phonetic in another character, *wei3* meaning 'withered', in combination with the grass classifier. The question therefore arises as to whether the disease name is a phonetic compound as the *Shuo1wen2* tells us or whether it arose through semantic extension of *wei3* meaning 'withered' to denote an analogous condition in humans, which came to be distinguished in writing by the substitution of the illness classifier for the grass classifier. The latter etymology is actually more plausible since it explains not only the composition of the character, but also the origin of its sound. The problem of dubious origin observed in *wei3* is by no means isolated. The same etymological riddle is found in many if not most characters denoting diseases. No Chinese medical dictionaries, either single-character or compound dictionaries, broach the question, and no general dictionaries offer word origins that are generally accepted.

Etymological problems also arise in single-character and compound terms of a metaphorical nature. Chinese medical dictionaries do not, for example, explain why a certain lesion of the female breast attributed stoppage of breast milk is called *du4 ru3*. The character *du4* means 'jealous' or 'begrudge', while *ru3* denotes either 'breast' or 'milk', but which originally mean 'childbirth'. The literal meaning of 'jealous milk' would not appear to make much sense. However, a similar compound, *du4 jing1 chuang1*, denoting a syphilitic sore of the groin, in which the same character *du4* is combined with *jing1* meaning 'semen' and *chuang1* meaning 'sore' is intelligible if it can be accounted for by the once apparently popular belief that the sore is caused by withholding semen during intercourse. If this interpretation is correct, the term means a 'sore due to begrudging [the emission of] semen'. In the light of the interpretation of this latter term, it seems possible that the literal meaning of *du4 ru3* should be interpreted not as 'jealous milk' but as 'begrudging milk', i.e., a lesion developing when a physiological disturbance prevents (as it were, "begrudges") the flow of breast milk.

A similarly obscure etymology is seen in the commonly used term *ying2*, a form of qi said to play a role in blood formation, and to flow around the body with the blood in the vessels, thus supplying the whole body with nourishment. It stands in complementary opposition to *wei4*, 'defense', the qi that flows around the body outside the blood vessels and resists the invasion of disease-causing evils from outside the body. The character *ying2* according to the *Shuo1wen2* meant a 'military camp' or a 'settlement surrounded by a protective wall', and hence could, like *wei4*, be a military metaphor. However, the *ying2* has accreted numerous other meanings and usages, of which 'battalion' and 'manage, operate' are the most predominant, and in the *Nei4jing1*, it is also used in the verbal sense of to 'circulate'. Furthermore, it is sometimes replaced in Chinese medical texts with a character of similar construction and pronunciation. *rona2*. 'splen-

dor', 'glory'." We might ask, therefore, why *ying2 qi4* is so named since any of the following interpretations are theoretically possible.

1. like *wei4*, it provides the body with some sort of defense
2. like a military camp or base, it provides the support or basis for defensive activity
3. it circulates around the body
4. in the sense of *rong2*, it represents the 'splendor' of the body because it supplies the nutrients required to keep the body healthy.

Dictionaries have neglected the origins of the metaphor of a quite a number of anatomical and physiological terms. Why the two main classes of major internal organs are called *zang4* and *fu3*, which in their original forms were used in various senses including 'storehouses' and 'palaces' is not explained in any Chinese medical dictionary. It is not clear why a class of acupuncture points should be called *yuan2 xue2* when we cannot be sure which of the literal meanings of *yuan.2*, 'source' or 'plain' (flat land), applies. Nor is it clear why *jing1 luo4*, "meridians," are so called since both *jing1* and *luo4* are both highly generic 'fuzzy' words.

Perhaps it would not be possible to etymologies for such terms because present understanding of them is not definitive, but the need for them is nonetheless there. Providing etymologies serves the useful purpose of forging a link in the reader's mind between the literal meaning of a term and its denotative meaning. When a Western medical dictionary tells us that 'frenulum' is the diminutive of 'frenum' meaning a 'bridle', or that 'osteopoikilosis' derives from the Greek *osteo*, 'bone', + *poikilos*, 'mottled', + *osis*, 'a (morbid) process', we are enlightened as to the motivation of the term, and in the latter case, we have a useful breakdown of the term that eases the burden of memorizing largely opaque term. In both cases, the definition of the term clearly specifies the object denoted by the term, and the etymology tells us why it is so named. In our examples from Chinese medicine, etymologies would served a different purpose. Here, the constituent monosyllabic morphemes (characters) are all familiar to the modern Chinese student (unlike *poikilos* to the English-speaking student). The difficulty lies rather in knowing why these particular characters constitute or figure in the names, either because the relationship between the literal meaning and the denotative meaning of the term is unclear or because the characters have multiple literal meanings and the particular literal meaning that originally inspired the choice is unknown. Furthermore, in some cases, the exact nature of the referent is not clear since it cannot be identified by objective means (e.g., *ying1* and *jing1 luo4*) and the authors of the concept did not tell us how they identified it. At worst, therefore, we have a term of unclear literal meaning denoting a woolly concept or a referent that cannot be detected objectively. In such cases, a soundly researched etymology could shed light not only on the origin of the term but also on the origin of the concept itself. Needless to say, too, a sound etymology would also provide the translator with basis for

⁹In the *Nei4jing1*, there are 16 occurrences of *ying2 qi4* as compared with four occurrences of *ying1 qi4*, suggesting that *ying2 qi4* is the 'standard form.'

accurate translation of such terms into foreign languages where the standard bases for translation-literal and denotative meaning-are unclear.

Ordering of entries

Of all the Chinese-only dictionaries examined, only the SYCD-75 adopts a thematic order. Although terminologists believe that the thematic order is the most suited to the presentation of technical terminologies, the script-based ordering systems are still preferred by many users. The thematic order is most suitable to fields dealing in well organized concept that are clearly and systematically labeled. The nature of Chinese medical terminology is such that classification is difficult. Many terms could be placed in more than one class, and the dividing line between classes is not clear. For example, an descriptive etiological term such as *gan1qi4yu4jie2*, 'binding depression of liver qi', could also be considered as pattern name (a diagnostic end-result). A disease such as *bi4*, 'impediment', could also be a considered as a category of patterns. The clearest example of difficulty of classification is the area of formulas: since many medicinal formulas each perform a combination of therapeutic actions, there is often disagreement on how they should be classified. Formula books are notorious for their differences in the classification of different formulas, and for differences in the categories by which formulas are classified.

Script-based order is usually preferred. The entries of the ZGYXD-21 were ordered according to the traditional system of classifiers, while the PRC dictionaries by and large use the PRC system of stroke count and stroke type. Unlike the traditional system of classifiers, the new PRC system requires no knowledge about a character beyond that of how to write it. Unfortunately, both analysis of stroke types and the order they follow vary from one dictionary to another. Chinese medical dictionaries have not followed the PRC trend in general lexicography of ordering entries according to Pinyin pronunciation. The preliminary version to the ZYD-95 offers a Pinyin index of the first characters of the header, but this was dropped in the final version for lack of space. A modern edition of Hsieh Kuan's work also includes a Pinyin index.

Standardization of terms

Despite the changes that Chinese medicine has undergone in this century, modern dictionary makers take a conservative approach to the naming of concepts. Although selection of terms and information is to a certain degree conditioned by the cognitive esthetics of the modern age, the continuing, though weakening, importance of the classics requires lexicographers to fulfill the dictionary's function of providing access to the past. However, more radical approaches to terminological management, which could potentially affect lexicographical trends in the future, have been put forward. Xu³Zhi⁴-Quan² has suggested polysemy is much higher in Chinese medicine than in Western medicine and should be reduced to as close to zero as possible, and that full terminology of Chinese medicine should be revised, modernized, and standardized. He suggests that a link with the past could be ensured by including old terms referenced to the new ones. To deal with the particularly high rate of polysemy in formula names, he suggests that all polysemous formulas should

parenthesized prefix highlighting the source or essential characteristic of each formula in order to identify it unequivocally. This tendency has already started to develop in modern literature, but the *suggestion* that it should be systematically applied across the whole gamut of formulas and be enforced may be new. Xu's argument that the standardization of terms would enhance communication and learning is naturally appealing. In some areas of terminology, such as drug names, formula names, and certain other terms, it might well be feasible. However, his proposal to standardize disease names in relationship both to Western medical disease categories and Chinese disease patterns, if it were to be "conducted democratically" as he suggests, would probably fail because of the conservatism that reigns in a field of knowledge so closely tied to the past. To gain a general agreement on such a rigid classification for all diseases as presented for dysentery in the table below would be difficult since the correspondences made between Western and Chinese medicine may be questionable. It remains to be seen whether dictionaries of the future will embark on such a bold prescriptive attempt to change the language of Chinese medicine.

Non-standard terms	Standard Terms*	Pattern
Dysentery	Dysentery (acute bacterial d.) Dysentery (acute bacterial d.) Dysentery (acute amebic d.)	Damp-heat type Cold-damp type Epidemic toxin type
Epidemic toxin d.	Epidemic toxin dysentery (acute bacterial d.)	Damp-heat type
Food-denying d.	Food-denying d. (acute toxic d.)	Pronounced damp-heat type
Intermittent d.	Intermittent d. (chronic bacterial d.)	Spleen vacuity type
Intermittent d.	Intermittent d. (chronic bacterial d.)	Spleen-kidney vacuity type
Intermittent d.	Intermittent d. (chronic amebic d.)	Spleen vacuity type

* The Western medical equivalents are given in parentheses.

English-language dictionaries

A discussion of Chinese medical lexicography would not be complete without mention of English-language dictionaries, which began to appear in the 1980's. All but three of these are the work of Chinese writers.

Starting with relatively small volumes, English-language dictionaries have increased rapidly in size. The Word-Ocean Dictionary published in 1995 contains 26,253 entries in 1973 pages, with header definitions and information in Chinese and English. Despite its size, this work is marred by the consistently poor standard of English of English grammar and spelling.

It is of note that two of the English Dictionaries listed as specifically acupuncture dictionaries. This reflects the West's traditionally almost exclusive interest in a healing form that was almost forgotten in China until the twentieth century when it was revived partly in response to Western interest, and still to this day remains only a very minor element of Chinese healing practices as a whole. The appearance of a materia medica dictionary in 1994 reflects the growing realization by Westerners that China principal form of healing is drug therapy.

It is noteworthy that the thematic order is more popular among English dictionaries. The thematic order was chosen for *Illustrated Dictionary of Chinese Acupuncture*, *Chinese-English Terminology of Traditional Chinese Medicine*, and *Dictionary of Traditional Chinese Medicine*, presumably with the thought that it is appropriate

where many terms may be unfamiliar to readers. Alphabetical listing is also well represented. *The Chinese-English Medical Dictionary* presents Chinese terms in Pinyin order, each followed by the English equivalent. The *Glossary of Chinese Medical Terms and Acupuncture Points* and *English-Chinese Chinese-English Dictionary of Chinese Medicine* provide not only Pinyin-Chinese with English equivalents but also English equivalents with Chinese-Pinyin. Only *Chinese-English Glossary of Common Terms in Traditional Chinese Medicine* is arranged in stroke order.

English-language dictionaries of Chinese medicine differ from Chinese-only dictionaries in that they play a normative role by proposing equivalents for Chinese terms (indeed, the *Glossary of Chinese Medical Terms and Acupuncture Points* and *English-Chinese Chinese-English Dictionary of Chinese Medicine* were created essentially for this purpose). For this reason, some of these works contain terms without definitions and supplementary material. In the main, the translation of terms shows a marked tendency to translate Chinese medical terms with imprecise Western medical equivalents (Wiseman 1995, Introduction). Furthermore, a good proportion of terms are given multiple English equivalents or paraphrases, and the *Word-Ocean Dictionary* for a large proportion of entries offers a Pinyin transcription without an English rendering.

Four of the English dictionaries examined, the *Chinese-English Medical Dictionary*, the *Word-Ocean Dictionary*, the *Illustrated Dictionary of Chinese Acupuncture*, and *Chinese-English Terminology of Traditional Chinese Medicine*, take the “mirror-translation” format, i.e., the text for each entry is given in Chinese with an English translation. Despite their potential use for English-language readers with little or no knowledge of Chinese, this has not been fully realized by the inclusion of an English index. As a result, these dictionaries principally address a Chinese readership wishing to study English-language expression of Chinese medicine.

All in all, English-language dictionaries of Chinese medicine reveal a patent tendency on the part of English-language lexicographers to assume that the act of transmitting Chinese medicine to the English-speaking world is first and foremost a task to be performed by Chinese, and neglect the utility of dictionaries of Chinese medicine for the reader unfamiliar with Chinese.

English dictionaries of Chinese have failed to solve the problem of the absence of a standard English terminology, a problem that continues despite the recent growth in popularity of Chinese medicine in the West over the past three decades. Each dictionary offers a different terminology, and non won recognition as the standard. Wide disagreement over term translation arises for a number of reasons. First, Western medical notions hold sway over translators in different ways. Some believe traditional disease names should be translated into Western medical terms (e.g., *feng1 huo3 yan3*, lit. ‘wind-fire eye’, as ‘acute conjunctivitis’), or into terms that have a modern resonance (e.g., *qi4* as ‘energy’). Others believe that certain LGP terms that have been given specific definitions in Western medicine cannot be used to translate Chinese terms (e.g., *pi2* and *gan1* cannot be translated (literally) as ‘spleen’ and ‘liver’ because the Western medical understanding of the function of these organs now attaches to the English word). Second, some terms do not have precise definitions and their literal meanings are ambiguous. The way in which these

terms are translated depends largely on the personal interpretation of the translator (e.g., *ying2* variously translated 'nutrition', 'construction', Ying) Third, many Chinese terms are, to use Nida's hierarchical analysis," specific usages of generic or fuzzy terms, that have partial synonyms that nevertheless often distinct technical implications. Different translators translate such terms in different ways, some preserving and some ignoring distinctions, and the reader reading different authors receives a picture in which many of the original distinctions are lost. On Chinese term may be rendered by different translators with different English words (e.g., *xu1*, as 'asthenia', 'depletion', 'emptiness', 'vacuity', 'deficiency'), and one English word may be used by different translators to render one and the same Chinese term (e.g., 'worry' as a rendering from *si1*, lit. 'thought', 'cogitation' by some and *you1*, lit. 'anxiety', 'sadness', by others. The translation of Chinese medical terms has prompted some discussion (Unschuld 1989, CJITWM) and even the publication of a monograph.¹¹ However, the main protagonists of Chinese medical translation have never met to discuss standardization of terms.

With a view to correcting some of the above tendencies, I have focused my own work as a Chinese medical translator on developing an English terminology of Chinese medicine based on a systematic methodology and creating lexicographical works both for translators and for students of Chinese who have no knowledge of Chinese. I have produced two Chinese-English English-Chinese dictionaries mainly intended for translators. Both these works include lengthy introductions setting forth the principles of translation adopted in the formation of terms. In order to realize the full potential of lexicography for the benefit of both translators and English-speakers unfamiliar with Chinese, an English dictionary with definitions and clinical information is currently in production. The latter work represents something of a lexicographical experiment. Given the immense difficulties in categorizing Chinese medical terms, a thematic order was rejected in favor of alphabetical ordering of English entry headers and seeks to overcome the problems of a terminology that will be partially unfamiliar to readers by copious interreferencing of entries. Time will tell whether translation theory can influence the transmission of Chinese medicine and whether the dictionary offers a format for the presentation of Chinese medical information that is useful for both students and practitioners unfamiliar with Chinese and can draw them closer to an understanding of Chinese medical concepts.

Conclusion

Although no definitive definition of LSP has yet been given, modern terminologists would have no doubts about considering the language of Chinese medicine as an LSP on the grounds that it is a form of the Chinese language spoken by those engaged in specialized activity and that possesses a vocabulary that differs from the general lexis in form and meaning. According to this definition of terminology, it is also beyond doubt that Chinese medicine has possessed a terminology for some two thousand years. Yet if we were to define terminology as "a set of terms contained only in technical dictionaries", we would conclude-quite wrongly of course-that

¹⁰ Eugene A. Nida, *Toward a Science of Translating*, E. J. Brill, Leiden, 1964.

¹¹ *Zhong1yi1 fan1yi4 dao3lun4* (Introduction to Chinese Medical Translation), Li3 Zhao4guo2, Xilbei3 Da4xue2 Chu1ban3she4 (Xibe1 University Press), Xi3an1, 1993.

Chinese medicine has had only possessed a terminology for 80 years, that over those eighty years, the terminology has undergone considerable change. The difference in these two positions is explained by the fact the birth of awareness of the technical nature of the language of Chinese medicine after a two-thousand period of gestation, hastened by the impact of the Western world view. That birth has been slow. The omission in ZGYXDC-21 of virtually the whole gamut of therapeutic terms, and the omission of a many terms more recent works tell us that Chinese medical lexicographers have been unsure of what constitutes a technical term. If we consider that Chinese medical dictionaries are encyclopedic in nature, providing several categories of information beyond the definition, which is the lexicographer's essential concern, then we could further argue that the many terms included but not defined reflect the conception that these are not considered to be technical terms in the fullest sense of the expression since if Chinese medical dictionaries were pared back to providing terms and their definitions only, the undefined terms would have to be omitted.

The slowness to realize the technical nature of Chinese medical terms is most probably attributable to the fact that many commonly basic terms are none other than specialized usages of LGP (Language for General Purposes) words and that strictly technical terms not used in the LGP are mostly non-LGP collocations of LGP words. This is borne out the fact that compound-character dictionaries did not development until the modern era, by the failure to term etymologies, and by the failure to move toward standardization of English equivalents for Chinese terms.

At several points in this paper, I have emphasized how Chinese lexicography has reflected changes in Chinese medicine. It is of course only natural that a new dictionary, whether general or technical, should reflect the new lexical items and new usages of words. In Chinese medicine, developments in lexicography, the art of describing technical concepts has gone hand in hand with changes in the subject matter itself. Chinese medical lexicography was born as a result of the adoption of the Western sciences and the Western style of academic exchange. The birth of the awareness that Chinese medicine has a terminology worthy of systematic presentation in dictionaries is the result of a new world vision that relegated Chinese medicine from its once sovereign status to a position second to Western medicine, and that has conditioned the development of Chinese medicine ever since. The systematic act of registering and defining Chinese medical terms was prompted by the adoption of Western procedures of investigation that right from the start revealed major shortcomings in traditional Chinese medical knowledge. From the very beginnings of Chinese medical lexicography, the selection of terms appears to be have been conditioned in part by acceptability according to an imported world view that has shaped the modern practice of Chinese medicine. Furthermore, there is evidence that the modern requirement of specificity of definition has forced an alien unequivocality on the meaning of terms.

Here, we appear to be witnessing a phenomenon with which physicists are familiar: the very act of observation influences the object being observed. This phenomena may be inherent in the lexicographical act in general, since the lexicographer's analysis of word meanings may discretely influence the dictionary user's perception, and possi-

bly even his use, of words. The registration of words and their meanings may influence the language itself. Indeed, although dictionary makers are no longer as prescriptive as they were in the past, users expect dictionaries to provide a standard in correct usage. In Chinese medical lexicography, a comprehensive diachronic representation of terminology befitting the traditional nature of Chinese medicinal knowledge would increase the number of entries and the number of definitions considerably. Given also that the scrutiny of terminology has come with a scrutiny of the validity of traditional concepts, it is hardly surprising that content of dictionaries is conditioned by modern judgment of what is acceptable in this vast medical heritage. "Prescription" in Chinese medical dictionaries is not so much a matter of prescribing what is good or bad usage, but rather, through the overall content, prescription of a view of what constitutes Chinese medicine, that reinforces the view presented in college curricula. The segment of the Chinese medical heritage presented by each dictionary has differed sometimes in subtle, sometimes in gross ways. The recent tendency to provide a broader access to the concepts of the past hints at a return to conservatism after a dimming of hopes of full modernization and integration with Western medicine. The attempt to replace the traditional cognitive foundations of Chinese medicine with the solid matter of modern science that would sever the shackles of the past and allow Chinese medicine to, as it were, begin anew has not been as successful as once thought. If the current trend continues, we might expect a further widening of the diachronic purview in the Chinese medical dictionaries of the future, even if it is limited by consideration of the cost of research, ink, and paper.

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