

PAUL U. UNSCHULD

## Huang Di nei jing su wen

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Nature, Knowledge, Imagery in an Ancient Chinese Medical Text

### Paul U. Unschuld

WITH AN APPENDIX

The Doctrine of the Five Periods and Six Qi
in the Huang Di nei jing su wen

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THE DOCTRINE OF THE FIVE PERIODS AND SIX QI IN THE  $HUANG\ DI\ NEI\ JING\ SU\ WEN$ 

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### PREFATORY REMARKS

This book is a study of the *Huang Di nei jing su wen* 黄帝內經素問 (*Su wen*), an ancient text that, together with its sister text, the *Huang Di nei jing ling shu* 黄帝內經靈樞 (*Ling shu*), plays a role in Chinese medical history comparable to that of the Hippocratic writings in ancient Europe. Progress and significant paradigm changes have reduced Hippocrates to the honored originator of a tradition that has become obsolete. In contrast, many practitioners of Chinese medicine still consider the *Su wen* a valuable source of theoretical inspiration and practical knowledge in modern clinical settings.

Available evidence suggests that at the basis of the *Su wen* is a layer of texts written beginning in the second or first century B.C., with some of its conceptual contents possibly dating from the third century B.C. Presumably in the first or second century A.D., several compilers or teams of authors, all unknown to us today, set out to bring together disparate texts of previous decades, thereby generating a second textual layer, to which were added further layers in subsequent centuries. The outcomes of these more or less contemporary efforts to combine a selection of statements and texts from an identical pool of writings by numerous previous authors in one authoritative compilation have come down to us in four major works: in addition to the *Su wen* and the *Ling shu*, the *Nan jing* and the *Huang Di nei jing tai su* (*Tai su*).

Although the *Su wen* corpus has so far escaped all attempts at reconstruction, scholars agree that it was subjected to significant rearrangements, emendations, and additions in post-Han centuries, culminating in the contributions by Wang Bing in the eighth century. The Imperial Editorial Office of the eleventh century decided to introduce only minor editorial changes, so that the corpus available today essentially reflects the text that existed twelve hundred years ago.

Hence the importance of the *Su wen* as a source of ancient Chinese intellectual history lies in its formative period of about one thousand years; it offers invaluable data on cognitive dynamics in ancient Chinese medicine and knowledge of nature. Reading the *Su wen* not only increases our understanding of the roots of Chinese medicine as an integral aspect of Chinese civilization. It also provides a much needed starting point for serious and well-informed discussions on differences and parallels between European and Chinese approaches to existential threats such as illness and the risk of early death. Such discussions are essential to an appreciation of the cultural construct of illness and health in Chinese intellectual traditions; they appear necessary in view of current political attempts to structure the coexistence of Chinese and Western medicine either as competing or as complementary paths in the unending quest for human health.

Nature, Knowledge, Imagery in an Ancient Chinese Medical Text is the first in a multivolume publication of the results of the Su wen project, which was carried out with international cooperation at the Institute for the History of Medicine of Munich University. The scope of the project was broad. It aimed at preparing the first complete, philologically sound English translation of the Su wen together with a research apparatus that will be of help for future work on this text.

I prepared a preliminary version of the translation to serve as a starting point for an extensive collaboration with Hermann Tessenow. His philological expertise contributed decisively to the result achieved, which will be published separately in three volumes. In addition, Tessenow has conducted a detailed analysis of the approximately three hundred fifty separate segments constituting the historical and structural layers of the *Su wen*. The outcome of this study also will be published in several volumes.

Because we have spent so much time with the *Su wen*, we have come to realize the enormous complexity of its contents. There is no doubt that just as we have adjusted our interpretation of many passages to an everprogressing understanding of the text, knowledgable readers will take issue with the result and discover errors that we overlooked. Nevertheless, we believe that this translation represents a level of understanding that may be considered a substantial contribution to a well-informed discussion of the *Su wen* as one of the seminal documents of ancient Chinese culture.

In my attempts to penetrate the Chinese text and its historical context, I have greatly benefited from Chinese and Japanese scholarship of previous decades and centuries. The publication of annotated bibliographies of more than three thousand articles by Chinese authors of the twentieth century, as well as of more than six hundred monographs by Chinese and Japanese authors of past centuries, will document the secondary sources I have used. While our interpretation of the original is reflected in the English version,

I have taken great care to quote as many consenting and dissenting Chinese and Japanese views as was feasible.

Zheng Jinsheng of the Research Institute of Medical History and Medical Literature of the China Academy of Traditional Chinese Medicine has stayed with us in Munich several times for extended periods. He was of invaluable help in the compilation of the annotated bibliographies and of the survey of the doctrine of the five periods and six qi, published as an appendix to this volume. He also discussed with me the translation of discourses 66 through 74 and offered welcome comments.

In the early phase of the project, when PCs and electronic word processing had just begun to play a role in our work, Rupprecht Mayer supplied us with electronic versions of the *Su wen*, *Ling shu*, and *Tai su* and, in addition to writing several search programs, designed the software required to compile the concordances also to be published as part of this project.

Over the years, we received valuable support and technical assistance from the following colleagues whose cooperation is gratefully acknowledged: Cui Zhenhua, Donald Harper, Ursula Holler, Christine Hu, Frieder Kleemann, Alexander Kossarev, Jürgen Kovacs, Franz-Josef Maaßen, Bernhard Sander, Christian Schütz, Reinhard Vonthein, Yü Hong, and Zhang Tongjun.

All quotations from the Su wen in this volume are part of the translation of the full text to be published in three subsequent volumes. For the most part, the ample annotations on the meaning of individual characters and entire passages accompanying the translation have not been repeated here. Phrases in the quotations denoted by brackets [] are inserts required in English for syntactic reasons or to complete a statement from the source text too concise to reveal its meaning in the target language without such inserts. Parentheses () indicate explanatory notes added by me. Curly brackets {} denote statements in the Su wen tentatively identified as ancient commentaries on an older layer of the text. Double curly brackets {{}} denote a sec-

ondary commentary added by an ancient author to an earlier commentary. Angle brackets <> denote ancient inserts in the *Su wen* text meant to complete or amend an earlier text passage.

This book cannot and does not claim to say everything that can be said about the *Su wen*. On the contrary, it should be seen merely as a beginning, meant to generate an intellectual interest in this text in many more scholars than have cared to take notice of it and related ancient Chinese writings in the past.

I wish to take this opportunity to express my gratitude for financial, organizational, and scholarly support not only to the German Research Association (DFG) and the Volkswagen Foundation, whose generous grants made the project possible in the first place, to the German Association of Acupuncture Physicians (DÄGFA), who supplied financial aid to complete the annotated bibliography, and to the editors of the *Munich Medical Weekly* (Münchener Medizinische Wochenschrift), who contributed a fund to engage outside expertise on some special issues, but also to Michael Lackner, whose vision coincided with mine and who was instrumental in the Volkswagen Foundation's decision to support a project that seemed to many, at first sight, to be so utterly removed from contemporary and future needs.

For one year, from August 1998 through July 1999, I was privileged to work as a fellow of the Institute of Advanced Study in Berlin. It was the intellectual and organizational environment in the Wissenschaftskolleg led by Wolf Lepenies and Joachim Nettelbeck that freed me from the unavoidable distractions of daily university life, gave me all the time to concentrate on the contents of the *Su wen*, and simultaneously offered unique opportunities to discuss with other fellows the issues encountered in its analysis. The present volume is a product not only of the long-term project but also of the stimulating atmosphere in Berlin.

Paul U. Unschuld Munich, July 2001

### Bibliographic History of the Su wen

### 1. SOME SCHOLARLY VIEWS ON THE ORIGIN OF THE SU WEN

The Huang Di nei jing su wen 黄帝內經素問 and the Huang Di nei jing ling shu 黄帝內經靈樞 form a textual corpus generally known as the Huang Di nei jing.¹ Popular accounts of the history of Chinese medicine tend to locate the origin of this text in a distant past, several millennia B.C. Voices refuting authorship by the legendary Huang Di in prehistoric times have been heard in China for centuries, and to this day there is a discrepancy between views held by historians of Chinese medicine in and outside China, on the one hand, and by authors writing for the general public, on the other.

Zu Xi 朱熹 (1130–1200) and Cheng Hao 程顥 (1032–1085), the two eminent philosophers of the Song era, identified the *Su wen* as a product of the Warring States period, the fifth through third centuries B.C.<sup>2</sup> The latter's contemporary, Sima Guang 司馬光 (1019–1086), author of the important historical work *Zi zhi tong jian* 資治通鑒, stated: "If someone were to say that the *Su wen* were indeed a work written by Huang Di, this, I presume, would be inaccurate. . . . His name was adopted by medical people during the Zhou and Han eras to lend [his] weight [to their field]."<sup>3</sup>

Lü Fu 呂復, the fourteenth-century Yuan-era literary critic, noted, first, that the Su wen was compiled by several authors over a long period, and, second, that its contents were brought together, like those of the Li ji 禮記, the "Book of Rites," by Han-era Confucian scholars who then transmitted the text together with the teachings of Confucius.<sup>4</sup>

During the Ming dynasty, the famous literatus Hu Yinglin 胡應麟 (1551–1602) concluded: "The *Su wen* is also called *Nei jing* today. However, the [bibliographic] section in the [history of the] Sui [dynasty] (i.e., 581–618) only mentions a *Su wen*. The fact is, the fifty-five *juan* of Huang Di's *Nei* [*jing*] and *Wai jing* [recorded in the bibliographic section of the dynastic history of the

Han]<sup>5</sup> had been lost by the time of the Six Dynasties (i.e., between the third and sixth centuries A.D.). Hence later persons compiled it [anew] and changed its name."<sup>6</sup>

Cui Da 崔達 voiced a view critical of Huang Di's authorship during the Qing era: "The *Su wen*, a text transmitted from the past, contains a dialogue between Huang Di and Qi Bo. Some people say that the *Ling shu* and the *Yin fu jing* 陰 符經 were written by Huang Di himself. By the time of the Warring States, many philosophers included Huang Di in their writings. For example, the *Zhuang zi* is said to be [the result of] Huang Di's inquiring from Guang Chengzi about the Way. My opinion is, at the time of Huang Di no historical books existed yet. How could a text have been transmitted to posterity? Also, the sayings [in the *Su wen*, etc.] are fairly recent. Obviously, they were compiled by persons living at some time in the Warring States, the Qin, and the Han eras."

Beginning with the twentieth century, Chinese scholars have begun to scrutinize the available historical data systematically, their research findings making it increasingly clear that the textual history of the  $Huang\ Di\ nei\ jing$  began no earlier than the second century B.C. For example, as early as 1950, quoting an article published in 1928 and concluding that the  $Su\ wen$  was written during the Qin-Han era, with the dialogue structure superimposed by even later authors, Song Xiangyuan  $\pi$   $\not{n}$   $\pi$  wrote: "From the  $Shi\ ji$   $\not{n}$   $\not{n}$   $\not{n}$   $\not{n}$   $\not{n}$  with the author of the  $Shi\ ji$ , did not believe that Huang Di was the source of medical and pharmaceutical teachings. And we, people living in the twentieth century, if we were to accept [the saying that] Qi [Bo and] Huang [Di] are the 'Sages of Medicine,' would this not be superstitious?"

Zhao Hongjun, repeating arguments voiced by Liu Changlin in 1982,<sup>9</sup> pointed out in 1985; "The preconditions for the writing of the *Nei jing* were not given before the Western Han (i.e., 206 B.C. to A.D. 9). The major contents of the *Ling shu* and the *Su wen* cannot have formed before the Western Han. Some of its passages may tentatively be identified as compilations of the Eastern Han era" (i.e., A.D. 25–220).<sup>10</sup>

In 1987 Yang Yiya 楊醫亞 attributed the compilation of the *Nei jing* to the Han era, although he accepted an earlier origin for most of its contents: "The *Nei jing* was compiled at the earliest during the middle or late period of the Western Han era. The *Nei jing* of that time quoted and summarized ancient medical texts most of which had been written since the late Warring States era. In addition, it added contemporary medical achievements. In the course of its subsequent transmission, later authors supplemented its contents."<sup>11</sup>

David Keegan, the first Western scholar to write a dissertation on the structure and origin of the *Su wen*, identified a three-step generation of the *Nei jing* text corpus. First, certain ideas were composed. Second, these ideas were

compiled in texts. Third, these texts were compiled in the *Nei jing* corpus. The first step alone involved many authors and took more than six hundred years. As Keegan stated, "The language and ideas in all of the versions of the *Nei jing* were composed between 400 B.C. and A.D. 260. Between the time this language and the ideas it expresses were composed and the time they were set into the compilations extant today they had been shaped and reshaped through a long and active textual tradition. . . . The [extant] versions of the *Nei jing* are not simply compilations but the last in a progressive series of compilations." Keegan emphasized that none of the *Nei jing* compilations extant today are identical to those texts known under this title in the Han era. <sup>13</sup>

Based on our reading of the text, we largely agree with Keegan, as well as Yang Yiya and other Chinese scholars who hold similar views. In the following, I offer some hitherto unnoticed evidence that supports these views. Presumably, only a small portion of the textus receptus transmits concepts from before the second century B.C.  $^{14}$ 

### 2. REFERENCES TO HUANG DI NEI JING AND SU WEN IN EARLY BIBLIOGRAPHIC SOURCES

As noted by Liu Changlin, titles such as  $Huang\,Di\,\,nei\,jing\,$  and  $Su\,\,wen\,$  are conspicuously absent from Sima Qian's 司馬遷  $Shi\,ji\,$ 史記 of 90 B.C. Sima Qian's biography of Chunyu Yi 淳于意, which includes a detailed list of ten medical texts received by Chunyu Yi from his teacher Yang Qing 陽慶, would have provided an opportunity to mention such a fundamental text corpus if it had existed.  $^{15}$ 

The earliest known reference to a  $Huang\ Di\ nei\ jing$  is in a work titled  $Qi\ l\ddot{u}e$  七略 . This text was compiled by Liu Xin 劉歆 (d. A.D. 23) in the first century B.C. on the basis of the  $Bie\ lu\$ 別錄 , an earlier bibliography compiled by Liu Xin's father, Liu Xiang 劉向 (77?–6 B.C.). The  $Qi\ l\ddot{u}e$  was a catalog of the holdings of the Han court library at Chang'an after 26 B.C. It was lost in the centuries following the Han dynasty but is quoted explicitly in the  $Jia\ yi\ jing$  甲乙經 by Huangfu Mi 皇甫謐 (215–282), a text that is still extant.

Huangfu Mi wrote in his preface to the *Jia yi jing*: "The bibliographic section (Yi wen zhi 藝文志) of the *Qi lüe* [lists a] *Huang Di nei jing* in 18 *juan*. Today there exist a *Zhen jing* 針經 in 9 *juan* and a *Suwen* in 9 *juan*. Nine plus 9 adds up to 18. Hence [these two texts] constitute the *Nei jing* [of the *Qi lüe*]."<sup>16</sup>

A reference identical to the listing in the  $Qi\ liue$  appears in the "Prescription Techniques" section ( $fang\ ji\ 方$  技) in the bibliography of the dynastic history of the Han, compiled by Ban Gu 班固 (A.D. 32–92), presumably on the basis of the data supplied by the  $Qi\ liue$ . This section lists thirty-six books in four subcategories:  $yi\ jing$  醫經, "medical classics"; jing

fang 經 方, "classic prescriptions";  $fang\ zhong$  房 中, "inside the chamber [techniques]" (i.e., sexual cultivation); and  $shen\ xian$  神 儒, "[techniques of the] immortals." A  $Huang\ Di\ nei\ jing$  is listed together with seven other titles as "medical classics":

Huang Di nei jing 黃帝內經, 18 juan Huang Di wai jing 黃帝外經, 37 juan Bian Que nei jing 扁鵲內經, 9 juan Bian Que wai jing 扁鵲外經, 12 juan Bai shi nei jing 白氏內經, 38 juan Bai shi wai jing 白氏外經, 36 juan Pang pian 旁篇, 25 juan altogether these seven medical classics comprise 216 juan<sup>18</sup>

Apart from the fact that these seven texts add up to only 175 *juan*, rather than 216, this listing, which does not mention authors, or contents, or times of compilation, raises one central question: is the *Huang Di nei jing* mentioned here identical to or at least related to the *Huang Di nei jing* extant today? While most Chinese historians agree with this equation, others have voiced strong objections. <sup>19</sup>

Obviously, by the time of the Jin  $\mathfrak{F}$  dynasty, almost two centuries after Ban Gu had compiled the list quoted above, Huangfu Mi had no text titled *Huang Di nei jing* at hand. Rather, he identified two texts present in his own time, a *Su wen* (Basic Questions) and a *Zhen jing* (Needle Classic), each consisting of nine *juan*, as constituting the *Huang Di nei jing* of the *Qi lüe* of the Western Han and hence of the Han dynastic history of the Eastern Han.

In the absence of any other data, the only clues we have to understand this equation are the identical number of *juan* and the appearance of Huang Di in the title of the *Huang Di nei jing* as well as in the textus receptus of the *Su wen* and of the *Ling shu* as a dialogue partner of various informants.

If the titles of the three <code>nei jing/wai jing</code> listings in the bibliographic section of the Han dynastic history suggest a certain parallel in the structures of these books, why and in what way were the <code>Bian Que nei jing/wai jing</code> and the <code>Bai shi nei jing/wai jing</code> associated with Bian Que and a Bai shi, that is, "Mr. Bai," respectively? Were these texts structured as dialogues too, with Bian Que and Mr. Bai superimposed on preexisting texts as central figures of a question-and-answer exchange, as is Huang Di in the textus receptus of the <code>Huang Di nei jing</code>? This is difficult to imagine, given the nature of the dialogues of the text available today. These usually introduce a Huang Di who—except for his discussions with Lei Gong—is not the ultimate source of wisdom but begs to be taught by his obviously more knowledgeable dialogue partners.

If it is hard to imagine how the dialogue structure of the textus receptus of the *Huang Di nei jing* could be paralleled by similar structures centered

on Bian Que and Mr. Bai rather than on Huang Di, the parallels in the structuring of the three *nei jing/wai jing* pairings listed in the bibliographic section of the Han dynastic history may suggest a different parallel in the significance of the three names Huang Di, Bian Que, and "Mr. Bai," perhaps as presumed authors, a condition that is not met by the *Huang Di nei jing* text available today.

Also, Huangfu Mi's equation relies on an identical number of *juan* in the listing of the *Huang Di nei jing* and the *Su wen* plus the *Zhen jing*. However, as Liao Yuqun as well as Yu Zihan et al. have pointed out, the terms *juan* (volume) and *pian* (treatise, chapter) were used interchangeably during the Han dynasty, and there is some evidence that the eighteen *juan* of the *Huang Di nei jing* listed in the Han bibliography referred, in today's terms, to eighteen *pian*, while the reference to eighteen *juan* of the combined *Su wen* and *Zhen jing* referred to what would be considered eighteen *juan* today.<sup>20</sup>

The *Zhen jing* mentioned by Huangfu Mi is generally equated with the *Ling shu* available today. If one accepts this equation, even more questions arise regarding the identity of the *Huang Di nei jing* and of the *Su wen–Zhen jing*. I return to this issue after discussing the *Zhen jing–Ling shu* equation. At this point, though, the historical data already suggest a conclusion.

There is little reason to assume that of the seven texts mentioned in the bibliographic section fang ji lüe of the Han dynastic history, only the *Huang Di nei jing* survived the turmoil after the end of the Western Han. Rather, it appears that all these texts were lost and that the *Su wen* and the *Zhen jing* equated by Huangfu Mi with this ancient *Huang Di nei jing* were texts compiled during the Eastern Han, most likely integrating and elaborating on bits and pieces transmitted since the final period of the Western Han era. It may well be that some textual fragments of the textus receptus of the *Su wen* were also part of the *Huang Di nei jing* or one of the other texts mentioned in the Han dynastic history.

In the preface to his *Shang han lun* 傷寒論, the Eastern Han author Zhang Ji 張機 (ca. A.D. 200) stated: "In compiling [the *Shang han lun*], I have made use of the *Su wen* (Basic Questions), the *Jiu juan* 九卷 ([Text in] 9 *juan*), the *Ba shi yi nan* 八十一難 (81 Difficult Issues, i.e., today's *Nan jing* 難經), and the *Yin yang da lun* 陰陽大論 (Comprehensive Discourse on Yin and Yang). . . . In antiquity there existed Shennong 神農, Huang Di 黃帝, Qi Bo 崎伯, Lei Gong 雷公, Shao Yu (or: Shu) 少俞, Shao Shi 少師, and Zhong Wen 仲文."<sup>21</sup> This is the earliest listing of a text titled *Su wen*. This text, traceable to the second century A.D., was subsequently amended significantly, most of all by Wang Bing of the eighth century, who added one-third of the text available today in a final editing by Gao Baoheng 高保衡 et al. in the eleventh century.

A few appearances of the title *Su wen* in the dynastic histories hint at the continuous presence of the text, or at least one or more traditions of it,

throughout the centuries. Thus the dynastic history of the Wei 魏書 (386-550) in juan 91, compiled between 551 and 554, characterized a man named Cui Yü 崔彧, who died young but had been an excellent physician, as "having been taught the Su wen, the Jiu juan, and the Jia yi [jing]."  $^{22}$ 

The dynastic history of the Northern Qi (550–577), the *Bei Qi shu* 北齊書, completed in 636, includes in *juan* 49 a biography of Ma Siming 馬嗣明, who is characterized as "a man from Henei." "In his youth he had acquired an understanding of medicine and he established a comprehensive collection of classical prescriptions. Of the *Jia yi jing*, the *Su wen*, the *Ming tang*, and the *Ben cao*, there was no text he had not recited. When he examined a person, he would know survival or death one year in advance."<sup>23</sup>

The first dynastic history to record the *Su wen* in its bibliography was the *Sui shu* 隋書, compiled during the Tang dynasty in the first half of the seventh century.

While no author ever doubted that the Su wen mentioned by Zhang Ji and in later sources listed above is the nucleus of the text with the same title available today, the subsequent reference to a fiu fi

First, some of the ancient medical heroes who are mentioned by Zhang Ji, including Shao Shi and Shao Yu, do not appear in the *Su wen*. They are named as dialogue partners of Huang Di only in the *Ling shu*, suggesting that *Su wen* and *Jiu juan* refer to two different texts and that the *Jiu juan* is a predecessor of or identical to the *Ling shu* of today.

Second, Wang Shuhe 王叔和, author of the *Mai jing* (Vessel Classic), who lived during the Western Jin dynasty (third century A.D.) and was a contemporary of Huangfu Mi, ended a quote from an earlier text—found in today's *Ling shu*—with the three characters 出九卷, "from the *Jiu juan*."

Third, Huangfu Mi, in the preface to his *Jia yi jing*, explicitly identified the *Su wen* and the *Jiu juan* as two different texts: "The *Su wen* offers the essential and the subtle in a discourse on diseases; the *Jiu juan* is based on the conduit vessels." In today's *Ling shu*, sixty of the eighty-one chapters discuss "the conduit vessels"; one chapter bears the title Jing mai 經脈, "The Conduit Vessels." Finally, all passages quoted by Huangfu Mi as originating from the *Jiu juan* appear in today's *Ling shu*. While Huangfu Mi quoted from the *Jiu juan*, in his preface he spoke of a *Zhen jing* 針經 (Needle Classic) in addition to the *Su wen*. Presumably, *Zhen jing* and *Jiu juan* are two references to an identical text. By the time of Huangfu Mi, it may have become increasingly inadequate to refer to a text simply by the number of its volumes.

All of this, then, lends strong support, first, to a separate reading of *Su* wen and *Jiu juan* in the preface to the *Shang han lun* and, second, to an equation of the *Jiu juan* with the *Zhen jing* and the *Ling shu*.

The bibliographic sections of the Tang histories do not mention a *Ling shu*, however. The old dynastic history of the Tang lists a "*Huang Di jiu ling jing* 黄帝九靈經, 12 *juan*, Lingbao commentary 靈寶注." *Ling bao* (magic treasure) is a Daoist concept. The new dynastic history of the Tang has a similar entry: "*Ling bao* commentated *Huang Di jiu ling jing* 黄帝九靈經, 12 *juan*." Gao Baoheng et al., who in the eleventh century prepared the version of the *Su wen* available as the standard text today, wrote, "We made use of the *Su wen*, the *Jiu xu ling shu* 九墟靈樞, and the *Tai su jing*." Yu Zihan et al. proposed reading *Jiu ling* and *Jiu xu* as titles signifying intermediary stages in the development from the title *Jiu juan* to the title *Ling shu*.<sup>25</sup>

# The Meaning of the Title Huang Di nei jing su wen

### 1. HUANG DI 黃帝

Long Bojian 龍伯堅 explains the association of the *Nei jing* with Huang Di with two arguments. First, the *Nei jing* emphasizes the yin-yang and the five-agents doctrines, which, according to the *Shi ji*, had been introduced by Zou Yan 鄒衍. Because Zou Yan, in turn, venerated Huang Di, the *Nei jing* was given his name.

Second, Long Bojian quotes a passage from the *Huai nan zi* 淮 南 子 of the second century B.C.: "The ordinary people often venerate the old and despise the new. Hence those who set up the Way are forced to do so under the names of Shen nong and Huang Di, and it is only then that they may enter the discourse."

Although these arguments appear inadequate to explain why this particular *Nei jing* was published under the pseudonym Huang Di rather than Shen nong, Bian Que, or Bai shi, the *Huai nan zi* at least informs us that it may have been common knowledge by the second century B.C. that scriptures carrying the names of the ancient culture heroes in their titles had not necessarily been written by these persons themselves.

Of the 79 discourses constituting the textus receptus of the *Su wen*, 68 are structured as dialogues between Huang Di and one of three advisers, Qi Bo 岐伯 (60 dialogues), Lei Gong 雷公 (7 dialogues), and Gui Yuqu 鬼臾區 (1 dialogue). A similar distribution of dialogues and nondialogue discourses is found in the *Ling shu*. Its dialogue partners include, in addition to Qi Bo and Lei Gong, Bo Gao 伯高, Shao Shi 少師, and Shao Yu 少俞.

Most of the dialogues, Tessenow concludes from his analysis of historical layers in the *Su wen*, were the work of compilers who construed them as a device to link originally separate texts. The questions and answers put in

the mouths of Huang Di and his partners allowed them to provide introductions and transitions from one theme to another. Only in a few instances, as for example in the first part of *Su wen* 19, should the dialogue be considered a structural characteristic of the primary text.

The textus receptus of the *Su wen* resulted from different primary compilations, most of them completed during the Han era. This explains the mixture of texts structured as dialogues and nondialogue discourses. Later, secondary compilators, such as Quan Yuanqi, Yang Shangshan, and Wang Bing, brought these dialogues and nondialogue discourses together or rearranged them without attempting to superimpose one coherent structure on them.

The different dialogue partners are evidence of different primary compilations too; at least they refer to an origin of "their" texts in different traditions or schools of learning. In the *Su wen*, the dialogues between Huang Di and Lei Gong in particular are to be distinguished from the other dialogues and must be considered a layer of their own.<sup>2</sup> The sixty-one discourses with Qi Bo and Gui Yuqu portray Huang Di as an eager student with little knowledge of the subjects he inquires about. Only in the seven dialogues with Lei Gong does Huang Di act as sovereign teacher.<sup>3</sup>

Huang Di is occasionally named as the ancient Chinese culture hero who bestowed the knowledge of medicine on the Chinese people. Such statements may be justified with the final seven Lei Gong chapters, *Su wen* 75 through 81. The vast majority of *Su wen* discourses throw a different and contradictory light on the role of Huang Di. The first lines of *Su wen* 1 quote the first chapter of the *Shi ji* of 90 B.C. <sup>4</sup> The editors who superimposed the dialogue structure on the *Su wen* texts thereby deliberately identified Huang Di as the mythical ancestor ruler of all the tribes inhabiting central China in the distant past.

In former times there was Huang Di.
When he came to life, he had spirituality and magic power.
While he was [still] weak, he could speak.
While he was [still] young, he was quick of apprehension.
While he grew up, he was sincere and diligent.
When he had matured, he ascended to heaven.<sup>5</sup>

This Huang Di, as the *Yi jing* has it, rose to power after the death of Shen nong, another of the ancient Chinese culture heroes, <sup>6</sup> who was credited with the introduction of materia medica into Chinese civilization. <sup>7</sup>

The Huang Di of the *Yi jing*, the *Shi ji*, and *Su wen* 1 was the son of Shao Dian 少典. His family name was Gongsun 公孫, and his personal name was Xuan Yuan 軒轅. Because his reign rested on the forces of soil and because the color of soil is yellow, his title was Yellow Di.<sup>8</sup> No equivalent is available in English to reflect the meanings associated with Di in this ancient context.

A rather appealing translation of Di in English is "Lord." In its European context, this term combines notions of a worldly and of a heavenly ruler, but the latter component is not necessarily evoked by the appearance of a Huang Di, "Yellow Lord," in a Chinese context. Also, in the Judeo-Christian tradition, the concept of Lord is tied to a monotheistic and eternal ruler in heaven. Neither of these facets is reflected in the notion of Huang Di.

"Yellow Emperor" is the translation of Huang Di most often encountered in references to the *Huang Di nei jing* in popular English accounts. The title Emperor, however, cannot be employed in a historical-philological context because it implies solely a this-worldly rule and fails to include the notion of the mythical ruler.

Several authors have suggested rendering Di as "thearch." This is a suitable term to emphasize the godlike qualities attributed to Di in ancient Chinese mythology. Originally a "deity invoked in the religious ceremonies of earlier times," he "had been a spirit of the storm invoked by shamans or shamanesses in rainmaking rituals, and the return of the rain at the end of the New Year season had been imagined in the form of a cosmic battle between this lord of the storm and a lord of drought."

Surprisingly, in the context of the *Huang Di nei jing* in many instances a very different image is evoked of "the sage who created human forms of warfare and punishments" and who "in several histories and genealogies . . . was credited with the creation of Chinese civilization and described as the primal ancestor of the Chinese people." Not quite resembling a creator of civilization, in the *Su wen* Huang Di asks to be taught the most fundamental knowledge by his underlings and is occasionally rebuked for not having done enough reading.

Huang Di asked:

Alas! Distant is the Way of heaven, indeed!

"As if one looked up to drifting clouds,

as if one looked down into a deep abyss." [However,]

when looking into a deep abyss, it is still possible to fathom [its depth];

when looking up to the drifting clouds, no one knows their farthest extension.

[You,] Sir, have repeatedly spoken about the Way of heaven which you have attentively accepted. I have heard [it] and [I have] stored it. In my heart, [though,] I feel strange about it. I do not know what it means. I should like [you,] Sir, to pour out your mind and enumerate all these issues. . . .

May [I] hear about the Way of heaven?

Qi Bo paid reverence by knocking his head on the ground twice and responded: It is brilliant, indeed, to ask about the Way of heaven!<sup>12</sup>

Huang Di asked:

Heaven has eight winds. The conduits have five winds.

What does that mean? 13

Huang Di asked:

Man has four regulars and twelve verticals.

What does that mean?14

Huang Di asked:

I should like to hear [the following]:

How do the twelve depots engage each other, and what is their hierarchy?<sup>15</sup>

Huang Di asked:

I have heard:

In heaven one relies on six [times] six terms, . . .

on the earth one relies on nine [times] nine [geographic regions] to set up calculations....

I do not know what this means. 16

[Huang] Di:

"Greatly excessive" and "inadequate," what does that mean?

Oi Bo:

[This is [outlined] in the classic.<sup>17</sup>

One wonders what kind of a Di the *Su wen* editors may have had in mind when they let his adviser dare to refuse to answer a question and refer Huang Di to the literature instead.

In two instances, Qi Bo compares Huang Di to a Sage Di or, in the context of the imperial age, a sagelike emperor. In two other instances, he points out that a question asked by Huang Di pertains to the knowledge of a Shang Di, a Di on High. When the Christian Gospel was translated into Chinese, the Chinese equivalent chosen for "the Lord" was "Shang Di." In fact, this is the only Chinese concept that comes close to the monotheistic and eternal nature of the Lord. In *Su wen* 9 and 69, however, Qi Bo's references to the Di on High make it very clear, first, that this Shang Di cannot be the one and only Lord and, second, that Huang Di does not occupy the highest echelon in the hierarchy of the various Di.

Qi Bo:

This was kept secret by the Lords (Di) on High; the teachers of former times have transmitted it.

[Huang] Di:

May I hear about these [issues] one by one?<sup>19</sup>

Qi Bo paid reverence by knocking his head to the ground twice, and responded: A lucid question, indeed! This is the brilliant Way.

This is what the Lords (Di) on High valued, what the teachers of former times have transmitted.

[I, your] subject, though not intelligent, have heard their instructions in the past.  $^{20}$ 

Huang Di too is occasionally said to "have heard" or otherwise to know about events in antiquity. This puts him at a great distance from these events:

Once [Huang Di] asked the Heavenly Master:

I have heard that

the people of high antiquity,

in [the sequence of] spring and autumn, all exceeded one hundred years.

But in their movements and activities there was no weakening.

As for the people of today, after one half of a hundred years, the movements and activities of all of them weaken.

Is this because the times are different?

Or is it that the people have lost this [ability]?<sup>21</sup>

Huang Di asked:

I have heard that,

when [healers] in antiquity treated a disease,

they simply moved the essence and changed the qi.

They were able to invoke the origin<sup>22</sup> [and any disease] came to an end.

When the people of nowadays treat a disease,

[they employ] toxic drugs to treat their interior, and

[they employ] needles and [pointed] stones to treat their exterior.

Some are healed; others are not healed.

Why is this so? $^{23}$ 

[Huang] Di:

When the sages in high antiquity made decoctions and wines,

they produced them but did not employ them.

Why was that?24

In these discourses, Huang Di is a figure of "today's world,"  $^{25}$  not of a distant past. He is concerned with the well-being of his subjects and is described as having an interest in acting as a healer himself.

I wish to attend a patient, and

when [I] observe [him to find out] whether [he must] die or will survive,

[I should like to] cast away all doubts.

[I] should like to know the essentials—

[they should be as clear] as the light of sun and moon.

May [I] hear [of this]?<sup>26</sup>

[Huang] Di:

When I think about the pain of the [people],

this disturbs my heart.

In my confusion, contrary to [my intentions I cause their pain] to increase in severity.

I am unable to substitute their diseases [with health].

When the people hear this, they consider [me] cruel and destructive.

What is to be done?<sup>27</sup>

Nevertheless, among the dialogues with Qi Bo are some that attribute to Huang Di the aloofness one expects of a Di. One is *Su wen* 67:

Huang Di sat in the Hall of Light.

In the beginning he rectified the mainstay of heaven.<sup>28</sup>

He looked down [from his elevated seat] and observed the eight farthest [regions].

Having carried out investigations, he established the five constants.<sup>29</sup>

The Hall of Light, *ming tang* 明堂, is a place where the emperor and his officials gathered for discussions in ancient times.  $^{30}$  Hence once he felt he had received sufficient instruction for the time being,

[Huang] Di dismissed his entourage and rose. He paid reverence twice and said:

Today you have released me from ignorance and you have dispersed [my] delusions.

I shall store [this knowledge] in a Golden Chest;

I shall not dare to take it out again.<sup>31</sup>

As it is only in the seven dialogues with Lei Gong that Huang Di is portrayed as a capable teacher, it is here where no doubt is left of his dignity as a supreme ruler and of his superior knowledge.

At the first arrival of the first month of spring,

Huang Di sat calmly.

While he looked down upon the eight farthest [regions] and

rectified the qi of the eight winds,

he asked Lei Gong:

The categories of yin and yang, and

the Way of the conduits and vessels,

that is what is ruled by the five inside.

Which depot is the most precious?<sup>32</sup>

Huang Di examines Lei Gong, asks him about the literature he has read, rebukes him more or less severely ("How can it be that while you are old in years you ask like a child!"),<sup>33</sup> and is willing, nevertheless, to "instruct him in the essentials of the perfect Way."<sup>34</sup>

Huang Di is the most prominent of the deities of shamanic cults transformed by the Zhou elite "into historical exemplars for their own claims to wisdom and authority."<sup>35</sup> In the *Su wen*, several stages or results of this transformation are apparent. The different historical layers of the *Su wen* portray different notions of Huang Di.<sup>36</sup> There is a reference in the *Su wen* placing him, as did Sima Qian 司馬遷 in the *Shi ji* in the first century B.C., at the very beginning of time, but no allusions can be found to Huang Di's role as an ancestral father of the Chinese people who instructed them how to produce silk, how to construct boats and chariots, and how to write. His merits

as "the fount and origin of the entire corpus of the traditional Chinese healing arts" can be upheld, as we have seen, in view only of the Lei Gong section, not of the vast majority of treatises in which he is most often portrayed as a latecomer in history, eager to study what others have initiated. This image corresponds, of course, to that conveyed in some of the Mawangdui manuscripts, where Huang Di appears as a student of seemingly disparate fields such as politics and macrobiotics.

The Di of Huang Di, it appears, is too heterogeneous a title or position to be translated throughout the *Su wen* with the same English term. Rather than speak of Huang Di as Yellow Di, we prefer to transliterate the entire compound and view Huang Di as a title whose meaning has changed with its historical context.

#### 2. NEI 內

Because the title *Huang Di nei jing* has been associated with the *Su wen* and the *Zhen jing/Jiu yuan/Ling shu* only since the beginning of the third century A.D. and because it is uncertain whether the contents of the *Su wen* and of the *Ling shu* available today permit us to imagine the contents of the *Huang Di nei jing* mentioned in the bibliographic section of the dynastic history of the Han, it must also remain unclear whether the nature of the *Su wen* and of the *Ling shu* reveal anything about the meaning of the term *nei* in the Han title *Huang Di nei jing*. If our assumption is correct and at least some sections of today's *Su wen* can be traced to the Western Han, we nevertheless cannot be sure that these sections originated in the *Huang Di nei jing* or in the *Huang Di wai jing* or even in one of the other two (*Nei jing/Wai jing* pairings listed as medical classics in the bibliographic section of the dynastic history of the Han.

As we have seen, Wang Shuhe's equation of the Western Han *Huang Dinei jing* with the *Su wen* and the *Zhen jing* on the basis of an identical number of *juan*, eighteen, may not have been justified after all, given the change in the meaning of *juan* between the Han and Jin dynasties. Hence one should be cautious in using the nature of the text available in today's *Nei jing* to infer a conceptual opposite that could be termed *Wai jing*.

As Qian Chaochen 錢 超塵 has pointed out, <sup>39</sup> it was not uncommon, especially during the Qin and Han dynasties, to rely on an "inner-outer" enumeration to name two parts of a text. The best known examples are *Zhuang zi nei pian* 莊子內篇 and *Zhuang zi wai pian* 莊子外篇, as well as *juan* 9 and 10 of *Han fei zi* 韓非子, which constitute the *nei chu shuo* 內 儲 說, in contrast to *juan* 11 through 14, which constitute the *wai chu shuo* 外 儲 說. But in none of these cases can one be sure that this "inner-outer" enumeration is associated with any meaning distinguishing the nature of the first part of a text from the second part. It may well be that those who edited these texts and

introduced the *nei-wai* division placed the older and more authentic contents of a tradition into a first, "inner," section while they designated those materials that may have been added later and by others than an original author as secondary and "outer."

An ancient commentary on the  $Han\ fei\ zi$  explained the title  $nei\ chu\ shuo$  as "Collected Sayings from the Interior," that is, the plans developed by a Lord himself. Hence one should assume that  $wai\ chu\ shuo\ refers$  to "collected sayings" introduced from outside the palace. In this sense, the Qing-era author Wang Xianshen  $\Xi$   $\xi$   $\xi$  associated  $wai\ chu\ shuo\ with$  the rewards and punishments granted to officials outside the court on the basis of their speeches and behavior as far as they came to the attention of the ruler.  $\xi$ 

Two writers of the sixteenth/seventeenth century, Wu Kun 吳崑 (1551–1620?), author of the *Huang Di nei jing su wen zhu* 黄帝內經素問注, and Wang Jiuda 王九達, author of the *Huang Di nei jing su wen ling shu he lei* 黄帝內經素問靈樞合類 of 1628, considered *nei* a reference to the five depots and to the yin and yang categorization of the human body. <sup>41</sup> Zhang Jiebin 張介賓 (ca. 1563–1640) wrote in the first chapter of his *Lei jing* 類經: "The *Lei jing* combines the [contents] of the two classics and brings together related [issues]. The two classics bear the titles *Ling shu* and *Su wen*. Together they are called *Nei jing*, 'Inner Classic.' 'Inner' refers to the Way of life. A 'classic' is a book recording the Way." Another Ming author, Yang Xun 楊珣, wrote in his *Zhen jiu xiang shuo* 針灸詳說: "*Nei* means 'deep,' 'mysterious.'" Fang Yizhi 方以智, author of the *Tong ya* 通雅, stated: "[The work of] Qi [Bo] and Huang [Di] is called *Nei jing* because it is on the interior of the body." <sup>43</sup>

The problem with all these interpretations is, how should one think of the corresponding contents of a *Wai jing*? If *nei* referred to the "interior of the body," should we assume that the *Wai jing* focused on the "exterior or outer regions of the body"? If *nei* meant to express the notion of "deep and mysterious," was the *Wai jing* devoted to the "superficial and obvious"? And what could have been the opposite of the "Way of life" in a medical treatise?

None of these differentiations is sufficiently convincing. Until a lucky find in a Western Han tomb or elsewhere presents us with a direct view of the contents of a *Huang Di wai jing*, one might agree with Qian Chaochen who concluded that the juxtaposition of *nei* and *wai* bears no other significance than to name two halves of a text. Similarly, Gao Bozheng 高伯正 interprets *nei* and *wai* as "first part" and "second part," and he interprets *nei*, *wai*, and *pang* 旁 (the latter in the entry *pang pian* following the *Bai shi wai jing*) as "first part," "second part," and "further part." Hence he reads *Huang Di nei jing* as *Huang Di jing nei* in the sense of "Huang Di's scripture, first part."

However, Tessenow points out that the fact that it is the *Huang Di nei jing* rather than the *Huang Di wai jing* or the *Huai nan zi nei pian* rather than the *Huai nan zi wai pian* that has survived the passage of time may tell us that the *nei* part was considered more central, more important.<sup>45</sup> When the *Huang* 

*Di nei jing* was compiled from numerous bits and pieces of texts in the Later Han era or even later still, the title *Nei jing* may have been chosen, as Tessenow suggests, to express the idea that this knowledge was the core knowledge.

### 3. JING 經

A more precise association of the character jing with specific texts may be found in  $Zhuang\ zi$  莊子, in the chapter Tian yun 天運, which, according to A. C. Graham, can be traced to "primitivist" philosophers active in the late third century B.C.: "Confucius said to Laodan: When I restored the six jing, that is, the Shi (Songs), the Shu (Historical Documents), the Li (Rites), the Yue (Music), the Yi (Changes), and the  $Chun\ qiu$  ([Annals of] Spring and Autumn), this is because I presumed them to be old."

It was only when Sima Qian 司馬遷 spoke of the *Shi jing* 詩經 in his account of the Confucian teaching, *Ru lin lie zhuan* 儒林列傳, in his *Shi ji* 史記 of 90 B.C., though, that the character *jing* appeared in a book title.

Western translations of *jing* in medical titles such as *Huang Di nei jing* or *Nan jing* 難經 range from "manual" to "canon" to "classic." The etymology of the Chinese character identifies its earliest meaning as "warp," that is, the threads running lengthwise through and holding a woven fabric. In a metaphorical sense, this meaning has been applied to various instances of "threads running lengthwise." Hence Sima Qian 司馬遷 spoke of the imaginary channels penetrating the human body and enabling the passage of qi as *jing*; likewise, Zhang Heng 張衡 (78–139) termed the major roads stretching from the south of China to the north *jing*—a usage that was extended later in the naming of the meridians in geography.

Obviously, the term *jing* was used in book titles to signify statements of fundamental importance or to point to those types of knowledge whose extraordinary significance was meant to persist through the ages if not forever. <sup>49</sup> If society is comparable to a fabric combining many threads of ideas and levels of hierarchy, a certain wisdom may be considered the warp holding it all together and ensuring its everlasting functioning. In a later part of *Mo zi*, presumably compiled circa 300 B.C., the phrase *yu jing* 語經, translated by

Graham as "expounding the canons," may refer to the fundamental ideas of earlier Mohist moral and political philosophy. <sup>50</sup>

It is not clear, then, precisely when the metaphorical meaning of *jing* was transferred to texts that may have been considered seminal enough to be handed down from generation to generation. The passage quoted from *Xun zi* above, contemporaneous with the later Mohist writings, undoubtedly refers to specific texts as *jing*.

The development of this usage of *jing* seems to have occurred in various fields of knowledge, soon to include the core of the Confucian scriptures, the six *jing* cited above. In the Confucian tradition, gradually an increasing number of texts were honored in this way until a total of thirteen or fourteen *jing* came to be acknowledged as expressions of fundamental Confucian learning.

Medicine and pharmaceutics were among the earliest subjects to be handed down to later generations in texts named *jing*. We have seen these titles in the bibliographic section of the dynastic history of the Western Han, which most likely took its data from the  $Qi\ l\ddot{u}e$  七略 of the first century B.C.; the  $Nan\ jing$  難經, a work on medical theory, and the  $Shen\ nong\ ben\ cao\ jing$  神農本草經, a work on pharmaceutics, were compiled during the first century A.D. In later centuries, the scope of subjects claimed worthy of eternal transmission grew. The dynastic history of the Sui 隋 listed a  $Shui\ jing\ x$  經, which is the first account of the major waterways in China, as well as a  $Xing\ jing\ x$  經, a text focusing on astronomy. The dynastic history of the Tang introduced a  $Cha\ jing\ x$  經, a fundamental text on all the knowledge associated with tea.

The term *canon* comes close to expressing the warp metaphor. It invokes the notion of "a regulation or dogma decreed by a church council," an "authoritative list of books accepted as Holy Scripture," the "authentic works of a writer," or "an accepted principle or rule.<sup>51</sup> It is true that the character *jing* itself was often used to express the meaning of *chang dao* 常道 or *gui fan* 規範 (norm), for example, by Meng zi 孟子, in Jin xin xia 盡心下, when he stated 君子反經而已矣,經正則庶民興: "When a ruler acts against the norms,

this will bring about the end [of his rule]. When the norms are held in proper esteem, the population prospers." Also, one might think of the core texts of Confucian learning as outlining specific norms. However, if employed in rendering individual titles such as *Shi jing* 詩經, *Nei jing* 內經, or *Shui jing* 水經, the notions associated with *canon* might generate a misleading idea of the contents of these books.

A classic, though, is "a work of enduring excellence." Wu Kun 吳崑 (1551–1620?), author of the *Huang Di nei jing su wen zhu* 黄帝內經素問注, wrote: "A pattern revered through myriad generations is called *jing*." A book or a piece of music, to name but two examples, deserves to be named a classic once it has shown it speaks to an audience beyond its own time, that is, once it is expected that its impact and acceptance will last for a long time if not forever. This, of course, is the idea behind the character *jing*; hence a translation of *Nei jing* as "Inner Classic" appears quite justified.<sup>53</sup>

### 4. SU WEN 素問

It has become common practice in scholarly literature not to translate but simply to transliterate the title Su wen. This book has adopted this custom too. Nevertheless, a translation should be possible; we believe the rendering "Basic Questions" comes closest to the original meaning. This intepretation was suggested by Quan Yuanqi  $\hat{z}$ , who flourished in the sixth century during the era of the North-South division of China and wrote the first known commentary on the Su wen. The very meaning of Su wen has been debated ever since.

As a note preceding the main text of the Su wen by Gao Baoheng and his fellow members of the eleventh-century committee responsible for compiling an authoritative edition of the text points out, Quan Yuanqi appears to have read the title as wen su. He stated: " $\sharp$ , su, is  $\star$ , ben.  $\exists$  wen is: Huang Di asked (wen  $\exists$ ) Qi Bo. He broadly outlined the origins of [human] nature and the basis (ben  $\star$ ) of the five agents. It is for this reason that [this text] bears the title Su wen," that is, "Questions Asking for the Origin" or "Questions Inquiring into the Basis."<sup>54</sup>

Gao Baoheng et al. commented on Quan Yuanqi's interpretation: "Even though Quan Yuanqi has offered this explanation, the meaning [of Su wen] has not become very clear. Now, the Qian zuo du 乾 鑿度 states: 'That which has physical appearance is generated by that which has no physical appearance. Hence there are the [stages] tai yi 太  $\delta$ , tai chu 太  $\delta$ , tai shi 太  $\delta$ , and tai su 太  $\delta$ , tai t

can emerge from. Hence, when Huang Di asked for this *tai su*, the beginning [presence of human] disposition was meant. This is where the title of the *Su wen* originated."<sup>55</sup> Hence one might render Gao Baoheng et al.'s interpretation of *Su wen* as "Disposition Questions" or "Questions Inquiring into the Disposition [of Man]."

The  $Qian\ zuo\ du$  dates to the Han period. The passage referred to by Gao Baoheng et al. can be traced to the chapter Tian rui 天瑞, "Celestial Omina," in the  $Lie\ zi$  列子. The bibliographic section of the dynastic history of the Western Han lists a  $Lie\ zi$  in the Daoist texts category. The textus receptus of the  $Lie\ zi$  was commented on by Zhang Zhan 張湛 of the Eastern Jin dynasty (317–420). Its contents are heavily influenced by the thought of Lao zi 老子 and Zhuang zi 莊子 and by Buddhism. There is every reason to assume that the  $Lie\ zi$  commented on by Zhang Zhan differed, partially or even entirely, from the  $Lie\ zi$  of the Western Han. To make their point, Gao Baoheng et al. did not hesitate to cut the  $Qian\ zuo\ du/Lie\ zi$  quote at a decisive point. The original wording was "[At this stage] the qi, the physical appearance, and the disposition [of man] are complete and do not leave each other. Hence [this stage] is called  $hun\ lun\$ 混  $\[ \] Hun\ lun\]$  is to say: the myriad beings are all tied together and do not leave each other.

Gao Baoheng et al.'s interpretation suggests that the wording of the title Su wen was based on the Lie zi equation of tai su 太素 with zhi 質 in the sense of su zhi 素質 or ben zhi 本質, that is, "natural disposition" or "original disposition." The chapter Tian di 天地, "Heaven and Earth," of the Bai hu tong yi 白虎通義 by Ban Gu 班固 in the first century A.D. has a passage similar to the one in the Lie zi: "Prior to the emergence of a beginning, this is tai chu (the grand commencement), subsequent [to the emergence of a beginning], this is tai shi (the grand beginning). When the physical appearance and the omina have been completed, this is tai su (the grand origin)." To read tai su in this context, which may be the original context of the almost identical passage in the Lie zi, as "grand disposition" and to infer from this a reading of Su wen as "Disposition Questions" makes little or no sense. Hence Gao Baoheng et al.'s interpretation is difficult to accept.

Only a little earlier than Gao Baoheng et al., during the reign of Emperor Zhenzong 真宗 of the Northern Song dynasty (997–1022), Zhang Junfang 張君房 et al., in revising the Daoist canon, excerpted essential contents and compiled the *Yun ji qi qian* 雲笈七籤. In this context they wrote: "The pure girl (*su nü* 素女) descended from heaven to cure the ills of man. [Huang] Di questioned her and compiled the *Su wen*," that is the "Pure [Girl] Questions" or "Questions Directed at the Pure Girl." No evidence whatsoever exists to support this interpretation. Although references to the mystical figure of the Pure Girl can be traced to Sima Qian's 司馬遷 *Shi ji* 史記 of 90 B.C., their early context of sexual cultivation techniques does not suggest an association with the type of medicine presented in the *Su wen*.60

In the Southern Song era, Zhao Gongwu 晁公武 went to the very origins in the etymology of the character  $su \not\equiv$ , that is, "undyed silk," in considering the meaning of su wen and arrived at yet another conclusion. He stated in his Jun zhai du shu hou zhi 郡齋讀書後志: "When the ancients spoke of Su wen, [they referred] to questions raised by Huang Di that were written on undyed silk. That is as if one said su shu 素書, 'written on undyed silk.'"61 It should be remembered here that the bibliography *Qi lüe* 七略 of A.D. 23, in a section devoted to the works of the vin-yang school, lists a text named *Huang* Di tai su 黄帝太素. While there is no evidence that this Huang Di tai su is related to a book named Huang Di nei ring tai su 黃帝內經太素 commented on by Yang Shangshan 楊上善 in the eighth century and transmitted, at least in numerous fragments, until this day, 62 it is, however, certain that the character  $su \not\equiv w$  was used in its title in the metaphorical sense alluded to above, that is, "grand origin" or "grand purity," and it appears far-fetched to assume an author of the late Western or early Eastern Han could have thought of the original etymology of *su* when he adopted this character to name a text.

During the Ming dynasty, Wu Kun 吳崑 (1551–1620?), author of the *Huang Di nei jing su wen zhu* 黄帝內經素問注, following his interpretation of 經 jing as "a pattern revered through myriad generations," suggested: "General investigations are called *su wen*."<sup>63</sup> Similarly, Ma Shi 馬蒔, author of the *Huang Di nei jing su wen zhu zheng fa wei* 黄帝內經素問注証發微 of 1586, wrote: "The *Su wen* is a text consisting of a general dialogue between Huang Di and his six subjects Qi Bo, Gui Yuqu, Bo Gao, Shao Shi, Shao Yu, and Lei Gong."<sup>64</sup> Zhang Jiebin 張介寶, author of the *Lei jing* 類經, agreed: "General questions, that is meant by *Su wen*."<sup>65</sup> The meaning "general," "common," as suggested by Wu Kun, Ma Shi, and Zhang Jiebin, may well have been implied by the phrase *su wen*. However, one might also argue that the character *su* was used in a metaphorical transfer of its original meaning "white silk" in the sense of "simple," "unadorned," and also "empty," "not preoccupied."

In the early Qing period, Yao Jiheng 姚際恆, in his "Examination of Forged Texts of All Ages," the *Gu jin wei shu kao* 古今偽書考, came forward with yet another solution to the *Su wen* riddle: "My studies [suggest the following:] a *Huang Di tai su* is listed in the section of yin-yang specialists in the bibliographic section of the Han dynastic history. Obviously, the character *su* was borrowed there. Also [in this text Huang Di] asks Qi Bo questions. Hence it is called *Su wen*."<sup>66</sup>

Tamba Genkan 丹波元簡, the eminent Japanese *Su wen* commentator of the nineteenth century, continued the argument introduced by Yao Jiheng and linked it to the earlier association of *Su wen* with *Tai su* outlined by Gao Baoheng et al.: "Gao Baoheng et al. held that [*Su wen*] means *wen tai su* 問 太素,'questions concerning the *tai su*.' That is correct. The *Shi ji*, Yin ben ji 史記,殷本紀,stated: 'Yi Yin followed [a request by King Wu] Tang and spoke on the affairs of Su Wang 素王 and the nine rulers.' The *Suo yin* 索隱

stated: 'Su Wang is the tai su supreme emperor. His Way is that of sincerity and purity. Hence he is called Su Wang, king of purity.' The Lie zi and also the possibly even older Qian zuo du state: 'Tai su is the beginning of zhi 質, "constitution."' (Tamba comments: Guan zi 管  $\mathcal{F}$ , Shui di pian  $\mathbf{x}$  地 篇: 'Su  $\mathbf{x}$  is the zhi 質 "constitution" of the five colors.') The Yi wen zhi lists a Huang Di tai su in 20 pian. Liu Xiang 劉 向 (77?—6 B.C.), in his Bie lu quoted in his son's Qi  $l\ddot{u}e$ , stated: '[The Huang Di tai su] expounds [the doctrines of] yin-yang and the five agents, considering them to be the Way of Huang Di. Hence [the text] is named Tai su.' Hence the Su wen is a question-and-answer dialogue on the Tai su; this should be proof enough of the meaning of its [title]. That it is named Su wen rather than Wen su  $\mathbb{F}$   $\mathbb{F}$ , this is not different from [a title such as] Tian wen  $\mathbb{F}$   $\mathbb{F}$ ."

As Qian Chaochen 錢 趕 塵 pointed out, no antecedent is known for the construction of a book title from such diverse elements. However, if Gao Baoheng et al., Yao Jiheng, and Tamba Genkan meant to indicate that the meaning of su in Su wen is identical to that of su in Huang Di tai su, they may not have been wrong after all. The tai su in Huang Di tai su may have referred to the widely shared cosmological notion of "grand simplicity" in the sense of the basics of existence unaffected by human culture. In this view, Su wen could be interpreted as "Basic Questions," that is, questions pertaining to the basics of human existence.

It is here that we return to Quan Yuanqi, whose reading comes close at least to the intention we consider inherent in the title *Su wen*. Hence our rendering of the title *Huang Di nei jing su wen* is "Huang Di's Inner Classic, Basic Questions."

### Ш

## Early *Su wen* Texts and Commentaries before the Eleventh Century

### 1. HUANGFU MI 皇甫謚 AND THE JIA YI JING 甲乙經

In about A.D. 260 a man named Huangfu Mi (215-282) wrote the first medical text transmitted to the present containing historically datable contents that can be traced to the textus receptus of the Su wen. Huangfu Mi, whose childhood name was Jing 靜 and whose style name was Shian 士安, was renowned enough to be remembered with a biography by the authors of the official history of the Jin dynasty. He is portrayed as a knowledgeable author who wrote texts on a broad range of topics. Originally not a medical specialist, he became interested in health care as a result of a personal illness during the gan  $lu \, \ddagger \, \mathbf{g}$  reign period (256–60). Coping with what he experienced as inadequate treatment, he collected medical texts and realized the deplorable state of what he considered the remnants of the *Huang Di nei jing* listed in the bibliographic section of the history of the former Han dynasty. A separate book, the Ming tang kong xue zhen jiu zhi yao 明堂孔穴針灸治要 (Essentials on [Insertion] Holes and Acu-Moxa Therapy from the Hall of Brilliance), which he held in his hands and which, like the *Huang Di nei jing*, he traced to the Huang Di, supported his impression of omissions, errors, and overlaps in the available medical literature. Hence he "threw out meaningless phrases, eliminated repetitions, and [focused on the] discussion of the essential" and compiled the *Huang Di san bu zhen jiu jia yi jing* 黄帝三部 針灸甲乙經(The Classic in One, Two, [Three, . . . Juan Compiled from] Three Sections of Acu-Moxa [Texts] by Huang Di).

The "three sections" alluded to in the title were the *Su wen*, the *Zhen jing*, and the *Ming tang kong xue zhen jiu zhi yao*. While the *Su wen* and the *Zhen jing* are closely associated with the *Su wen* (except for the one-third of its contents added by Wang Bing during the Tang dynasty) and the *Ling shu* of the

Huang Di nei jing available today, the third source used by Huangfu Mi was lost early; its full title appeared only in the preface to his Jia yi jing. The bibliographic section of the official history of the Sui dynasty lists a "Ming tang kong xue 明堂孔穴,5 juan" and a "Ming tang kong xue tu 明堂孔穴。圖,3 juan" as "lost." It is unknown to what extent these texts and others referred to under similar titles in later bibliographies were identical to the Ming tang kong xue zhen jiu zhi yao mentioned by Huangfu Mi.

Quotations from Huangfu Mi's text in the Wai tai bi yao 外臺祕要 compiled by Wang Dao 王熹in 752 and in the Japanese medical anthology Ishimpo 醫心方 compiled by Tamba Yasuyori 丹波康賴 in 982 suggest that the juan of the Zhen jiu jia yi jing or Jia yi jing, as the book is mostly called, were enumerated following the sequence of the ten celestial stems jia 甲, yi 乙, bing 丙, ding 丁, and so on; hence, as the Japanese scholar Tamba Gen-in 丹波元胤 proposed in the nineteenth century, the reference to jia and yi in the title.

However, the textus receptus of Huangfu Mi's preface speaks of 十二卷, "12 *juan*," and while the bibliographic entry in the official history of the Sui dynasty does indeed list the text as divided into "ten *juan*," a commentary in small characters noted "[during the] Liang [dynasty]: 12 *juan*." The "Earlier Tang History" (*Jiu tang shu* 舊唐書) lists the text as *Huang Di san bu zhen jiu jing* by Huangfu Mi in thirteen *juan*. Hence it is not entirely clear whether Huangfu wrote his book in ten or twelve *juan* and whether the *jia yi* in its title is indeed a reference to the first two figures in a list of ten. Tamba Genkan considered the character 二in 十二卷 an erroneous addition.

The Jia yi jing was written for practitioners. Hence it contains significantly fewer portions excerpted from the Su wen than from the Ling shu. Huangfu Mi did not add text himself; his objective was to present data he considered helpful in clinical medicine. Huangfu Mi arranged the passages copied from the Huang Di nei jing corpus in a thematically rather systematic fashion. He began with data on general physiology and morphology, followed by general principles of diagnosis, therapy, and disease. The second part, juan 7 through 12, offers more specific discourses on diseases, diagnosis, prognosis, and treatment; it is structured according to diseases affecting the vessels, the depots, and the palaces and specific disease entities. Diseases of women and children conclude the volume.

The *Jia yi jing* was transmitted through the centuries in numerous handwritten copies showing increasing differences. In 1069 the Imperial Editorial Office published an authoritative version in twelve *juan* that has formed the basis for all reprints and commentaries ever since. Ma Jixing 馬繼 與has compared the edition of 1069 with the textus receptus of the *Su wen* and the *Ling shu*. Accordingly, Huangfu Mi combined textual fragments from the *Su wen* and the *Ling shu* throughout *juan* 1 through 12 of his *Jia yi jing*; the *Ming tang kong xue zhen jiu zhi yao* appeared only in *juan* 3, 5, and 7 through 12. Also, as Ma Jixing has pointed out, a total of 132 passages (the longest con-

sisting of 172 characters) appears to have been entered into the *Jia yi jing* between the eighth and the eleventh century from the *Su wen*, the *Jiu juan*, the *Ling shu*, the *Tai su*, the *Nan jing*, and the *Shang han lun*.<sup>2</sup>

Although the Song editors did not take the same pains in commenting on the *Jia yi jing* that they had taken in annotating the *Su wen* and although they too added passages from the *Huang Di nei jing*—albeit noted as such—that were not part of the *Jia yi ying* before, the *Jia yi jing* is nevertheless of value for an analysis of the textual history of the *Su wen*.

#### 2. QUAN YUANQI 全元起 AND THE SU WEN XUN JIE 素問訓解

The first known commentated edition of the complete Su wen was compiled early in the sixth century by Quan Yuanqi. The bibliographic section of the official history of the Sui dynasty lists this book as "Huang Di su wen, 8 juan, with a commentary by Quan Yuanyue 全元越." Chapter 59 of the Southern History 南史, the official history of the southern dynasties in the epoch of the empire's Division between North and South, refers to a man named Jin Yuanqi 金元起, who in preparing a commentary to the Su wen sought advice from a scholar named Wang Sengru 王僧孺(465-522) on how to interpret the meaning of the term bian shi  $\overline{\&u}$   $\overline{u}$ , that is, the "pointed stones" used for bloodletting before the introduction of needles and acupuncture. Both the character  $\underline{u}$  in the Sui History and the compilers of the New Tang History, who identified the author as  $\underline{u}$   $\underline{u}$ 

Another entry in the Sui dynastic history lists a "*Huang Di su wen*, 9 *juan*" with a comment: "[during the] Liang [dynasty]: 8 *juan*." Possibly both entries referred to the *Su wen* edition commentated by Quan Yuanqi who, as a junior contemporary of Wang Sengru, wrote during the Liang dynasty (502–557). When in their introduction to the *Su wen* Gao Baoheng et al. identified Quan Yuanqi as an author of the Sui dynasty, they may not have been aware of the anecdote related in the *Southern History*.

Gao Baoheng et al., also in their introduction to the Su wen, pointed out that Quan Yuanqi "was the first to prepare a commentary" to the Su wen: 始為之訓解. Most likely on the basis of this wording, Xu Chunfu 徐春甫, a Ming author of the mid-sixteenth century, called Quan Yuanqi's edition Su wen xun jie 素間訓解, "Su wen Commentary." This title has been used for Quan Yuanqi's version of the Su wen ever since.

At the time Gao Baoheng et al. edited the *Su wen*, Quan Yuanqi's version was still extant. Presumably it was lost by the early twelfth century at the latest, perhaps as a consequence of the turmoil during the *jing kang* reign period of 1126–1127, or simply because the *Su wen* version with comments by Wang Bing and edited by Gao Baoheng et al. had slowly pushed the *Su wen xun jie* into oblivion. <sup>4</sup> Only a small number of Quan Yuanqi's comments quoted in

the *Su wen* commentaries by Wang Bing and Gao Baoheng et al. have preserved some literal wording from the *Su wen xun jie*.

Hence we know that the information Quan Yuanqi gained from Wang Sengru found its way into Quan's text. In a comment added to *Su wen 25*, Gao Baoheng et al. wrote: "Quan Yuanqi stated: pointed stones represent an ancient method of external treatment. They have three names: 1. needle stones, 2. pointed stones, and 3. chisel stones. In fact this is just one item. In ancient times [people] were unable to cast iron. Hence they used stones as needles. This is why they named them needle stones. That is to say, the workmen had to sharpen them and give them shapes of varying sizes in correspondence with the illnesses [to be treated]. Huang Di created the nine [types of] needles to replace the chisel stones."

Not rarely, Quan Yuanqi's comments were entered, as were some of the annotations added by earlier commentators unknown to us, into the main text when later copyists purposely or erroneously did not care to preserve a distinction between historical layers of the text. For example, *Su wen* 47 had a fifteen-character passage found neither in the *Jia yi jing* nor in the *Tai su* version (see below). Gao Baoheng et al. concluded that this passage was a comment by Quan Yuanqi later inserted into the main text. Hence they moved this passage back into the commentary.<sup>6</sup>

In compiling the *Jia yi jing*, Huangfu Mi had at his disposal a *Su wen* in nine *juan*. Quan Yuanqi, though, commented on an eight-*juan* version. This difference allows two interpretations. Either an entire *juan* was lost in the course of the transmission of the text from the third to the sixth century; judging from Wang Bing's version (see below p. 41) this may have been the seventh *juan*. Or, for reasons unknown, in the course of three hundred years, the treatises of the *Su wen* were rearranged from nine into eight *juan* and, in one of the versions referred to by the Sui dynastic history, later into nine *juan* again.

Hence it is difficult to decide on the basis of available evidence whether Quan Yuanqi commented on a text of the same size as the one seen by Huangfu Mi, in which case the major loss claimed by Wang Bing occurred between the sixth and the eighth century. The alternative, favored by Chinese exegesis, is that Quan Yuanqi himself already worked with a shortened version, in which case one may assume that his edition was transmitted more or less complete until the time of Wang Bing.

One might keep in mind, though, that the only data available to judge the contents of the Quan Yuanqi edition are the notes Gao Baoheng et al. added in view of the arrangement of the seventy treatises<sup>7</sup> of the Quan Yuanqi edition they were able to consult in 1069 in comparison with Wang Bing's edition of 762. No one can say for sure that their copy of the *Su wen xun jie* was still the same size as the original compiled by Quan Yuanqi five centuries before.

#### 3. YANG SHANGSHAN 楊上善 AND THE HUANG DI NEI JING TAI SU 黄帝內經太素

## 3.1. History and Reconstruction of a Tai su Text in Japan

Japanese records of the eighth and tenth centuries give evidence of the existence of a medical text titled  $Tai\,su\,$  太 素 in Japan. During the same period, in the early ninth century, at least one commentated version of this  $Tai\,su$  was published, the  $Tai\,su\,jing\,ji\,zhu\,$  太 素 經 集 注 , by Ono Kurane 小 野 藏 根 . While the latter was lost in subsequent centuries, the fate of the original  $Tai\,su$  itself can be traced to the present. As intensive research over the past decade has demonstrated, parts of the original  $Tai\,su$  appear to have survived the centuries in Japanese temple archives and in at least one private Japanese collection.

In the eighth century, a Japanese named Hachida no Kusushi Hunato 蜂 田藥師船人 prepared a copy of an original text that was lost afterward. This copy was transmitted for four centuries before a man named Tamba Norimoto 丹波憲基 copied it again between 1151 and 1158, recording the name of the earlier copyist and adding the date of his copy to the end of each *juan*. Only a few years later, between 1166 and 1168, a man named Tamba Yorimoto 丹波賴基 copied this latest copy again, providing at the end of each *juan* the names of the earlier copyists as well as the dates both of the previous copy and of his own. Possibly during the thirteenth century, the Tamba Yorimoto copy found its way into the Nin-naji 仁和寺 temple library. At that time it was complete, with a total of thirty *juan*.

In about 1363 Wajyo Yurin 和上有鄰 declared in his book Fu tian fang 福田方: "Conscientious scholars must study the Su wen, the Tai su, Wang Shuhe, Zhang Zhong jing, and the Nan jing." At least at that time, the Tai su must still have been widely available in Japan.  $^{10}$ 

In about 1800, however, a Japanese collector named Hukui Youtei 福井 榕亭 was able to purchase a one-*juan* fragment of the *Tai su* copy previously kept in the Nin-naji temple archives. Presumably during the great fire of 1788, this fragment had vanished from the temple and had reappeared shortly afterward outside the temple to be offered for sale. In 1820 Hukui Youtei published his fragmentary *juan* 27 of the *Tai su*, an event that drew much attention from Japanese scholars. But it was only in 1918 when the Nin-naji temple sent someone to check the Hukui Youtei collection for ad-

ditional texts that might have vanished from their archives in the eighteenth century that it was found out that Hukui Youtei had purchased a complete *juan* 21 fragment as well as parts of *juan* 3, 12, and 14 in addition to the *juan* 27 fragment. Finally, in 1936, a committee formed to survey Japanese cultural heritage discovered that the Nin-naji temple archives had retained further parts of the *Tai su*. On the basis of all the fragments collected by that time, twenty-five of the original thirty *juan* could be reconstructed, although some of them remained fragmentary. Nothing is known of the whereabouts of the missing five *juan*.

From the nineteenth century through the final decades of the twentieth century, first numerous handwritten copies of various parts of the reconstructed Taisu fragments and later partial or complete printed editions have appeared, making the twenty-five juan available to research. <sup>12</sup>

## 3.2. The Issue of the Chinese Master Copies of the Tai su

There is no doubt that the Japanese reconstruction has brought back to light the major part of a *Tai su* text that was extant in China itself at least until the eleventh century, when the Imperial Editorial Office set out to work on what were considered the core works of ancient Chinese medicine.

The order given to Gao Baoheng et al. specified eight texts, including the Tai su. 13 For reasons unknown, the Tai su remained unedited, but so did the Ling shu, which was extant then and is still available today. Also, Gao Baoheng et al. made extensive use of the Tai su in commentating the text of the Su wen and of the Jia yi jing. Presumably the Tai su lost its attraction as a separate book in the course of subsequent decades for at least two reasons. First, the availability of a Su wen authorized by the Imperial Editorial Office, a text overlapping to a large extent with the *Tai su*, may have made the Tai su seem outdated, because the latter lacked the elaborate comments by Wang Bing of the eighth century (see below) and by Gao Baoheng et al. of the eleventh century. Second, and perhaps more important, the comments added by Yang Shangshan had a definite Buddhist and Daoist tinge; it may well be that at a time when Confucian scholars began to approach medicine as an alternative to a career as a scholar-official, the more naturalistic comments by Wang Bing and Gao Baoheng appeared preferable to them. Hence when the bibliographic section of the Song dynastic history was compiled during the Yuan dynasty, the Tai su was listed only as a fragment consisting of three juan. Subsequently it disappeared entirely and was reprinted in China for the first time again only in 1897, on the basis of the Japanese finds. 14

The one basic question that remains is whether the reconstructed version of a Chinese text titled *Tai su* that apparently found its way to Japan during the eighth century dates back to a *Tai su* 泰素 of twenty *juan* listed in the

Western Han bibliography  $Qi \, l\ddot{u}e \, t$  略 compiled by Liu Xin 劉歆 (d. A.D. 23). If indeed the  $Tai \, su$  of the  $Qi \, l\ddot{u}e$  is identical to the medical text  $Tai \, su$  documented in Japan since the eighth century, several points need to be clarified.

The text transmitted to Japan in the eighth century and reconstructed in the nineteenth century was compiled by a Chinese author named Yang Shangshan 楊上善. Yang Shangshan's life is not recorded in a biography of his own in any official dynastic history. Gao Baoheng et al. considered him a contemporary of the Sui. This assessment was repeated by Li Lian 李濂 (1488–1566) in his Yi shi 醫史, "History of Medicine," and by Xu Chunfu, also of the sixteenth century, in his Yi tong 醫統, "Summary of Medicine."

More recent research has considered evidence to the effect that Yang Shangshan probably was born during the Sui or early Tang dynasty and died during the Tang dynasty. <sup>16</sup> For example, at the beginning of the text found in Japan, Yang Shangshan is identified as a *tai zi wen xue*  $\pm$   $\pm$   $\pm$  efficial. Such an office did not exist before the Tang dynasty. Similarly, all commentaries by Yang Shangshan refer to Lao zi as *Xuan Yuan Huang Di*  $\pm$   $\pm$   $\pm$   $\pm$  %. "August Di of the Obscure Origin." As Xiao Yanping  $\pm$   $\pm$  was able to show in 1924, this title was not conferred on the founder of Daoism until the year 666. <sup>17</sup>

Furthermore, although Yang Shangshan was not found eligible for an official biography, his books were listed in the bibliographic section of the *Old Tang History*. Apparently the compilers of the first official history of the Tang dynasty personally held in hand thirty-three *juan* written by Yang Shangshan on Daoist subjects and forty-three *juan* written on medical issues, including a *Huang Di nei jing tai su* of thirty *juan* and a *Huang Di nei jing ming tang lei cheng* 黄帝內經明堂類成 of thirteen *juan*. It is quite unlikely that Yang Shangshan's books would have remained unnoticed by the Tang dynasty compilers of the dynastic history of the Sui if they had been written during the Sui dynasty.

Also, a number of characters occurring in the personal names of the first Tang emperor, Gao zu, that is, Li Yuan 李淵, his father Li Bing 李炳, and his son Li Shimin 李世民, who became the second Tang emperor known as Tai zong, as well as of Li Zhi 李治, who reigned as the third Tang emperor and is known as Gao zong, were taboo both in the main text of the *Tai su* and in the commentaries added by Yang Shangshan, suggesting that Yang Shangshan wrote his text during that time.<sup>18</sup>

Finally, Du Guangting 杜光庭, an eminent writer and Daoist scholar who lived from 850 to 933, spoke in his *Dao de jing guang sheng yi* 道德經廣聖義 of Yang Shangshan as a contemporary of emperor Gao zong, whose reign lasted from 650 through 683. That is, if Yang Shangshan died during Gao zong's reign, he may have been born during the final years of the Sui dynasty, which was supplanted by the Tang in 618. Except for the reconstructed

 $Tai\ su$ , all the other books by Yang Shangshan were lost in subsequent centuries. That is, if Yang Shangshan commented on his  $Tai\ su$  between 666 (the year when Lao zi was given the title Xuan Yuan Huang Di) and 683 (the end of the reign of Emperor Gao zong), there is a gap of about six centuries between the reference to a  $Tai\ su\ \mbox{\ensuremath{$\pi$}}\ \mbox{\ensuremath{$\pi$}}\ \mbox{\ensuremath{$u$}}\ \mbox{\ensuremath{$m$}}\ \mbox{$ 

Ma Jixing has expressed his notion that the two books are identical and he is able to offer at least two good arguments. Pirst, both the text listed in the  $Qi\ l\ddot{u}e$  and the text at the disposal of Yang Shangshan were structured in twenty pian 篇. Although Yang Shangshan rearranged the book in thirty juan 卷, mostly by dividing one juan of the original into two or three juan in his version, he nevertheless identified the original sections and their headings at the beginning of each of his thirty juan. Hence the following list of nineteen of the original twenty pian titles of the  $Tai\ su$ , as it was transmitted before Yang Shangshan's rearrangement of its contents, has reemerged from the reconstruction of the fragments found in Japan. The twentieth title (referring to the twelfth pian) was lost, together with the five juan that are missing in the Japanese fragment. Pi

- 1. 攝生, To maintain life
- 2. 陰陽, Yin-yang
- 3. 人合, Man's correspondences
- 4. 藏府, Depots and palaces
- 5. 經脈, Conduits and vessels
- 6. 輸穴, Transportation holes
- 7. 營衛氣, Camp [qi] and protective qi
- 8. 身度, Body measures
- 9. 診候, Diagnosis
- 10. 證候, Pathological conditions and signs
- 11. 設方, To set up prescriptions
- 12. (Lost)
- 13. 九針, The nine needles
- 14. 補瀉, Supplementation and drainage
- 15. 傷寒, Harm caused by cold
- 16. 傷熱, Harm caused by heat
- 17. 邪論, On evil
- 18. 風論, On wind
- 19. 氣論, On qi
- 20. 雜病, Various illnesses<sup>22</sup>

Doubts concerning the identity of the text listed in the  $Qi\ l\ddot{u}e$  and the text commented on by Yang Shangshan may be based on more substantial arguments than are available to support a Han dynasty origin of Yang Shangshan's  $Tai\ su$ . First, Liu Xiang in his  $Bie\ lu\$ 別錄 stated on the  $Tai\ su$  entry in the Han dynastic history: "Some say this was written by Zhu gongsun 韓諸公孫 of the [state] Han (some editions have  $zi\$ 子 instead of  $sun\$ 孫)." This state of Han 韓 was eliminated by the state of Qin 秦 in 230 B.C.; 23 hence, if Liu Xiang was correct, the  $Tai\ su$  mentioned in the  $Qi\ l\ddot{u}e$  should have been written during the Warring States period. However, there is very little in the textus receptus of the  $Tai\ su$  that fits conceptually into a period preceding the Mawangdui texts of the early second century B.C. Hence it is unlikely that the contents of the two are identical or even closely related.

Second, in his Bie lu comment on the Tai su, Liu Xiang offered a hint at its contents, stating that it is concerned with the way Huang Di used the yinyang and five-agents doctrines for his government. Not surprisingly, the *Tai* su appears in the Qi lüe in the section "yin-yang school" (Yin yang jia 陰陽 家), rather than in the section fang ji 方技, "prescription techniques," which comprises the four literary subsections of yi jing 醫經, "medical classics," jing fang 經方, "classic prescriptions," fang zhong 房中, "inside the chamber [techniques]" (i.e., sexual cultivation), and shen xian 神儒, "[techniques of the] immortals." Given the claim that both the Tai su and the Huang Di nei jing listed in the Qi lüe are ancestors of large parts of the Huang Di nei jing su wen and of the *Huang Di nei jing tai su* available today, and in view of the fact that the contents of Yang Shangshan's Tai su are largely identical to the contents of the Su wen, one would have expected to see the Tai su and the Huang Di nei jing listed in the Qi lüe in the same subsection of the fang ji group of texts. This, however, is not the case. The Huang Di nei jing is listed together with seven other titles as "medical classics." The compilers of the bibliographic section of the dynastic history of the Han saw no reason to bring the Tai su and the Huang Di nei jing together in one group either.

Third, Huangfu Mi did not know of a *Tai su*; he spoke only of the existence of a *Su wen* and of a *Zhen jing*. His contemporary Zhang Hua 張華(232–300) stated in the "Survey of Literature" (*Wen ji kao* 文籍考) in his book *Bo wu zhi* 博物志: "Those ancient books that are still extant today include

the *Shen nong jing* 神農經, the *Shan hai jing* 山海經—some say the *Shan hai jing* was authored by Yu, the *Su wen* authored by Huang Di."<sup>24</sup> That is, Zhang Hua knew of the *Su wen* but was not aware of the existence of a *Tai su*. To assume that Yang Shangshan's copy was related to the text listed in the *Qi lüe* would imply that this manuscript survived and, presumably, was copied for more than six hundred years, unnoticed, before surfacing again.

After rejecting the identity of the Tai su listed in the Qi lüe and the text serving as a master copy for Yang Shangshan, Qian Chaochen examined whether Yang Shangshan could have started from Quan Yuangi's Su wen xun jie when he prepared his Tai su. He pointed out: "From the records in the bibliographic section of the dynastic history of the Sui, it is obvious that the only Su wen transmitted at the time of the Six Dynasties was Quan Yuangi's Su wen xun jie. Hence the Tai su took Quan Yuanqi's text as a master copy. For this reason, in his comment at the beginning of *juan* 6 of the *Tai su*, Xiao Yanping stated: 'The Tai su is identical to the Quan Yuanqi edition. Unfortunately, Quan Yuanqi's version is lost and there is no way to conduct a thorough examination.' However, in a comment following the sentence 腎脈大 急沉, "the [movement in the] kidney vessel is large, urgent, and in the depth," in juan 15 of the Tai su, Xiao Yanping said: 'See pian 26, Jing mai jue 經脈 厥, of this text. Judging from this, the present text and the Quan Yuanqi text are identical.' However, a critical examination raises questions. The main point is that, because of a taboo, the entire Quan Yuanqi text avoids the character shun 順. If the Tai su were based on the Quan Yuangi edition, why should it have failed to observe the taboo on shun? Was the character used instead changed to *shun* again by someone later on? This is not a rare phenomenon in ancient texts. It may well be that in the course of several hundred years, when the Su wen xun jie was copied again and again, someone did indeed return the character shun to the text."25

One may conclude that the contents of the master copy elaborated on by Yang Shangshan and published by him as *Huang Di nei jing tai su* and that are accessible today through the reconstruction of the fragments found in Japan are as old as the contents of the core text of the textus receptus of the *Huang Di nei jing su wen*. The *Su wen* is a collection of different texts of varying age compiled and brought together beginning with the final period of the Earlier Han dynasty or during the Later Han dynasty, that is, between 150 B.C. and A.D. 200. The text used as a master copy by Yang Shangshan represented a collection of text portions by various authors that are largely identical to the texts found both in the *Su wen* and in the *Ling shu*, that is, the former *Jiu juan* or *Zhen jing*. This master copy collection may have been arranged even after Huangfu Mi compiled his *Jia yi jing*; some of its contents appear to be quoted from the *Jia yi jing*, because they can be seen neither in the *Su wen* nor in the *Ling shu*.<sup>26</sup>

Based on his comparative reading of the Su wen, the Ling shu, the Jia yi

jing, and the Tai su, Tessenow has proposed the following hypothesis. The Tai su is a compilation that does not parallel the Su wen and the Jiu juan/Ling shu. Rather, it was a new compilation based exclusively on the contents of the Su wen and the Jiu juan/Ling shu. This new compilation may have been motivated by a desire, first, to generate a medical summa (tai su) and, second, to systematize the material that had been presented rather unsystematically in the Jiu juan/Ling shu and in particular in the Su wen.

The compilation of the Jia yi jing may have been based on the same motives as that of the Tai su. However, in contrast to the Tai su, the author of the Jia yi jing clearly expressed his ordering principles and specified the sources of his Jiu juan/Ling shu and Su wen quotes.

Tessenow supports his proposition with several arguments. First, the *Tai su*, in addition to incorporating material from the *Jiu juan/Ling shu*, is clearly based on the pre–Wang Bing version of the *Su wen*. It contains almost no material not found in the *Ling shu* and in the *Su wen*. If the *Tai su* had been a primary compilation paralleling the *Jiu juan/Ling shu* and the *Su wen*, one would expect to find in the *Tai su* idiosyncratic choices of material from the original sources as are reflected by the contents of the *Ling shu* and the *Su wen*.

Second, the division of larger sections in the *Tai su* is basically identical to those found in the *Su wen* and the *Ling shu*. The structures of the dialogues and the texts in the individual sections are virtually identical. If the *Tai su* had been a primary compilation of formerly unstructured material one would expect to find as many divergences between the *Tai su*, on the one side, and the *Su wen* and the *Ling shu*, on the other, as between the *Su wen* and the *Ling shu*.

Third, the sequence of the sections in the *Tai su* in general (albeit not in every detail) follows that of these sections in the *Ling shu* and the *Su wen*. For example, in the *Tai su*, *Ling shu* portion 29A is followed by the parallel *Su wen* portion, then by the subsequent *Ling shu* text 30 and, again, by the corresponding *Su wen* portion, and so forth.

So far Tessenow's proposition. Recently, Qian Chaochen has published his exhaustive study of the *Huang Di nei jing tai su*, presenting an abundance of evidence to lend weight to his three conclusions: "The *Tai su* is not based on the *Huang Di tai su*";<sup>27</sup> "The *Tai su* is not based on the *Jia yi jing*";<sup>28</sup> and "The *Tai su* is based on the *Jiu juan* and the *Su wen*."<sup>29</sup>

Yamada Keiji 山 田 慶兒, in his study on the formation of the *Huang Di nei jing* of twenty years ago, had suggested the opposite relationship between the *Tai su* and the *Jiu juan* and the *Su wen*, claiming that the *Tai su* was the source of the *Jiu juan* and the *Su wen*. His arguments, however, cannot be maintained in the light of more recent research.<sup>30</sup>

In view of textual research, it is important to note, however, that in comparison with the *Huang Di nei jing su wen* available today, the *Tai su* text as a

whole is closer to the original sources of the Han era, because it has come to us in a version of the seventh century, uninfluenced by the changes introduced by Wang Bing in the eighth century and the editorial committee of the eleventh. Hence a comparison of the *Su wen* with the text of the *Tai su* often serves to elucidate the meaning of incomprehensible passages in the former, simply because occasionally the latter contains these passages in their original, meaningful wording. However, this is by no means to say that the reconstructed *Tai su* version contains a perfect replica of what Yang Shangshan used as a master copy in the seventh century. The textus receptus of the *Tai su* is also marred by omissions and errors, and it is again through comparison with the *Su wen* and the *Ling shu* that a more faithful ancient version may be approached.

## 3.3. Yang Shangshan's Commentaries

The reappearance of the *Tai su* by way of the reconstruction of fragments transmitted for more than a millennium in Japan is not only of great value because it opens a window onto a rather early historical layer in the development of ancient Chinese medical texts that also found entrance into the textus receptus of the *Su wen*. The *Tai su* is also significant for textual research because of the commentaries Yang Shangshan added to the master copy.

Yang Shangshan explicitly quoted sixteen medical and eight nonmedical titles in his annotations. The former included, among others, the  $\it Jia$  yi  $\it jing$ , the  $\it Su$  wen, the  $\it Jiu$   $\it juan$ , and the  $\it Nan$   $\it jing$   $\it parage = \it parage$ 

Yang Shangshan was first of all a philosopher interested in the teachings of Lao zi and Zhuang zi, judging by the topics treated in the books he published.<sup>32</sup> But except for the *Tai su* and a short fragmentary *juan* of the *Huang Di nei jing ming tang lei cheng*, a work on acupuncture, plus the preface to this work, all these books were lost in subsequent centuries. It is mainly from Yang Shangshan's commentaries that are preserved in the *Tai su*, therefore, that we are able to assess his worldview, and it is from these commentaries that we learn that Yang Shangshan was an eclectic who resorted not only to Daoist

notions in his understanding of human existence but also to Buddhist and Confucian thought.

The central cosmological statement in Lao zi's *Dao de jing*, section 42, reads as follows: "The Way generates one, one generates two, two generates three, three generates the myriad things. The myriad things shoulder yin and embrace yang; it is by means of the *chong qi* that they are united." This statement leaves open what the figures one, two, and three actually stand for. A slightly more explicit elucidation of Lao zi's cosmology was offered in *Huai nan zi* 淮南子,Tian wen xun 天文訓: "The Way, that is to say, the law, begins with one. One [alone] does not give life. Hence it parted and became yin and yang. Through the union of yin and yang, the myriad beings came to life. Hence it is said 'one generates two, two generates three, three generates the myriad things.'"<sup>33</sup>

In *juan* 19 of the *Tai su*, Yang Shangshan further expounded this line of development: "Out of the Way, the One comes to existence; it is called 'original state of nature.' The One parts into two, that is to say, into heaven and earth. Out of the two, three comes to existence, that is to say, yin and yang combine their qi. Out of three, the myriad beings come to existence; they are separated into the nine fields, the four seasons, sun and moon, until the myriad beings are reached. Each and every being is reached by yin and yang qi. Hence the places reached [by yin and yang qi] are innumerable."<sup>34</sup>

Numerous additional comments by Yang Shangshan apply the central theme of the importance of yin and yang qi for the changes and development of the myriad beings. A statement closely related to the cosmology quoted above is the following: "The one qi divides into yin [qi] and yang [qi] to form the basis of birth and nurture. [Yin and yang qi] in turn divide into the four seasons, which then serve to bring about birth, growth, harvest, and storage. When this has reached its end, it begins anew. This is like a ring without beginning or end. This is what is called regularity." Or: "The Way of yin and yang, it has no physical appearance and it has no shape. It is by means of this [Way of yin and yang] that Creation is completed and that beings are processed without end."

The union of yin qi and yang qi may explain the generation of the myriad things, but it does not explain the animation of a living being. The *Tai su* contained the following passage: "The origin of life is called essence. When the two essences meet, this is called spirit." Yang Shangshan commented:

When a male and a female spirit meet, together they form one physical appearance. First my body comes to existence. Hence this is [the origin of life] that is called essence. When two essences meet, together they form one physical appearance. That which is elusive in this one physical appearance is that which is called spirit. This, then, is the subtle in a body. Someone asked: "That which is called spirit, I do not know whether it first comes to life within the essence, or whether it has a prior existence and comes only now?" The answer

is: "This *Nei jing* text speaks only of 'the spirit has received harm,' 'the spirit leaves,' or 'the spirit lives/generates.' From these [statements] one knows that [the spirit] arrives; it does not say: 'it first comes to life [within the essence].' Also, according to the Buddhist teachings, at the time the essences unite, a spirit qi arrives to entrust itself [to them]. From this one knows that [the spirit] has a prior existence; this is not an empty principle. Hence, Confucius presumably had a reason for not answering whether he knew about this or not. Only the Buddha spoke about this in all clarity and this can be trusted."<sup>38</sup>

Nowhere in the *Su wen* or *Ling shu* texts do we find a statement on the existence of a spirit prior to the existence of matter. By adding such decidedly Buddhist thoughts of transmigration in a commentary, Yang Shangshan altered the basic worldview underlying the wording of the *Tai su*.

In another passage of the *Tai su*, Yang Shangshan found a way to hint at his view on the existence of demon-spirits and their role in the causation and cure of illness. Huang Di had asked how to interpret the sudden onset of some ailments, concluding his remarks with what appears to have been a rhetorical question: "Can this be anything else than the working of demonspirits?" Qi Bo evaded a direct response by answering that the cause of such an illness can be neither seen nor heard and that "therefore, it appears as if demon-spirits" were involved. Huang Di continued by asking why such illnesses came to an end as a result of an invocation. Qi Bo answered: "Formerly the shamans knew very well what could overcome all illnesses. In those cases where they knew beforehand from which origin the illnesses were to arise, it was possible to make an invocation and [the illness] came to an end."<sup>39</sup>

While Qi Bo placed the effectiveness of invocations in "former times" and thereby indirectly denied that such things were still possible today, Yang Shangshan reinterpreted his statements in the following way:

"Formerly the shamans knew" (Yang Shangshan's abbreviated reference to the fuller sentence in the main text) means that shamans ahead of humans, by relying on demons and spirits, have foreknowledge of matters. In knowing the hundred illnesses to come about from conquering, being conquered, and generating, there are cases of evil being generated from inside [the body] and outside. As for what generates illness, one uses needles and drugs to treat that. It is not the case that demons and spirits are able to generate illness—demons and spirits can merely provide prior knowledge and that is all. To avail oneself of invocation when getting rid of those illnesses of which shamans have knowledge is not a case of incantation [against] the shamans' demons. 40

In other words, Yang Shangshan, by stating very clearly that demon-spirits exist in the present, argued that there is a legitimate place for consulting the spirit world to gain knowledge. Although this is in keeping with the general respect for divination in traditional Chinese society, Yang Shangshan

emphasized, and here he certainly contradicted most of the believers in demons, that they do not cause illnesses. They simply know why illnesses emerge. Shamans-magicians in close contact with the demon-spirits can know the cause of an illness earlier than ordinary men. Ordinary men, once they have learned through a shaman's invocation what the demons know about an illness, are then able to successfully treat the illness by means of needles or drugs. This, of course, is an ingenious solution to a problem that must have confronted every adherent of Daoist and Buddhist thought: how to reconcile the belief in the existence of demons with naturalistic medicine. Yang Shangshan managed to stand with one foot in each camp.

If the passages quoted above convey the impression that Yang Shangshan, as a philosopher, found it useful to employ both Daoist and Buddhist notions in annotating the *Tai su*, it should be added that some of his commentaries are tinged by what may be considered Confucian precepts. Not surprisingly, all examples are closely related to the Way of government.

The first is a comment on the famous passage in *juan* 2 of the *Tai su*, which also appears in *Ling shu* 29, expounding the correspondence between ruling a state and caring for one's health:

To maintain order among the people and to maintain order in one's body, to maintain order elsewhere and to maintain order here, to maintain order on a small scale and to maintain order on a large scale, to maintain order in the state and to maintain order in the family, it has never been that one acted against [the rules] and was able to maintain order. Hence it is only through going along with [the rules] that one achieves success. "To go along with" does not apply only to the acting against or going along with the qi in the yin or yang [movement in the] vessels; even in view of the entire population one should always strive to go along with their expectations. 41

Yang Shangshan saw no reason to reinterpret this explicitly Confucian statement; his comments served to confirm the original statement:

One must not act against the emotions of the people. Acting in accordance with them brings luck. Hence it is said: The sage does not cling to one state of mind permanently; it is by [assessing the state of mind of] the people that he develops his own state of mind.<sup>42</sup>

The original text continues with the following dialogue.

Huang Di:

How does one go along with them?

Qi Bo:

When you enter a state, inquire after its customs. When you enter a family, inquire after its prohibitions. 43 When you ascend the hall, inquire after its rites. When you approach a patient, ask what pleases him. 44

Again, Yang Shangshan remained firmly wihin Confucian thinking when he commented:

The Ways of dealing with the state, the family, and the body all have their structures. That someone meant not to follow these structures but wished to correct them has never occurred yet. The reason why one must make inquiries in all these situations alike is that one wishes to know the respective structures in all cases and go along with them. Customs, prohibitions, rites, and pleasure, these are the structures of man. Yin [qi], yang [qi], and the four seasons, these are the structures of heaven and earth. In the Way of maintaining life, not one of these must be left out. Hence one regularly inquires after them.

As these quotes demonstrate, Yang Shangshan was able to combine a broad range of thought in his commentaries. His nonmedical works bear titles that identify most of them as focused on Daoism; reading his *Tai su*, though, one cannot be entirely sure of the exact nature of the contents of his works. Surely, the *Tai su* alone makes him appear more like an eclectic than a firm adherent of only one of the three doctrines prevalent in his day. But it is difficult to imagine that it was because of the eclecticism of Yang Shangshan's comments that his text was less attractive than that by his competitor, Wang Bing, who wrote his annotated version of only the *Su wen* one hundred years later. There is at least one clear-cut political statement in Yang Shangshan's annotations that may have brought him into conflict with later dominant views.

In *Su wen* 8, the major functional entities of the human organism are identified in terms of central constituents of an imperial bureaucracy. In this context, the heart is described as "the official functioning as ruler. Spirit brilliance originates from it." Wang Bing commented: "It is responsible for establishing order among beings. Hence it is the official functioning as ruler. It is clear and quiet and houses the *ling* spirit. Hence [the text] states: 'Spirit brilliance originates from it.'" This parallel between what was considered the ruling organ in the human organism and the ruling position in the state was further elucidated in *Su wen* 8 in the following passage.

Hence,

if the ruler is enlightened, his subjects are in peace.

To nourish one's life on the basis of this results in longevity.

There will be no peril till the end of all generations.

Thereby ruling the world will result in a most obvious success.

If the ruler is not enlightened, then the twelve officials are in danger.

This causes the passageways to be obstructed and impassable.

The physical appearance will suffer severe harm.<sup>46</sup>

The identical terminology employed to describe the central elements in the state and its economy, on the one hand, and in the body and its pathophysiology, on the other, was perfectly suited to reinforce the near-total correspondence between political philosophy and medicine. The *Tai su* offers evidence of a concrete application of this principle:

The hand minor yin vessel is the only [vessel] without transportation [holes]. Why is that?

#### Qi Bo:

The minor yin [vessel] is the vessel of the heart. The heart is the eminent ruler of the five depots and six palaces; it is here that the essence spirit resides. Its storage is especially firm and durable, no evil is able to settle there. If it were to settle there, then the heart would be harmed. When the heart is harmed, then the spirit leaves. When the spirit leaves, then [the patient] dies. Hence all evil that is present in the heart is in fact present in the heart-enclosing network. The heart-enclosing network is the vessel of the heart ruler. Hence only [the minor yin vessel] has no transportation [holes].

#### Huang Di:

If the minor yin [vessel] has no transportation holes, [does that mean] it cannot fall ill?

#### Qi Bo:

The conduits outside of it may fall ill, the depot itself does not fall ill.<sup>47</sup>

In Confucian thought, this notion of the ruler of the state being shielded by his immediate entourage against evil influences may have been quite plausible. A transfer of this principle to the presumed ruler of an individual human organism, the heart, could not be based on any factual evidence. Rather, the claim of invulnerability reflects the integration of physiological and etiological concepts in a social philosophy. To question the invulnerability of the heart in a medical context, therefore, could not remain without repercussions in other spheres. In fact, just as every educated person knew that medicine served as a rather secure haven to test notions too dangerous to voice in politics, Yang Shangshan may not have been naive enough to assume that his message remained hidden.

As is the case with all the five depots, the heart may be strong or fragile. When a heart is fragile, then it tends to develop the disease "wasting dan." The reason is that it is not strong. Hence it tends to develop the disease "wasting dan." That is, it receives evil. Hence one knows, [when it is said: the heart] does not receive evil, [then this is to say:] it cannot receive much evil from outside. In view of the fact that beverages and food that serve to nourish the heart may bring about illnesses, it cannot be that there is never any evil [in it]. Therapies exist for all the illnesses that emerge by way of the minor yin [vessel] ruled by the heart. Also, in the *Ming tang* [literature] the hand minor yin [vessel], too, has five transportation [holes] to control illnesses. It cannot be that it has no transportation [holes].<sup>48</sup>

Even more explicitly, Yang Shangshan explained his notion in a context that did not really ask for such a comment. The *Tai su* stated: "The hand mi-

nor yin vessel of the heart emerges from within the heart. Once it has left [the heart] it connects with the heart link, moves down through the diaphragm, and encircles the small intestine."<sup>49</sup> Yang Shangshan admits that the heart occupies an eminent position, but, he adds, this does not protect it from evil influence:

All the remaining eleven conduit vessels among the twelve conduit vessels as well as the hand major yang vessel rise elsewhere and approach the depots and palaces. Why should only the minor vin conduit emerge from the heart? Because the spirit in the heart is the ruler among the five spirits, it is able to produce a vessel by itself; it does not enter by means of a vessel that has emerged somewhere else. . . . For all the diseases that result in the hand minor vin conduit from outside stimuli or by themselves, the *Shi er jing mai* 十二經脈 outlines [the different states of] abundance and weakness and whether to carry out a supplementation or a draining therapy. Also, the Ming tang liu zhu 明堂流注 lists five transportation [holes of this conduit]. In view of the circumstance that the heart depot cannot receive much evil from outside, it is a matter of course that the beverages, the food, and the medicinal decoctions that are supplied to the heart depot internally may exert harm in the same way as they may exert benefit. Hence when good food and good medication are supplied to the heart, the heart is balanced as a result. If bad food or bad medication is supplied to the heart, then the heart will fall ill.<sup>50</sup>

A text with the title  $Ming\ tang\ liu\ zhu$  is no longer known; hence its contents are not available for comparison. The  $Shi\ er\ jing\ mai$  text on the diseases of the hand heart minor yin vessel "resulting from outside stimuli" ( $shi\ dong\ \not\equiv$   $\mathfrak{h}$ ), though, may be the same text that appears a few lines farther down in the  $Tai\ su$ . That is, in view of the conflicting information in the  $Tai\ su$  on the possibility that the heart may fall ill, Yang Shangshan felt compelled to make it very clear that only one notion can be true, and he did not hesitate to point out which notion that is.

Yang Shangshan took a position here that may have been one of the reasons his book did not survive in China beyond the Song dynasty.

#### 4. WANG BING'S 王冰SU WEN EDITION OF A.D. 762

## 4.1. Wang Bing, His Intentions and His Preface

When a man named Wang Bing sat out to restore the *Su wen* in 751, he saw his undertaking justified by what he later described as a dismal situation in the transmission of the text. He took Quan Yuanqi's commentated version of nine *juan* as his master copy and, after correcting and rearranging the old material as well as adding new text portions, he published an annotated version in twenty-four *juan*. Wang Bing did not mention the *Tai su*, a complete and annotated edition of the two major texts of the *Huang Di nei jing* 

tradition, the *Su wen* and the *Ling shu/Zhen jing/Jiu juan*. The *Tai su* did exist in his time; it remains unclear whether Wang Bing simply was not aware of it or whether he disregarded it for some reason he chose not to specify.

Very little is known of the life of Wang Bing. He lived during the Tang era and wrote several books. His most important literary product is his *Su wen* edition. Apart from rearranging the structure of the text, he added more than five thousand commentaries, quoting a total of 536 passages (some identified as quotes, others not)<sup>51</sup> from thirty-eight texts.<sup>52</sup> The entire list of sources used by Wang Bing in his comments may demonstrate the comprehensive scholarship of this Tang author:

- 13 medical texts (totaling 423 quotes): Su wen (224 quotes), Ling shu (134 quotes), Nei jing ming tang 內經明堂 (1 quote), Shen nong ben cao jing 神農本草經 (7 quotes), Ming yi bie lu 名醫別錄 (3 quotes), Nan jing 難經 (3 quotes), Huang Di nei jing zhong hao tu jing 黃帝內經中語圖經 (23 quotes), Jia yi jing 甲乙經 (7 quotes), Ba su jing 八素經 (1 quote), Zheng li shang han lun 正理傷寒論 (12 quotes), Mai fa 脈法 (5 quotes), Su wen xun jie 素問訓解 (2 quotes), Li ji 歷忌 (1 quote).
- 25 nonmedical texts (totaling 111 quotes): Zhou yi 周易 (22 quotes), Zhou yi zhu 周易 注 (2 quotes), Shang shu 尚書 (14 quotes), Shi jing 詩經 (1 quote), Da Dai li ji 大戴禮記 (1 quote), Yue wei 樂緯 (1 quote), Li ji 禮記 (8 quotes), Li ji zhu 禮記注 (4 quotes), Zuo chuan 左傳 (3 quotes), Lun yu 論語 (1 quote), Er ya 爾雅 (2 quotes), Lao zi 老子 (21 quotes), Lao zi zhu 老子注 (6 quotes), Zhuang zi 莊子 (8 quotes), Guang cheng zi 廣成子 (1 quote), Xun jia jing 遁甲經 (1 quote), Bai hu tong 白虎通 (1 quote), Shan hai jing 山海經 (1 quote), Han shu 漢書 (2 quotes), Suan shu 算書 (1 quote), Yin yang fa 陰陽法 (1 quote), Bao pu zi 抱朴子 (1 quote), Zhen gao 真誥 (1 quote), San bei jing 三備經 (2 quotes), Yin yang shu 陰陽書 (7 quotes).<sup>53</sup>

Social and existential insecurity have often been responsible for an in-

creasing belief in the presence and power of demons, spirits, and gods. Hence Qian Chaochen suspected that these factors may have been responsible for a strongly Daoist element in Wang Bing's commentaries. However, as far as they appear in his *Su wen* commentaries, Wang Bing's Daoist convictions are not expressed as a belief in the existence of demons that went beyond Yang Shangshan's. The few statements in the main text of the *Su wen* that might have given Wang Bing an opportunity to at least hint at a role of demons in human health and illness did not stimulate him to make any remarks, except that he recognized their presence. <sup>56</sup>

If Wang Bing's commentaries are to be interpreted as a response to the unsettling sociopolitical events of his time, this response may be seen in his emphasis on self-cultivation, that is, on the need to take one's fate and welfare into one's own hands coupled with the belief that the environment contributes very little if anything to one's fate. Hence Wang Bing rearranged the *juan* and sections of his master copy in such a way that statements on the nourishment of life received a prominent position.

We do not know whether Wang Bing acted on these premises purposely; some of the intentions he was conscious of, though, are outlined in his preface:

To untie strings and to eliminate distress, to keep the true [qi] complete and to guide the [vital] qi [through the entire body], to raise the people to humaneness and long life, and to help the emaciated to regain health, all this can be achieved only through the Way opened by the three Sages. Kong Anguo stated in his preface to the *Shang shu:* "Fu Xi, Shen Nong, and Huang Di, their books are called Three Monuments. They tell the grand Way." Ban Gu mentioned in the *Han shu*, Yi wen zhi, a *Huang Di neijing*, 18 *juan*. The *Su wen* constitutes 9 *juan* of that classic, together with the *Ling shu* in 9 *juan*. This is how this number [of 18 *juan*] came about.

Even though the times have changed repeatedly, [this book continues to be] transmitted and studied and is still extant. Occasionally, however, it was feared that no appropriate person [was present to whom the text could be taught] and hence it was kept secret. It is for this reason that the seventh *juan* was stored away by the teachers, with the result that [the version] available today consists of only eight *juan*.

Now, its text is concise, its meaning is extensive, its [underlying] principles are difficult, and its thoughts are profound. It distinguishes among the images of heaven and earth, it arranges the manifestations of yin and yang, it elucidates the origins of change and transformation, and it expounds the early signs of death or survival. Far and near are one without [prior] deliberation, the obscure and the obvious coincide without [prior] agreement. An examination of its words shows that they are well founded; an investigation into the facts it relates proves that they are free of errors. It is truly possible to say that it is the origin of the perfect Way, the basis for the nourishment of life.

If one is able-minded by nature, [this book helps] to know the wonderful and to penetrate the mysterious. A complete understanding may be associated with intuitive wisdom, but to grasp rules and standards one has to rely on textual studies too. So far it has never been the case that for walking one left the way, or that for leaving one did not go through the door. Hence by concentrating one's thoughts and by studying the essential, by deliberating upon the subtle, and by exploring the hidden, one's knowledge will reach the true and the important and a state can be achieved in which, when looking at the ox, one does no longer perceive it as a whole.<sup>57</sup> Hence any activity will lead to success as if demon-spirits had granted invisible help, and world-famous outstanding personalities will appear again and again.

So, in the Zhou era there was Mr. Qin.  $^{58}$  In the Han era there was Mr. Chunyu.  $^{59}$  In the Wei era there were Mr. Zhang and Mr. Hua.  $^{60}$  They all had obtained this wonderful Way. They all demonstrated its usefulness anew every day. They were of great help to the people. They flourished continuously like flowers and leaves; fame and facts coincided. This was a manifestation of their learning and a gift from heaven.

In my youth I longed for the Way; all the time I strove to nourish [my] life. Fortunately, I found the true classic and used it as tortoise and mirror. However, the editions extant today are full of errors. Headings of a *pian* may occur twice; beginning and ending do not follow the same structure; wording and meaning do not fit; to apply [their contents] in practice is not easy. Even its perusal is quite difficult. In the course of a long time, flaws have accumulated continuously. In some cases one single *pian* appears twice under two different names. Or two discourses have been combined under one title. In other cases, a dialogue has not been brought to its end and yet a theme of another *pian* is begun. Or it may be that something was left out and has not been written [again] and this is said to be a gap resulting from time.

The [treatise] "Jing he" appeared twice but was given the heading "Zhen fu" [in one instance]. The [treatise] "Fang yi" was subsumed under the title "Ke lun" together with [another treatise]. The "Xu shi" was cut [from its original context and entered] into the [treatise] "Ni cong." The [treatise] on the conduits and network [vessels] was combined with the "Lun yao." The [treatise] on "Pi bu" was separated [from its former context and entered] into the [treatise] "Jing luo." The [treatises] "Zhi jiao" were pushed to the back [of the book], while the [treatises] on the needles were moved forward. There are innumerable [problems] like this.

Now, if someone wished to climb on Mount Tai, how could he do so without a path? If someone wished to visit the Fusang [tree], he could not get there without a boat. Hence I conducted diligent studies, carried out extensive investigations, and met with knowledgeable people. After twelve years, I finally arrived at the principles and at the essentials [of this book. I] deliberated what was right and wrong and I felt deeply that my original intention had been realized. I spent some time in the studio of my teacher Kuozi and got ahold there of secret copies of the former teacher Mr. Zhang. The writing was very

clear and the meaning was comprehensive. As soon as [I] had examined it in detail, all doubts vanished like melting ice. [I] feared that [these scriptures] might be dissipated among later students [with the result that the transmission of] these materials of the former teachers would be interrupted. Hence [I decided] to write a commentary so that its transmission [through the ages] would never cease. [I] added that *juan* that had been stored away since old and combined [the entire text] into one work of eighty-one *pian* in twenty-four *juan*.

[I] hope that [future readers] will penetrate [the text from] beginning to end and that they follow the commentary to understand the classic. [This way] beginners can have their eyes opened and the perfect principles can be conveyed.

As for those sections in [the text] that were abridged or omitted and where the meaning did not follow the context, [I] have searched the discourses in the classic for the presence [of related passages] and [I] have moved [displaced sections] to supplement there. Where the heading of a *pian* was lost, or where its meaning remained unclear, [I] deliberated upon its conceptual contents and added the characters needed to elucidate its meaning.

In those instances where [originally separate] discourses had been combined, with the result that the meanings of [heading and contents] failed to agree, and where the heading was deficient or had been dropped altogether, [I] have separated different groups of issues and have given them different headings.

Where the dialogue between ruler and subject did not meet the requirements of etiquette, [I] have studied their relative positions and have made additions to illustrate their meaning. Where there were erroneous insertions or corrupt passages, where repetitions occurred in different places, [I] have closely investigated the message of these [sections] and I have eliminated the unnecessary to preserve the essential.

Regarding those [passages] whose wording is too tight and which are difficult to discuss in short terms, [I] have written the *Xuan zhu* 玄珠 as an extra work to outline their Way.

All the words [I] have added [I] have written in red characters to make sure that the new and the old characters are clearly separated and will not be confused. This way [I] hope to elucidate the message of the sages and to make their mysterious sayings shine. They should resemble the stellar constellations hung up on high, where [constellations such as] Kui and Zhang cannot be confused, and they should resemble the crystal-clear water in a deep spring where scales and shells can be distinguished. Rulers and subjects will not encounter premature death; barbarians and the Chinese alike should have a prospect of long life. As a result, practitioners [of medicine] will not commit errors and [the path to be aimed at by] students will be bright. The perfect Way will reach everywhere; its good reputation will never end. Even after thousands of years, the inexhaustibility of the compassion and the grace of the great sages will be known. (Preface at the time of the Great Tang, first year of the *bao ying* [reign period], a *ren yin* year [i.e., 762].)<sup>62</sup>

### 4.2. Structural Characteristics of the Wang Bing Edition

The use of red ink to distinguish Wang Bing's commentaries has not been continued, and some of Wang Bing's annotations appear to have been entered into the main text by subsequent copyists. However, by the eleventh century, when Wang Bing's *Su wen* version received its final editorial touch, almost all of his comments were discernible as such, and they have been printed in small characters alongside the large characters of the main text ever since.

The general scope of Wang Bing's textual interventions was outlined in his preface and need not be repeated here. However, a few examples may help to give an idea of the detailed steps he undertook to generate an authoritative version of the *Su wen*.<sup>63</sup>

Whenever Wang Bing discovered what he considered a break in the flow of an argument or a dialogue, possibly resulting from an erroneous omission or from the displacement of a text portion, he made one of three choices. He sometimes transposed a text portion to a more fitting spot. Or he interpolated content he suspected had not been displaced but lost altogether and which could be imagined from the requirements of the context. Or he chose not to touch a lacuna but simply added a comment to the effect that a longer or shorter text portion must be missing here. Occasionally, Wang Bing drew attention to his intervention in his annotations. More often he seems to have made these moves without specifying them, in which case it was mainly a comparison of the Wang Bing version with the Quan Yuanqi edition and the *Tai su* that led Gao Baoheng et al. to assume that Wang Bing must have been behind the replacement or insertion in question.

For example, in Su wen 63, Wang Bing moved a string of twenty-nine characters (嗌中腫...右刺左) from 351-6 ff. to 349-3 ff. In his comment, he stated: "These 29 characters were originally misplaced in front of [the passage] 邪客手足少陰太陽足陽明. Now [I] have moved them here." On the other hand, Gao Baoheng et al. discovered a twenty-one-character string (腎肝并沉為石水...并小弦欲驚) in Wang Bing's version of Su wen 36, which they found in a very different context in the Quan Yuanqi edition. Hence they concluded: "[This passage] appeared in the Quan Yuanqi edition in the section 'On Recession.' Wang Bing moved it here."

In *Su wen* 33, Qi Bo's response reflects only parts of what Huang Di asked him to explain. Wang Bing commented on this omission but did not attempt to correct it: "Considering the explanation given in the text above, it fails to elucidate the meaning of 'the heat rises from the chest and back to the head. Sweat leaves [the body] and the hands are hot. The mouth is dry, has a bitter [taste, and the patient is] thirsty.' Most likely the present corruption of the text resulted from an omission from the ancient discourse."

In Su wen 41, Gao Baoheng et al. discovered that a string of sixty-one char-

acters (腰痛上寒不可... 刺足少陰) was present neither in the *Tai su*, nor in Quan Yuanqi's edition, nor in the *Jia yi jing*. Wang Bing had not added a note to the effect that he had inserted such a lengthy passage. A later commentary, obviously not by Wang Bing, specified where these sixty-one characters had been copied from, and it may well be that the author of this comment was also responsible for the insertion. Nevertheless, Gao Baoheng et al. attributed the insertion to Wang Bing.<sup>64</sup>

In other instances, Wang Bing deleted entire passages from his master copy, mostly for the simple reason that they appeared twice in Quan Yuanqi's edition. An example is the "Discourse on How the Qi in the Depots Takes the Seasons as a Model," now *Su wen* 22. In Quan Yuanqi's version, it appears both in *juan* 1 and in *juan* 6. The "Discourse on Leaving and Uniting; True [Qi] and Evil [Qi]," now *Su wen* 27, appears in Quan Yuanqi's version as "Discourse on Conduits and Union" (經合論) in *juan* 1 and as "Discourse on True [Qi] and Evil [Qi]" in *juan* 2.

As Wang Bing pointed out in his preface, he was not content with adding, deleting, or moving characters in the master text; he felt the entire structure of the Quan Yuanqi edition called for a complete rearrangement. In this regard, he changed the sequence of individual sections, cut lengthy heterogeneous sections, giving the new sections new titles, and changed the titles of sections left undivided.

For example, he took a large section out of the treatise "Spreading and Elucidating the Five Qi" (now  $Su\ wen\ 23$ ) and, while leaving the original treatise its title, gave the new section the title "Blood and Qi, Physical Appearance and Mind" (now  $Su\ wen\ 24$ ). Similarly, he removed 144 characters from the "Discourse on Skin Sections" (now  $Su\ wen\ 56$ ) and established a new section of its own with the title "On Conduits and Network [Vessels]" (now  $Su\ wen\ 57$ ). He took the second half of the "Discourse on Types of Diseases [Associated with] the Four Seasons" and named it "Discourse on Making Known the Perfect Teachings" (now  $Su\ wen\ 75$ ) and he placed the beginning of the "Discourse on Types of Diseases [Associated with] the Four Seasons" at the end of the "Discourse on Yin and Yang Categories" (now  $Su\ wen\ 79$ ).

The first two sections of the Quan Yuanqi edition had been devoted to prognostics. Wang Bing not only moved these two sections to a less prominent position (now *Su wen* 18 and 20), he also changed the title of the second from "[How to] Decide about Death or Survival" to "Discourse on the Three Sections and Nine Indicators," thereby considerably playing down the prognostic nature of the treatise. It may well be that the need to determine before treatment which patients are curable and which are bound to die had given way to a more relaxed attitude in the relationships between physicians and patients by the time of the Tang.

In all societies in which the professional status of physicians is low, distrust in their motives easily leads to accusations when their patients die.

Hence prognostics is a defensive strategy to avoid risky situations. In societies where physicians enjoy a considerable level of confidence, they may approach even seriously ill patients without risking blame if nature proves stronger than medicine. Obviously, Wang Bing felt that, at his time, prognosis was not as important as self-cultivation, which he moved to the front of his edition.

In other cases it is quite impossible to even speculate about the reasons that Wang Bing changed the titles of specific sections. For instance, he replaced "To Distinguish Black and White by Means of a Natural Approach" with "Discourse on Demonstrating a Natural Approach" (now *Su wen* 76).

# 4.3. Discourses 66 through 74 in Today's Su wen

When Wang Bing finished his work, he had restructured Quan Yuanqi's edition of sixty-nine "discourses" in nine *juan* into a volume with altogether seventy-nine sections in twenty-four *juan*. Together with two sections classified by Wang Bing as lost this amounts to eighty-one *pian*. The number 81, possibly inspired by the *Dao de jing* 道德經,  $^{65}$  was reached not only by splitting several of the sixty-nine sections of the master copy in two. Wang Bing also added and commented on "seven comprehensive discourses" ( $qi\ da\ lun$  七大論) on the theory of the "five periods and six qi" ( $wu\ yun\ liu\ qi\ \Xi \ A$  氣), that is, that "juan that had been stored away since old," as he stated in his preface.  $^{66}$ 

These "seven comprehensive discourses" encompass one-third of the entire textus receptus of the Su wen; in the version edited by Gao Baoheng et al., they constitute Su wen 66 through Su wen 71, as well as Su wen 74. The origin of this huge text portion is unknown. An analysis of its contents and rhymes suggests that the texts were compiled by different authors as early as the Later Han era, and, as Harper has noted, "text parallels between excavated fang-literature of Han and earlier date and medieval manuscripts from Dunhuang  $\frac{1}{2}$   $\frac{1}{2}$  confirm that old fang-literature continued to be transmitted sub rosa without being recorded in bibliographies." Nevertheless, it is difficult to imagine how such a large and unique text could have been transmitted for perhaps five or six centuries in complete secrecy without coming to the attention of bibliographers.

In a comment to Wang Bing's preface, Gao Baoheng et al. suggested that the "seven comprehensive discourses" are nothing but the "comprehensive discourse(s) on yin and yang" (i.e., the *Yin yang da lun* 陰陽大論) listed by Zhang Ji in his preface to the *Shang han lun* together with the *Su wen*, the *Jiu juan*, and the *Nan jing* as one of his sources. A detailed analysis of the contents of these "seven comprehensive discourses" is added as an appendix to this volume.

Apart from these seven sections, Wang Bing included in the eighty-one

sections two sections, *Su wen* 72 and *Su wen* 73, that were already missing in his master copy and for which he did not find any suitable text. Hence he just gave them a number but added neither text nor title. The only reference to this issue occurs in a comment by Wang Bing at the end of *Su wen* 46:

All statements [beginning with the characters]  $\mathfrak{M}$  are explanations of unclear meanings. As for the present  $\mathfrak{M}$  iff, [I] have searched the entire text of the classic, but there is nothing that could be linked to the meaning of the present treatise. It appears as if the entire meaning expounded in these few sentences was meant to explain some additional text of the classic [which is not part of the current text]. In the version available at present, the two treatises of the seventh [juan] are missing. [The present commentaries] may be text passages of the lost [treatises of the] classic erroneously inserted here. The ancient text was cut apart and [these passages] have been erroneously added here.  $^{68}$ 

Why the two missing sections are counted in the textus receptus as *Su wen* 72 and *Su wen* 73 is unclear. As the "seven comprehensive discourses" were inserted by Wang Bing as one block and as he said nothing where he had decided to count the missing sections of *juan* 7 of the Quan Yuanqi edition, it is unlikely that Wang Bing himself created the gap between *Su wen* 71 and *Su wen* 74 of the textus receptus. The Song editors Gao Baoheng et al., who already had a version in which the gap was filled with two texts bearing the titles "Ci fa lun" 刺法論 (Discourse on Patterns of Piercing) and "Ben bing lun" 本病論 (Discourse on Tracing [the Origins of] Diseases), expressed the suspicion that someone had moved the two sections here after Wang Bing had finished his edition:

An analysis of these two treatises shows [the following]. They were already missing prior to Wang Bing's time. When Wang Bing, in his comment at the end of  $Su\ wen\ 46$ , stated "In the version available at present, the two treatises of the seventh [juan] are missing," he was referring to these two sections. Today's [versions of the  $Su\ wen$  have] "The lost treatises of the  $Su\ wen$ " and the "Discourse elucidating hidden meanings" and it is said they constitute these three (sic!) sections. They have comments added under the name Wang Bing. The style is primitive; there is no point in including them. In the older edition, the titles of these sections follow  $Su\ wen\ 71$ ; they have been moved here by someone [who lived] after [Wang Bing].  $^{69}$ 

The titles Ci fa lun 刺法論 (Discourse on Patterns of Piercing) and Ben bing lun 本病 (Discourse on Tracing [the Origins of] Diseases) of the treatises that appear as Su wen 72 and Su wen 73 in the textus receptus are of unclear origin. They were not mentioned in the Quan Yuanqi edition. Maybe they were adopted by Gao Baoheng et al. from the apocryphal "lost treatises of the Su wen," whose texts they decided not to incorporate in their edition.

Several editions of the Qing era and the edition by the People's Hygiene Press in Peking of 1983 added two sections as *Su wen* 72 and *Su wen* 73 under the two titles given above. As literary criticism has shown, Liu Wenshu 劉溫舒 of the eleventh century most likely compiled these as one chapter of his *Liu Wenshu nei jing su wen lun ao* 劉溫舒內經素問論奧, four *juan*, on the basis of texts written in a period spanning from the Tang into the Song era. In 1268 a *Nei jing* edition published by the Gu lin tang 古林堂 publishing house of a Mr. Hu 胡 was the first to include this chapter from Liu Wenshu's *Su wen lun ao*. This precedent was followed by the *Su wen* edition published in 1474 by the Zhong de tang 種德堂 publishing house of a Mr. Xiong 熊 and during the *jiajing* 嘉靖 period (1522–1567) of the Ming dynasty by Zhao Jianwang 趙簡王 and Zhu Houyu 朱厚煜 in the edition of the Ju jing tang 居敬堂, all of which added the "lost treatises."

## 4.4. The Influence of Wang Bing's Worldview on His Su wen Edition

In his preface, Wang Bing remarked: "In my youth I longed for the Way; all the time I strove to nourish [my] life." The combination of the notions of dao 道 and yang sheng 養生, "to nourish life," suggests Wang Bing's proximity to Daoism. This proximity is further established by Wang Bing's references to sayings of Lao zi and Zhuang zi in his comments on the first few as well as on later sections of the *Su wen*. Occasionally, his perspective may even have misled him when reading a character. For example, in *Su wen* 77, he commented on the passage 故事有五過四德, interpreting過 as "excess" and德 as "virtue": "To be cautious of the five excesses is to honor and follow the virtuous qi of the four seasons. Virtue is the operation of the Way, it is the master of life. Hence, it must be honored and followed."

Wang Bing, we recall, had moved the first sections of his *Su wen* edition from a less prominent position in a later chapter. While it may well be that a personal "nourishment of life" was an answer to the insecurity characterizing Tang society during his lifetime, Wang Bing's inclination toward Daoist ideas may have been what suggested this move.

Chinese scholars have suggested that the very first few lines of *Su wen* 1 were copied by Wang Bing from the *Shi ji* to express a Daoist preference for Huang Di.<sup>72</sup> It is true that Huang Di was one of the preceptors of Daoism, especially so in the context of the Huang-Lao philosophy that had developed during the Han era. However, as Song Xiangyuan has emphasized already, Huang Di was honored by virtually every philosophical school in the late Zhou–Han era.<sup>73</sup> Hence the homage to Huang Di at the beginning of the first chapter of Wang Bing's *Su wen* edition may have had a simple editorial reason. After all, the largest part of the *Su wen* was structured as a dialogue between Huang Di and his advisers. When Wang Bing moved several sections from *juan* nine in Quan Yuanqi's version to the front of the text, he

needed an appropriate opening. He found this opening in the chapter Wu Di ben ji 五帝本紀 of the Shiji 史記of go B.C. and preferred to copy it from there with only minor changes rather than write one himself. <sup>74</sup>

At any rate, later authors considered these first sections in Wang Bing's Su wen edition sufficiently Daoist to incorporate some segments from them into the grand encyclopedic collection of Daoist texts, the Dao zang 道藏. An example is the Yang xing yan ming Iu 養性延命錄,"Records on How to Nourish One's Nature and Prolong Life," written by an anonymous author under the name of the famous Tang physician Sun Simiao 孫思邈 (561–662?), which is found in the Dao zang text corpus.

A Daoist perspective on the world includes recognition of the existence of demon-spirits; as pointed out earlier, Wang Bing's worldview was no exception to this. However, in the same way as some of the finest and most insightful modern scientists claim to be Christians and to believe in God and the saints, Wang Bing's demonology did not preclude him from voicing commentaries on the *Su wen* that appear rather attractive even from the scientific hindsight of today.

For example, Su wen 67, one of the "comprehensive discourses" incorporated into the Su wen by Wang Bing and of possibly Han origin, offers a dialogue between Huang Di and Qi Bo on the structure of heaven, earth, and the Great Void. In view of Wang Bing's commentary, the following lines are of particular interest.

[Huang] Di:

Is it not so that the earth is below?

Qi Bo:

The earth is below man and within the Great Void.

[Huang] Di:

Is it supported?

Qi Bo:

The Grand Qi holds it.<sup>76</sup>

This is, of course, a perfectly adequate statement even from the viewpoint of modern science. It may not have reflected common knowledge or belief in the time of Wang Bing, though; hence he felt it necessary to write the following explanation:

"Grand Qi" is to say: the qi of creation; it is the [qi] sustaining the Great Void. The reason why the Great Void does not contract, why the earth [exists over] long and heaven continues forever lies in the [fact that] the qi of creation sustains it. If the qi were to transform and undergo changes [itself] and if it were not to sustain the [Great Void] any longer, the things [suspended] in the Great Void would be destroyed too. Now, when leaves drop and fly through the open space without falling [to the ground] quickly, that is because they ride on the

qi. Hence they cannot gain speed. Everything residing on the earth with physical appearance is sustained by the qi of creation. However, there are large and small things and their destruction may be slow or fast. However, if no qi is present to sustain them, the destruction of large and small [items] is all the same.<sup>77</sup>

A scientist who is also a follower of Christianity will not find it difficult to describe the structure of the universe and to acknowledge the physical laws in purely scientific terms while simultaneously attributing to God a preeminent role in the workings of his Creation, but Wang Bing never attributed any of the phenomena he described or any of the processes of change or continuity to anything else than laws inherent in nature. Every living being, he emphasized repeatedly, comes into existence, develops, and eventually perishes either because of qi in general or because of the six qi—wind, cold, summer heat, dryness, dampness, and fire—in particular.

In some respects, Chinese natural science, it appears, entered into a different coexistence with the numinous than did European science. When Daoists such as Wang Bing accepted the presence of numinous beings, these appeared to have faculties different from those of man. They could see and do things man had no access to. Nevertheless, they were inhabitants of the same universe and subject to the same fundamental laws as man. No statement in Chinese history, at least by any of the well-known naturalists, suggests that there are spirits, demons, gods, or thearchs who are able to manipulate the workings of yin and yang or of the five agents to their ends. The ability of demon-spirits to communicate between earth and heaven was no exception to this rule. After all, even many of the clearly visible creatures were able to sink deeper into the oceans or rise higher into the skies than man.

Qian Chaochen may have gone too far, though, when he claimed that, as a logical consequence of Wang Bing's emphasis on the role of qi in life, the Tang commentator left no place in his thought for a notion of fate. In the realm of medicine, religious persuasions have been widespread throughout time. In the main text of the *Su wen*, only one statement is known to have vaguely objected to acknowledging a role of demons in the cure of illness: "If someone is in the grip of demons or spirits, it is impossible to talk to [him] about perfect virtue." Such a statement does not necessarily imply a denial of a role of demons in the generation of disease or in the death of a person. After all, Catholic liturgy acknowledges the role of demons in the genesis of an illness to the present day but has fought any belief in the curative potential of these beings for many centuries.

Hence when Wang Bing ridiculed the attribution of the death of a patient to fate, his words cannot be interpreted as a general rejection of fate in such a situation. All he says in the two examples found in his commentaries is that when physicians commit malpractice, no one should blame fate for the death of their patients instead of pointing out the real culprit: "Alas,

when people die, why is this blamed on fate and not on the ignorance of prescription masters who have killed them?" $^{80}$  Another statement shows how little Wang Bing thought of demon-spirits as causes of premature death. In a comment to  $Su\ wen\ 1$ , Wang Bing made it very clear what factors he considered responsible for a fulfilled life and that all these factors are within man's reach if only he organizes his life in accordance with them, that is, if he "nourishes life." $^{81}$ 

If human conduct, he wrote, "is in agreement with the orders on generation, growth, gathering, and storage issued by the four seasons, if it is one with the requirements of the rise and descent of cold and summer heat, of yin [qi] and yang [qi]," and if it "follows the sequence of the qi of the four seasons, the requirements of nourishing life and of modest regulation, if one does not overtax oneself with absurd activities, if rising and resting have their limits, then the vital qi will never be exhausted and health and well-being will be held forever." Wang Bing did not include here any reference to gods or spirits who must be propitiated to avoid their scorn and achieve longevity. Such notions were quite popular in Chinese folk religion, and they were certainly shared by a vast majority if not all members of the scholarly and administrative strata of Tang society. As Wang Bing quoted from religious works such as the *Zhen gao* and the *Ba su jing*, he must have been aware of them. Nevertheless, his comments on the *Su wen* were not tinged by them.

# 4.5. Scope and Structure of Wang Bing's Commentaries

Annotating the *Su wen* was no small endeavor for Wang Bing or for any of his predecessors or successors among the *Su wen* commentators. The more than 88,000 characters compiled by his time over a period of perhaps seven or eight centuries required a thorough understanding both of their individual meaning and of their significance as parts of phrases or statements in the context of Chinese medical theory. Hence his commentaries covered a broad range, from annotations on single characters to lengthy explications of obscure concepts.

 trate quickly." That he chose not to explain the second character in the term 徇齊 may indicate that the use of qi 齊 in the sense of "quick-witted" was not as obsolete in his time as it appears today.

In contrast to such short and concise glossarial annotations, the explanation of a single character often resulted in an extended discourse. The reasons for such lengthy notes appear to have varied. For example, the character  $jing \not \equiv p$  appears in the opening statement of Su wen 4. In the Su wen, it is used with various meanings, sometimes referring to the notion of "classic text," sometimes referring to "conduits," sometimes to a "warp," sometimes to a "law," sometimes as the verb "to pass through," along with a few further possibilities. In the statement at the onset of Su wen 4, the character occurs in a context that does not immediately reveal its meaning in this particular sentence. Hence Wang Bing assisted:

經 refers to the conduit vessels [here]. They are the passageways through which the camp [qi] and the protective [qi], the blood and the qi flow.<sup>86</sup>

Consequently, when the same character appeared in *Su wen* 79 in a context using a metaphoric juxtaposition of the images "warp" (*jing* 經) and "weft" (*wei* 維), Wang Bing saw a need to clarify this too:

經 is to say 經綸, "threads," "structure." It is that which assists in completing a task. 維 is to say 維持, "to uphold." It is that by which the true [qi] of heaven is tied. 游is to say: 游行, "to travel." . . . Hence that which rules the qi assists in completing a task; that which transforms the grain ties the true [qi of] heaven.<sup>87</sup>

Another reason for going to greater lengths in the clarification of a single character may have been that this particular character reflected an important concept that Wang Bing considered worth outlining simply because he could not be sure whether all readers of the Su wen were familiar with it. An example is his commentary in Su wen 2 added to the character ni  $\mathfrak{E}$ , which was frequently used in the main text in the sense of "to move contrary to a regular course," or simply as "in contrast to."

 $\not$ t is to say: to carry out the orders of autumn in contrast [to the requirements of spring]. The liver corresponds to wood and flourishes in spring. Hence to carry out the orders of autumn [in spring] causes harm to the qi of the liver. In summer, fire flourishes and wood perishes. Hence the disease develops in summer. Now, as for the qi of the four seasons, the qi of spring generates life and the qi of summer contributes to growth. If one counteracts [the orders of] spring and harms the liver, this results in diminished qi [with a reduced ability] to receive the order of growth in summer. 88

When Wang Bing encountered statements he considered important beyond the meaning of their individual characters, he regularly went to great lengths to expound or repeat their meaning in other words. This was especially so when he set out to comment on notions associated with the "Way of nourishing life." For example, in *Su wen* 1, Qi Bo explains to Huang Di why in recent times people have contributed to their own failure to reach old age, pointing out, among other arguments:

The people of today... through their lust they exhaust their essence, through their wastefulness they dissipate their true [qi]. They do not know how to maintain fullness and they engage their spirit when it is not the right time. 89

One should think that these are clear-cut statements, not requiring any elucidation. When Wang Bing commented on them and other passages, it was solely because he felt compelled to add emphasis.

To find pleasure in sex is called "lust." To make frivolous use [of one's essence] is called "wastefulness." If one takes pleasure in sex without limits, then one's essence will be exhausted. If one makes frivolous use [of one's essence] without end, then the true qi will be dissipated. Hence it is because the sages cherished [their] essence and carefully considered its use that their bones were full of marrow and strong.<sup>90</sup>

That is to say, they make frivolous use [of essence] and give rein to their desires. The *Lao zi* has stated: 持而盈之不如其已. That is to say: to cherish [one's] essence and to protect the true [qi] is like holding a vessel filled [with liquid]. If one moves it without care it will turn over and the true [qi endowed by] heaven will be spilled. The *Zhen gao* 真語 states: "If one is unable to be continuously careful in his activities, all kinds of diseases will arise. How could this be blamed on the spirit-brilliance?" This is meant here.<sup>91</sup>

In Su wen 47, in a context devoted to the treatment of pregnant women, a commentary on the advice given elsewhere, "do not diminish an insufficiency," appeared to require yet another commentary. The passage in the main text is

As for the so-called do not diminish an insufficiency, when the body is lean, do not employ the chisel stone. 92

Wang Bing explained why someone who is emaciated should not be drained further. Interestingly enough, he kept the term "chisel stone." It may well be that by his time the instrument used for bloodletting was still a sharpened stone rather than a metal lancet.

After nine months of pregnancy, the sinews and the bones are thin and worn out. The strength is diminished, the body [feels] heavy, and [that woman] has an aversion to [consuming] grains. Hence the physical appearance of the body is emaciated and should not be [further] harmed with the chisel stone.<sup>93</sup>

"One must first remove their blood" is to say: when the blood vessels appear filled beyond normal, then remove the [blood]. This is not to say that in a normal situation one has to remove the blood before needling. 95

In other instances, the main text was much more enigmatic and Wang Bing resorted to examples of common knowledge to clarify a specific passage. One example is a series of statements in  $Su\ wen\ 68$ . In his commentary Wang Bing did not allude to the theoretical background of these statements in the five-agents doctrine; it may have been obvious enough. The problem he felt he needed to address may have been the rather unusual term  $\mathbb{R}$ , here in the sense of "to receive what is passed on" or "to succeed"; it has also been interpreted in this context as "to restrain," "to stop."

That is, when a specific agent has reached the apex of its development, its domination is passed on to the agent that, in the relationship among the five agents, is able to dominate the agent that had reached its apex. In other words, water "succeeds" fire, or water "stops" fire, because water can extinguish, that is, dominate, fire. The following quote from *Su wen* 68 illustrates Wang Bing's approach.

*Su wen:* Subsequent to the minister fire, the water qi succeeds it. <sup>97</sup> Wang Bing: When heat abounds, water succeeds it. Sprouts and shoots are tender and weak. Heavy rain brings overflow. The image of water is obvious. <sup>98</sup>

This may have meant that during a period of drought, plants find it difficult to grow and gain strength. Eventually, this will be succeeded by heavy rains, resulting in a more than sufficient abundance of water. Obviously, domination has been passed from fire/heat to water; water has succeeded fire.

Su~wen: Subsequent to the position of water, the soil qi succeeds it.  $^{99}$  Wang Bing: When cold is extreme, things harden and water freezes. All streams dry up. It is obvious that the image of soil appears to succeed [the water] here.  $^{100}$ 

In the relationship among the five agents, soil is able to dominate water. Hence domination by water may be succeeded by domination by soil. What appeared obvious to Wang Bing, though, is not so obvious today, because it is unclear why Wang Bing associated the fact that cold hardens water, causing it to freeze, with the image of soil.

*Su wen:* Subsequent to the position of soil, the wind qi succeeds it.  $^{101}$  Wang Bing: Subsequent to speedy winds it is often such that rain falls. That is, dampness is transformed to rain by the blowing of wind.  $^{102}$ 

The message of the main text is clear: Wind is associated with the agent wood; wood can dominate soil. Hence wind/wood succeeds dampness/soil. If wind causes dampness to transform, this can be interpreted as a kind of domination of wind/wood over dampness/soil. Hence wind qi, that is, wood, succeeds the dominating position of soil.

*Su wen:* Subsequent to the wind qi, the metal qi succeeds it.  $^{103}$  Wang Bing: When the wind blows, the qi is clear and the myriad things are all dry. These are obvious images of metal succeeding wood.  $^{104}$ 

Wind is associated with the agent wood; metal is associated with dryness and represents the agent that is able to dominate wood. Hence Wang Bing points out that strong winds have the effect of blowing away dampness. The resulting dryness is an obvious sign that the dominating position occupied by the agent wood has been replaced by the dominating position occupied by the agent metal.

Su wen: Subsequent to the position of metal, the fire qi succeeds it.  $^{105}$  Wang Bing: To forge metal, one generates heat. That is, fire makes the metal flow: [The fact that the metal] rides on top of the fire does not falsify the principle.  $^{106}$ 

Fire, that is, heat, is able to melt, that is, dominate, metal. Hence fire qi "succeeds" metal. It remains unclear, though, why Wang Bing saw a problem in the metaphor he employed simply because the fire has to be placed underneath the metal to make it flow. The metaphor "rides on top of" can also be interpreted as "avails itself of."

*Su wen:* Subsequent to the ruler fire, the yin essence succeeds it. $^{107}$  Wang Bing: At the location of the ruler fire, no great heat moves. The reason is that yin essence controls and succeeds it. $^{108}$ 

Ruler fire is associated with heat. Yin essence is associated with coolness or even cold. Wang Bing did not employ an example from environmental or climatic processes here to elucidate the weakness of heat at a time when "the ruler fire" occupies the dominating positon. He simply stated that it is controlled by yin essence.

Wang Bing drew on earlier literature when he believed he had discovered a copying error in the text. For example, in *Su wen* 58, a piece of therapeu-

tic advice calls for piercing a specific hole below the tenth vertebra. Wang Bing saw a contradiction with data provided in the available literature and commented accordingly:

According to the *Jia yi jing* and to the *Jing mai liu zhu kong xue tu jing*, there should be no hole below the tenth vertebra. This may be [an error for] "seventh vertebra." <sup>109</sup>

Wang Bing, one learns from many of his comments, was not only familiar with the theory of medicine, he also knew its practice. He often felt he should make clear what was meant by a passage in terms of the actual manual techniques involved. For example, in *Su wen* 62, Qi Bo had given an apparently rather detailed account of what is to be done in a specific therapeutic situation:

Press and rub [the affected area] continuously and [at the same time] apply the needle without pushing [into the depth]. [In this way] move the qi to the [place of] insufficiency and the spirit qi may recover.<sup>110</sup>

For Wang Bing, this seems not to have been sufficiently precise. Hence he added the following note.

One applies a massage to the location affected by the disease without letting one's hands go. One applies the needle at the location affected by the disease, again without pushing it. This way one causes the spirit qi of that person to move internally to the needle. By moving the spirit qi of that person one causes ( $\uparrow$  interpreted as an error for  $\uparrow$ ) it to fill up by itself. As a result, slight diseases will leave by themselves and the spirit qi can recover to normal. 111

In addition to those of his commentaries that were based on his conceptual and linguistic penetration of his *Su wen* master copy, Wang Bing used his annotations to add new knowledge to the text. Given the fact that he quoted earlier works when he needed an authoritative source to make a statement, one may assume that where he introduced new ideas without naming an earlier source the thoughts were his own. One example is his extension of the concept of qi. Previously, the qi of the individual depots and palaces had no special characteristics of their own apart from belonging to this or that depot or palace, or if they were believed to have such special characteristics, these were never spelled out. Wang Bing, in commenting on *Su wen* 74, filled this gap.

The qi of the liver is warm and harmonious. The qi of the heart is hot. The qi of the lung is cool. The qi of the kidneys is cold. The qi of the spleen combines all these [attributes]. 112

In various sections of the *Su wen*, the role of the kidneys in the generation of illness is outlined in varying detail. Obviously, the ancient authors of

these texts associated the kidneys with the metabolism of liquids in the organism. An example is *Su wen* 61, "Discourse on Holes [to Treat] Water and Heat." After it had been asserted that both the kidneys and the lungs are responsible for accumulations of water in the body, Huang Di asked: "The kidneys, how can they generate diseases by accumulating water?" Qi Bo responded: "The kidneys are the gates of the stomach; when the doorgates do not [open] freely, water accumulates and follows its type. Above and below it spills into the skin; hence *fu* swelling results." An unknown commentator before Wang Bing added to this the following remark: "As for '*fu* swelling,' that is a disease resulting from water accumulations."

One may interpret the entire statement as having resulted from a notion that the water accumulates because the kidney passage is blocked. When the kidneys are compared with gates, they appear to serve as an exit from the stomach, where food and beverages have accumulated first. The text does not say whether the accumulations remain in the stomach because its exit gates are closed or whether they occur anywhere else. A subsequent question-and-answer exchange between Huang Di and Qi Bo may be interpreted as a solution to the problem of the location in the body where water is generated from beverages and food.

[Huang] Di:

Is all water generated by the kidneys?

Qi Bo:

The kidneys constitute a female depot.

When the qi of the soil rises, it associates with the kidneys and generates water liquid.  $^{113}$ 

The qi of the soil is the qi of the stomach. That is, cooperation with the faculties of the stomach enables the kidneys to generate "water."

The issue of "swelling" occurring as a result of a kidney disease appears again in *Su wen* 43 and 48. In discourses on the pathological consequences of a blockage of each of the five depots, a blockage of the liver is associated with changes in urination, while a blockage of the kidneys is said to result in problems that, in hindsight, may be traced to an inability to pass urine but which was not specified as such. *Su wen* 43 states: "In case of a kidney block, [the patient] has a tendency to distension." Similarly, *Su wen* 48: "Kidney congestion: [the patient experiences] fullness from the lower [sections of the] flanks to the lower abdomen." The "fullness" and "distension" associated with the kidneys in these two statements may be considered edematous bloating caused by liquid accumulating in the tissue rather than being eliminated from the organism. Wang Bing may not have seen a need to comment on these issues or add anything new.

In *Su wen* 21, though, the flow of liquids through the organism is outlined as a function of only three organs, stomach, spleen, and lung.

Beverages enter the stomach. Overflowing essence qi is transported upward to the spleen.

The spleen qi spreads the essence, which turns upward to the lung.

[The latter] frees and regulates the passageways of the water, it transports [the water] downward to the urinary bladder.

The essence of water is spread to the four [directions], it moves through all the five conduits simultaneously. <sup>116</sup>

#### Wang Bing added the role of the kidneys to this account.

Water [consumed as] beverage flows downward [in the body] and reaches the triple burner. [There] the water is transformed to finest essence which rises and turns into clouds and fog. Clouds and fog disperse and flow into the spleen. . . .  $^{117}$ 

[The qi of] water and soil are transformed together. They rise to nourish the metal of the lung. The metal qi penetrates to the kidneys. Hence [the text states:] it regulates the waterways. It turns around and flows into the lower burner. The urinary bladder stimulates transformations, which leads to urination. 118

It is difficult to imagine where the original notions in the master text and Wang Bing's assertion of the role of the kidneys in the passage of liquids through the organism may have come from. Mere speculation may not have been sufficient to slowly develop such physiological and pathological knowledge. At any rate, despite all the differences between ancient Chinese and European medical thought, one should not overlook the possibility that a number of bridges existed between the two. The passages just quoted are one of these bridges.

Further research will undoubtedly reveal more details of the contributions of the eighth-century editor Wang Bing to the development of Chinese medicine. He was not merely an interpreter of tradition but also added knowledge. The few examples quoted above may suffice here to demonstrate the scope and the structure of his commentaries and annotations. Although no details of Wang Bing's biography are known, reading his commentaries teaches us that he must have been an impressive scholar whose erudition greatly helped his contemporaries and subsequent generations to gain access to and further the development of a text that had been written centuries ago and that was to survive for many centuries to come.

## IV

# Origin and Tradition of the Textus Receptus of the *Su wen*

#### 1. THE IMPERIAL EDITORIAL OFFICE OF 1057

For more than two hundred fifty years, Wang Bing's version of the *Su wen* was transmitted side by side with Quan Yuanqi's *Su wen xun jie* of the early sixth century. In addition, the combined edition of the *Su wen* and the *Zhen jing/Jiu juan/Ling shu* in Yang Shangshan's *Huang Di nei jing tai su* of the second half of the seventh century competed for the attention of scholars and practitioners with an interest in medicine. Eventually, beginning in the twelfth century, the *Su wen xun jie* and the *Huang Di nei jing tai su* fell into oblivion, and the *Su wen* annotated by Wang Bing was the only one of the three to be transmitted continuously in China until the present day.

A major reason for this success story was the editorial effort the Imperial Editorial Office put into Wang Bing's version in the second half of the eleventh century. As stated earlier, we can only speculate about the motives that led the Song-era editors to prefer Wang Bing's Su wen over the Su wen xun jie by Quan Yuanqi or over the even more comprehensive Tai su by Yang Shangshan. However, we may not be wrong in assuming that the quality of the version they published under the title Chong guang bu zhu Huang Di nei jing su wen 重廣補註黃帝內經素問 (The Huang Di nei jing su wen, once again broadly amended and commented) guaranteed this book its future position.

 dicate that no authoritative version existed at that time. The outcome of the second attempt is not known either.

Finally, in 1057, an editorial office was founded to edit an entire series of what may have been considered the core texts of Chinese medicine. Among the leading scholars asked to work on these projects were Zhang Yuxi 掌馬錫, Lin Yi 林億, Zhang Dong 張洞, and Su Song 蘇頌, as well as Sun Qi 孫奇, Gao Baoheng 高保衡, and Sun Zhaotong 孫兆同.¹ A high-ranking official named Han Qi 韓琦 had made a list of texts requiring editorial work; Zhang Yuxi and Lin Yi were assigned to work on the *Su wen*. The *Ling shu* and the *Tai su* were mentioned too; it is not known, though, why they were eventually left out. The work on the *Su wen* required ten years; maybe no impetus was left once this project and some others had been completed.

The preface to the *Chong guang bu zhu Huang Di nei jing su wen* demonstrates some of the difficulties medicine encountered in its attempts to gain recognition as a serious field of knowledge and practice by the state administration, that is, the class of Confucian scholar-officials, at the time. In view of their complaints, one can only guess at the intensity of political quarrels that must have preceded the institution of an entire office devoted to medical literature. After all, such a gesture can only be regarded as the success of those groups in Chinese society that strove for increased recognition of the healing arts. The complete preface reads as follows:

[We imperial] subjects have heard: In peace not to forget peril, and while being alive not to forget death; this was a preeminent obligation of the sages of former times. To bring the suffering of people to an end, and to feel pity with the grief of people, this was the deeply felt humanity of the rulers of the past.

When in ancient times Huang Di ascended the throne, he first ordered his own body and then also the state. He occupied a seat high in the Hall of Light, and he looked down upon the eight farthest [regions]. He examined and [then] determined the five constants. Then he spoke: as for human life, it carries yin on its back and yang on its front. One consumes the [five] flavors and wears [clothing in the five] colors. Outside [the body] there is the abrupt alternation of summer heat and cold; inside joy and anger compete with each other. Early death and death because of epidemics occur all the time in the state and in the family. [I] should like to concentrate myself on the five happinesses and then diffuse them so as to give them to my people. He is the state of the state in the graph of the five happinesses and then diffuse them so as to give them to my people.

Hence, together with Qi Bo, he thoroughly investigated the arrangements of heaven above and fully explored the structures of the earth below. From far away, they sought to grasp all beings; from nearby, they drew on all available human talents. Through discussions of difficult issues, they left an example of how to give happiness to a myriad of generations. Thereupon the *Nei jing* was compiled in that the principles of good conduct established by Lei Gong were handed down through teaching. [This text] was treasured throughout history; it never fell into oblivion.

With the rise of the later Zhou, [the physician] He of Qin related a discourse on the six qi.<sup>5</sup> His work came to the attention of the scribe on the left.<sup>6</sup> After that, Yueren<sup>7</sup> got hold of one or two [parts of this], extended them, and wrote the *Nan jing*. During the Western Han era, it was Cang gong<sup>8</sup> who further transmitted the old learning. During the Eastern Han era, [Zhang] Zhongjing<sup>9</sup> wrote down the discourses bequeathed to his time. During the Jin era, Huangfu Mi pierced [needles into the skin] and produced the *Jia yi* [*Jing*]. After the Sui dynasty had been established, Yang Shangshan compiled the *Tai su*. At that time there was also Quan Yuanqi; he prepared the first commentary to the [*Nei jing*]. The entire seventh [*juan*] was missing. When it came to the *bao ying* reign period of the Tang, the *tai pu* Wang Bing cherished the [text]. He obtained the *juan* kept by his teacher and extensively rearranged and commented on them

Nevertheless, as it appears [today], the text left to posterity by the Three Emperors is in bad shape. Unfortunately, the Tang ordered [the text] to be classified as medicine, and they added it to the stream of practice. Because of this, high-ranking officials rarely speak about it.

The distance from the sages [of the past] is great by now. Their art has become obscure. Hence the text and its commentaries have become mixed up. Meaning and structure are confused. It is impossible to know the bequest of the three great [rulers of antiquity], the eminence of the emperor-kings [of the past], and the abilities of the sages and exemplary men [of former times].

Yao contributed the four seasons, Shun provided the seven policies. Yu established the six palaces to enhance the achievements of the emperors. King Wen extended the six sons [of *qian* and *kun*] to record the trigrams and their qi. Yi Yin exhausted [his knowledge on] the harmonization of the five flavors to the ruler. <sup>10</sup> Ji Zi arranged the five agents to assist the world. <sup>11</sup> Their achievements were identical.

What sense would it make to transmit the most essential and the subtlest Way to the most primitive people in the lowest ranks? One would have to speak of extreme luck if [its transmission] were not interrupted altogether!

Recently, in the *jia you* reign period [Emperor] Ren zong became aware that the bequest by the sage ancestors was about to fall to the ground. Hence he called on experts in this learning to correct [the situation]. [We, his] subjects, have been entrusted to fill this open position and to revise the canon. For ten years we have devoted ourselves to its study. We have conducted a comprehensive investigation, and we have collected all copies to search for its meaning and to correct its errors. In three or four out of ten cases we were successful; in the remaining cases we were unable to complete our task. It was our opinion that it did not suffice to be called brilliant.

We were ordered to assist the Imperial will and brought together the writings of the Han and Tang eras. We managed to obtain tens of ancient medical classics that were still present. We took one after another into consideration to examine what might be correct. We followed the thread [of truth] through all

the confusion, searching for an encompassing understanding. In some instances we went to the roots to enquire about the ends; in other cases we went against the current to reach the source. This way we established what could be known, and we added the old titles to the [new] sequence.

We have corrected errors in connection with more than 6,000 characters, and we have added commentaries to elucidate meanings in more than 2,000 paragraphs. Every entering or elimination of a single word was based on a judicial examination. This way all doubtful meanings were clarified. If this [work] is used to treat one's body, it can reduce suffering before it is visible, and if it is given to those in the administration, it can extend life ad infinitum.

Full of respect, we have realized how the emperor cherishes the period of great unity, and how he loves limitless carefreeness. By spreading the intentions of the former [sages], he is granted success; by raising subtle learning [to the attention of the public], he has established its perennial orthodoxy. As a result, he can summon the qi of harmony, and catastrophes do not arise, so that eventually all people of this age will enter the land of longevity.

Respectfully submitted by the erudite of the National University, subject Gao Baoheng, and by the auxiliary in the Imperial Archives, subject Lin Yi, and others.  $^{12}$ 

#### 2. THE SCOPE OF THE REVISION BY GAO BAOHENG ET AL.

In contrast to Wang Bing, the editorial committee of 1053 did not intend to create an entirely new version of the *Su wen* or even to attempt to reestablish what might have been considered a more original version, that is, one closer to the ancient sages. Such an endeavor might have been meaningful a few centuries later, when dissatisfaction with the political and cultural situation in Chinese society called for a move back to the roots of Chinese greatness. It was only then that scholars set out to reconstruct authentic Han versions of some medical texts.

For the time, though, the legitimacy of progress was still taken for granted. Maybe the reason behind the decision to choose Wang Bing's version for revision and not the older *Su wen xun jie* or the *Tai su* was as simple as that. Still, Gao Baoheng et al. felt obliged to at least explain to the readers of their version what Wang Bing had done to the text, that is, in what way he had rearranged Quan Yuanqi's edition. Wang Bing himself had not such a need. In their first note following the title of the first section of the *Su wen*, the Song editors, who marked all their comments by the three characters *xin jiao zheng* 新校正 (newly revised, and corrected), stated:

[The present section] appears in the version commented on by Quan Yuanqi in the ninth *juan*. When Mr. Wang rearranged the sequence of the treatises, he moved it to the very beginning. When we now comment on all treatises, we

wish to ensure that [the readers] are informed of their position in the *juan* of Quan Yuanqi's edition, because we wish to preserve [knowledge of] the old sequence of the treatises. The current sequence of the treatises is entirely a result of the rearrangements made by Wang Bing.<sup>13</sup>

The comments added by Gao Baoheng et al. resulted from comparisons of different sections in the *Su wen*, from comparisons of their *Su wen* master copy with the Quan Yuanqi edition, the *Tai su*, the *Jia yi jing*, and other texts, from a comparison of different copies of Wang Bing's *Su wen*, and from a perceived need to correct mistaken commentaries by Wang Bing or even mistakes in the master copy itself.

An example of an inner-textual comparison is the note added to *Su wen* 66 pointing out that *Su wen* 5 lists the five affects as follows:

Man has the five depots; they transform the five qi, thereby generating joy, anger, sadness, anxiety, and fear.<sup>15</sup>

#### In contrast, Su wen 66 stated:

Man has the five depots; they transform the five qi, thereby generating joy, anger, pensiveness, anxiety, and fear. 16

#### Gao Baoheng et al. commented:

Su~wen~5 has "joy, anger, sadness, anxiety, and fear." The two discourses differ. Pensiveness is associated with the spleen; all the four [remaining] depots are supplied by it. Sadness dominates anger. <sup>17</sup>

The opening characters of Su wen 55 convey the following message:

An expert in piercing does not diagnose. He listens to the patient's statement: "It is in the head. The head has an illness, pain." And [if then] he needles him <the depot>, when the piercing reaches to the bones, the disease ends.

Gao Baoheng compared this statement with the Su wen xun jie and wrote: "The Quan Yuanqi edition does not have the character  $\bar{g}$ ." We too regard this character as a later addition.

Occasionally it was not enough just to point out differences. At one point  $Su\ wen\ 7$  stated:

In cases of [diseases] belonging to the killing yin [type], death follows within three days.

In cases of [diseases] belonging to the generating yang [type], death follows within four days.<sup>20</sup>

The Song editors noted that both another version of Wang Bing's text and the *Su wen xun jie* contradicted their master copy, in that they associated diseases of the "generating yang type" with a good prognosis. Hence they considered these two versions correct but, interestingly enough, did not decide to change their master copy:

Another version has 四日而生, "after four days [the patient returns to] life." The Quan Yuanqi edition has 四日而已, "after four days [the disease is] cured." Both are identical [in their meaning]. A careful comparison with the preceding and following text suggests that those [editions] having  $\mathcal{R}$ , "death," are wrong.

Similarly, when Gao Baoheng et al. identified an entire passage of eleven characters, "If the movement is reflected by the garments below the breast, the basic qi leaks," as a later addition to *Su wen* 18, they simply noted that this insertion should be omitted but did not do so themselves:

The Quan Yuanqi edition does not have these eleven characters. The *Jia yi jing* does not have them either. Given the meaning of the preceding and of the following text, these eleven characters should be omitted.<sup>21</sup>

Also in Su wen 18 one may find an example of the Song editors correcting what they considered an erroneous commentary by Wang Bing. The statement in Su wen 18, "When the urine is yellow-red, and one sleeps peacefully, this is 'yellow dan,'" $^{22}$  is followed by a commentary by Wang Bing to the effect that "dan iensure is identical to iensure, 'taxation.' When the kidneys are taxed, and the uterus is hot, one's urine is yellow-red. The iensure iensure

In his commentary, Wang Bing considers 疸 to be 勞. This is not the meaning. When it is said: one gets 疸from taxing [intercourse] with women, this is admissible; [but] if one considers 疸 to be 勞, then this is not correct.<sup>24</sup>

Su wen 58 has the following statement: "On both sides above the Great Hammer there is one [hole]; together these are two holes." Wang Bing

pointed out: "Neither the *Jia yi jing* nor the *Jing mai liu zhu kong xue tu jing* 經脈流注孔穴圖經 lists [these holes]. It is not clear which transporters [are meant here]."<sup>26</sup> The Song editors confirmed Wang Bing's note but could not offer a solution to this enigmatic passage either:

Above the Great Hammer on [both] sides there are no holes. The holes on [both] sides below the Great Hammer are called Great Shuttle and Posterior Presence (後有). Hence, Wang Bing states: "It is not clear [what is meant here]."<sup>27</sup>

Only rarely did Gao Baoheng et al. demonstrate that they commanded a thorough understanding of the contents of the *Su wen*. One example occurs in *Su wen* 6, where the following allegory required an extensive commentary:

In the division and unity of the three yang [vessels], the major yang is the opening; the yang brilliance is the door leaf; the minor yang is the pivot.<sup>28</sup>

The commentary by Wang Bing may not have appeared sufficient to the Song editors; hence they added the following discourse.

According to the  $\operatorname{Jiu} xu$  [ $\operatorname{ling} shu$ ],  $^{29}$  the major yang is "the gate." The yang brilliance is "the door leaf." The minor yang is the "pivot." Hence when the "gate" is broken, the flesh is destroyed and the joints slow down and sudden illnesses emerge. Hence when one observes such sudden diseases, they are to be eliminated through the major yang [vessel]. When the "door leaf" is broken, the qi has nothing that could stop it, and diseases of perturbed breathing emerge. Hence such perturbations are to be eliminated through the yang brilliance [vessel]. When the "pivot" is impaired, the bones are tossed, and do not rest firmly on the ground. Hence in case of tossed bones, [the disease] is to be eliminated through the minor yang [vessel].  $^{30}$ 

The *Chong guang bu zhu Huang Di nei jing su wen*, one may conclude from these examples, reflects the efforts of a committee working within a state bureaucracy to generate an authoritative edition of the *Su wen*. As is to be expected from such a committee, it lacked the courage and inspiration of individual scholars. The state "as is" is described; divergences between different copies are noted; obvious errors are identified. The committee either did not dare or could not agree, however, to draw the necessary consequences and propose a text version that might have been considered "correct" or perfect.

Nevertheless, the impact of the work of the editorial committee of the eleventh century should not be underestimated. The *Chong guang bu zhu Huang Di nei jing su wen* has remained, as was intended, the authoritative edition ever since. Until late in the twentieth century, numerous scholars have

published rearranged, abridged, or newly commentated versions. The Song edition, though, has always been viewed as the standard from which individuals started out to pursue their own ends; none of the secondary works has been able to establish a continuing second line of tradition or push the Song text into the background of history.

# 3. THE MAJOR COMMENTATED SU WEN VERSIONS SUBSEQUENT TO GAO BAOHENG ET AL.

#### 3.1. Ma Shi's Huang Di nei jing su wen zhu zheng fa wei

Ma Shi 馬 蒔, zi: Zhonghua 仲 化, original hao Xuantai 玄臺, <sup>31</sup> wrote the Huang Di nei jing su wen zhu zheng fa wei 黃 帝 內 經 素 問 注 証 發 微 (The Huang Di nei jing su wen, commented, validated, its subtleties elucidated) in nine chapters in 1586. Ma Shi was a physician during the final years of the Ming era. First he studied Confucian literature; later he practiced medicine. His Su wen commentary did not receive much praise in subsequent centuries; for example, the Si ku quan shu zong mu wrote: "[Ma Shi's] comments do not elucidate anything; his frequent criticism of the comments written by earlier authors is exaggerated." <sup>32</sup>

Nevertheless, Ma Shi offered interpretations that were adopted by later, more famous authors. For example, Su wen 11 states: "Whenever one treats a [patient's] disease, one must examine his below." While Wang Bing considered "his below" to refer to the region "below the eyes," Ma Shi commented: "'Observe the below' is to observe whether the lower orifices are passable or not." This interpretation was repeated as correct by Zhang Jiebin (1563–1640), Xue Xue  $\sharp$  (1681–1770), and others later on.

Ma Shi is best known for the first comprehensive commentary on the *Ling shu*, published under the title *Huang Di nei jing ling shu zhu zheng fa wei* 黄帝內經靈樞注証發微.<sup>35</sup>

# 3.2. Wu Kun's Huang Di nei jing su wen zhu

Wu Kun 吳崑, zi: Shan fu 山甫, biehao Hegao shanren 鶴皋山人, second hao Canhuangzi 參黃子 (1552–1620), was a famous physician and prolific medical author of the Ming era. He was born into a family with an established medical tradition and a comprehensive medical library. His father, a renowned author and clinician himself, is reported to have been poisoned after his many successful treatments at the court had aroused the envy of the Imperial physicians.  $^{36}$ 

In 1594 Wu Kun wrote the *Huang Di nei jing su wen zhu* 黄帝內經素問注 in twenty-four *juan*; it was published in 1600. This book became one of the

most influential commentated versions of the *Su wen* with changes and supplementations inserted into the original text. Wu Kun's ability to explain difficult passages in simple words received much praise in later times; his liberal attitude toward altering the original text was occasionally severely criticized.

The *Xu xiu si ku quan shu ti yao* characterized his work as follows: "His comments often follow statements by former authors. He abridged those that were too voluminous and he enlarged on those that were too short. In the arrangement of the treatises, he followed the precedence set by Wang Bing, but he introduced some changes as far as the headings of the individual sections are concerned."<sup>37</sup>

Wu Kun appears to have been the first author who employed his extensive clinical experience in commenting on the Su wen. An example is the disease fu liang  $\mathcal{R}$ , "hidden beams," which may not have been familiar to medical scholars without clinical practice. A passage in Su wen 40 introduced the term:

[Huang] Di:

A disease is [as follows]:

The lower abdomen [gives the patient a feeling of] abundance.

Above, below, to the left, and to the right, everywhere are roots.

Which disease is that?

Can it be treated, or not?

Qi Bo:

The name of the disease is Hidden Beams.

[Huang] Di:

Hidden Beams, through which cause is this [disease] acquired?

Qi Bo:

[The lower abdomen] holds massive pus and blood, located outside of the intestines and the stomach.

This must not be treated.

If one treats it, each time one presses the [lower abdomen] this brings [the patient] closer to death."

[Huang] Di:

How is that?

Qi Bo:

When this is moved downward, then it is by way of yin [passageways].

It is inevitable that what moves downward is pus and blood.

When this is moved upward, then it presses against the stomach duct where it generates [the disease] *ge-jia*.<sup>38</sup>

Wang Bing had stated: "[The term] 'Hidden Beams' [refers to] accumulations in the heart." Gao Baoheng et al. disagreed: "This [disease of]

Hidden Beams is very different from the Hidden Beams of the accumulations in the heart. These diseases have the same name, but in fact they differ and are not alike."<sup>39</sup> Wu Kun was aware that the same term appeared in the Nanjing 難經, but he attributed a different meaning there and relied on his clinical knowledge to clarify the difference: "伏梁 is to say: like hidden bridge beams. This name was chosen because the suffering is deep inside. The [occurrence of the term] here is not identical with the discourse on 'Hidden Beams' in the Nanjing. There it refers to accumulations in the heart, that is, to yin qi in the depots. Here it refers to accumulations of pus and blood, that is, to yang poison."<sup>40</sup>

# 3.3. Zhang Jiebin's Lei jing

Zhang Jiebin 張介賓, zi: Huiqing 會卿, hao: Jingyue 景岳, second hao: Tongyizi 通一子 (1563–1640), a famous physician during the Ming dynasty, is the author of the Lei jing 類經 (The [Contents of the] Classic Categorized) in thirty-two *juan*, published in 1624. The *Lei jing* constitutes a revised edition of the contents of the Su wen and the Ling shu, rearranged according to topical categories. In the judgment of the Si ku quan shu zong mu ti yao: "This book has divided the contents of the Su wen and of the Ling shu into the following sequence of topical categories: 1. Nourishment of life. 2. Yin yang. 3. Condition of the depots and their outer signs. 4. Pulse and complexion. 5. Conduits and network vessels. 6. Tips and roots. 7. Qi and flavor. 8. Therapies. 9. Illnesses. 10. Needling. 11. [Five] Periods and [Six] Qi. 12. Summary of different views. Altogether the book consists of 300 paragraphs, with an appendix including the *Tu yi* 圖翼 in 11 *juan* and the *Fu yi* 附翼in 4 *juan*. Even though it was unavoidable that the original text was severely cut, the [new] order makes sense, and lends itself to easy consultation. The comments are quite illuminating too."41

In fact, Zhang Jiebin often added commentaries that were much longer than those of his predecessors, as if he had aimed at eliminating any possibility of a misunderstanding. For example, in view of the meaning of the passage "observe his below" in *Su wen* 11, which had been interpreted by Ma Shi as a reference to the two lower orifices, Zhang Jiebin added the following exhaustive comment:

"Below" is to say: the two yin [orifices; i.e., the openings for urine and stools]. The two yin [orifices] are the orifices of the kidneys and the gate for [shutting or opening] the stomach. *Su wen* 17 states "If the granaries cannot keep what they store, the door gates are not under control." Those who keep their guard survive; those who lose their guard, they die. Hence stools and urine are the lock to the stomach qi, and they are closely linked to the uncritical or critical state of the original qi of the entire body. Hence one must observe the "below."

Despite his erudition and diligence, Zhang Jiebin could not escape criticism by subsequent commentators for some of his own interpretations. For example, Su wen 77 states: "The practice [of medicine] has five faulty and four virtuous [ways of therapy]."43 The character de 德 was interpreted as "virtue" by Wang Bing; Zhang Jiebin followed him: "In medicine one distinguishes between the ignorant and the sages. The ignorant commit many mistakes; hence there are the five transgressions [in treatment]. The Way of the sages is perfect; hence it embraces the four virtues."44 Zhang Qi, the author of the Su wen shi yi 素 問釋義 of 1829 (see below), was not the first to doubt Zhang Jiebin: "The text does not refer to the 'four virtuous ways of behavior' again. Hence his text is corrupt. Another author states: 德 is an error for 失, as can be seen from the title of the next treatise: 彼四失論."45 More recently, though, Qian Chaochen may have been the first to arrive at a correct interpretation: "五過 is the opposite of 四德. 過 is 'fault,' 'mistake.' 五過 refers to five types of mistakes. 德 is a loan character for the homophone 得, used here in the sense of 'correct medical procedure.' 德 must not be read here as the 德 of 道德, but as the 得 of 得失, 'gain and loss,' 'success and failure.' Wang Bing was wrong."46

In its combination of the *Su wen* and the *Ling shu*, Zhang Jiebin's *Lei jing* may be comparable to the *Tai su* and the *Jia yi jing*. Since the *Tai su* had brought the two texts together in the second half of the seventh century, no one else had followed this example. However, Zhang Jiebin's *Lei jing* differed from earlier commentated *Su wen* versions in that his was the first to rearrange the heterogeneous text on the basis of thematic categories. A contemporary of Wu Kun, Zhang Jiebin too let his clinical experience enter his comments on the *Nei jing*, in that he was the first to quote entire case histories he had encountered as a practicing physician to elucidate the meaning of obscure passages.

# 3.4. Zhang Zhicong's Huang Di nei jing su wen ji zhu

Zhang Zhicong 張志聘, zi: Yin'an 隱庵 (ca. 1619–1674), was a famous physician of the Qing era. He practiced medicine professionally. He established a center called Lü shan tang 侶山堂 in Hangzhou and invited colleagues and disciples to join him there to discuss and study medicine. His research on the Huang Di nei jing resulted in two major publications, the Huang Di nei jing su wen ji zhu 黃帝內經素問集注 (The Huang Di nei jing su wen with collected commentaries) in nine juan of 1670 and the Huang Di ling shu jing ji zhu 黃帝靈樞經集注 (The Huang Di nei jing ling shu with collected commentaries). His Su wen ji zhu, as the former is often called, is the first complete edition of the Su wen with consecutive comments not only by Zhang Zhicong himself but also by earlier authors. The introductory section states:

First. The meaning of the statements of the original classic is confused and has been changed [in its nature. It contains] unclear and strange [passages]. Sometimes one paragraph reveals very little, while another chapter is most lucid. The meaning [of a statement] may be expressed in specific terms, but the wording is difficult and remains on the level of a general discourse. Hence in [writing my] commentaries, [I] have sought only to clarify the meaning of the classic; it was not my intention to write excessively detailed commentaries. . . . Second. This compilation has the sole purpose of expounding the meaning of the classic; it does not strive for literary elegance. Hence the classic is used to explain the classic. I have not dared to impose my own ideas on it even in a single word. . . . Third. The meaning of the classic is most subtle; to elucidate it is quite difficult. Hence in this compilation there may be some sections where it was not considered annoying to deal with their [meanings] again and again, but this is not a useless repetition. Also, in case of those passages whose meaning has not been elucidated sufficiently, with the meaning proposed by the commentaries exceeding that of the original, and in cases in which passages diverge from the notions proposed by the commentaries, I have retained both of them nevertheless, to let scholars of later times decide after due reflection.47

Criticism was voiced by Wang An  $\Xi$ 昂 (b. 1615), a prolific and popular medical author himself: "Zhang Yin'an's Su wen ji zhu was printed in the year geng xu 庚戌 of the reign period kang xi 康熙 (1670). The entire book was written by his colleagues. They completely set aside the old text and construed many annotations of their own. They may even have applied their personal ideas to fathom the [statements of the ancient] sages."<sup>48</sup>

# 3.5. Gao Shishi's Huang Di su wen zhi jie

Gao Shishi 高世杖, zi: Shizong 士宗 (1636–1700), is the author of the *Huang Di su wen zhi jie* 黄帝素問直解 (The *Huang Di su wen* with straightforward explanations) in nine *juan*, published in A.D. 1695. Gao Shishi came from a poor family but managed to read books from his youth on. He began practicing medicine at age twenty-three and gained a certain reputation. Later he fell ill himself and, despite the assistance of other physicians, his condition worsened. It was then that he began to study with Zhang Zhicong 張志聰, and he is said to have become particularly well versed in medical theory. He adopted from his teacher the approach of commenting on the entire text, and he opposed those who cut the original text apart, leaving out and rearranging individual phrases and passages. In addition to the *Su wen zhi jie*, he published a *Ling shu zhi jie* 靈樞直解, the *Ben cao chong yuan* 本草崇原, and other titles identifying him as associated with the school of Han learning in medicine.

An early characterization of his Su wen edition is given in the Zheng tang du shu ji 鄭堂 讀書記 by Zhou Zhongfu 周中孚 (1768–1831):

[Gao] Shizong was of the opinion that all commentaries on the *Su wen* written by [earlier] authors were either insignificant and full of errors or shallow and uncanonical. Finally, Zhang Yin'an 張隱庵 (i.e., Zhang Zhicong) published his *Su wen ji zhu 素* 問集注. [However,] its meaning was difficult to understand; its drawback was its obscurity. Hence [Gao Shishi] wrote another commentary on the [*Su wen*]. He first commented on the title of a particular *pian*. Then he drew attention to the overall message of that *pian*. He divided the contents of each *pian* into several sections. Because the [original] discourse is unsystematic and verbose, he gave short accounts of the meaning of these sections, so that readers could easily understand it. . . . However, [his book] should be given only to beginning students; his language is not directed at accomplished scholars. <sup>49</sup>

Two further characteristics of Gao Shishi's *Su wen* commentary may be pointed out here: Gao Shishi sought to preserve the entire text transmitted since Wang Bing. In addition, he filled the gap of *Su wen* 72 and *Su wen* 73 by inserting the two apocryphal treatises Ci fa lun 刺法論 and Ben bing lun 本病論 and commenting on them. While Wang Bing had interspersed his annotations whenever he felt a comment was necessary and while Ma Shi and Zhang Zhicong had added clustered commentaries to lengthy paragraphs within a section of the text, Gao Shishi followed the latter but divided the text into many more paragraphs, providing more sites for his own comments.

# 3.6. Zhang Qi's Su wen shi yi

Zhang Qi 張琦 (1765–1833), original name Yi 翊, zi: Hanfeng 翰風, hao: Wanlin 宛鄰, became a licentiate of the first class in 1788. He took the ju ren 舉人degree in 1813 and then began a civil service career. At one time he was district magistrate; in his literary writings he followed the Changzhou

school. He developed an interest in medicine after he lost his son due to what he considered incompetent medical care and compiled the *Su wen shi* yi 素問釋義 in ten chapters in 1829; it was published in 1830.

In a preface, Zhang Qi outlined the background of his Su wen edition:

Zhang Qi placed particular emphasis on pointing out, first, erroneous insertions that make no sense whatsoever, neither in their present context nor anywhere else in the *Su wen*; second, those erroneous insertions that had been moved into their present context from another context in the *Su wen*; and third, those instances where text portions appear to have been misplaced within the same section.<sup>51</sup>

# 3.7. Hu Shu's Huang Di nei jing su wen jiao yi

Hu Shu 胡澍 (1825–1872), zi: Gaifu 荄甫, second zi: Ganbo 甘伯, hao: Shisheng 石生, received the second degree in his hometown in 1859. Later he was promoted by purchase to the position of secretary of one of the six boards and was dispatched as controller in Shanxi for the Board of Revenues. He was often ill in his middle years and developed an interest in medicine and pharmaceutics. When he finally succumbed to a disease, he was still working on the text and left behind only a manuscript draft of thirty-nine paragraphs covering sections one through five of the first juan of the Su wen. It was published in 1872 under the title Huang Di nei jing su wen jiao yi 黃帝內經素問校義 (Meanings in the Huang Di nei jing su wen examined).

The Qing-era bibliographic work *Jin shi hua jin lou shu mu jie ti* 金氏花近樓書目解題 stated: "[Hu] Shu carefully studied the 'minor teachings' (i.e., philology). In his middle years he was often ill and developed an interest in prescription books. He obtained a Song edition of the *Nei jing* and used the edition by Mr. Xiong 熊 of the Yuan dynasty, a Ming edition of the *Dao zang* 

Although Hu Shu's book touched on only a small fragment of the entire  $Su\ wen$ , he nevertheless left a definite impact. Hu Shu's thirty-nine paragraphs mark the introduction of a modern philological approach to the  $Su\ wen$  exegesis. In analyzing statements of unclear meaning, Hu Shu did not start from what earlier authors appear to have perceived as clinical evidence; rather, he compared the structure and wording of a phrase in question with earlier and subsequent portions of the text and with occurrences of comparable wordings elsewhere in the  $Su\ wen$ . In this way he was able to demonstrate, for example, why two characters had to be mutually exchanged to give them a very different meaning from the one attributed to them conventionally, thereby, possibly for the first time in centuries, clarifying their original significance.

In addition, he consulted numerous ancient dictionaries and nonmedical texts to search for appropriate meanings of characters in obscure passages. Not infrequently, he discovered that if a given character was exchanged for its homophone a wording was understandable. Finally, Hu Shu applied a method developed by Wang Niansun 王念孫(1744–1832)in his *Du shu za zhi*, *Huai nan zi jiao hou ji* 讀書雜志,淮南子校後記,taking into account the rhyme structure of certain passages to delete erroneously inserted characters or to invert the order of a sequence of characters and reconstruct what he regarded as the original wording.

# 3.8. Yu Yue's Nei jing bian yan

Yu Yue 俞樾 (1821–1907), zi: Yinfu 蔭甫, hao: Quyuan jushi 曲園居士, took his jin shi degree in 1850. Subsequently, he served in various positions at the Hanlin Academy. Later he devoted himself to the study of the Confucian classics and medicine. At some point he became a lecturer at the Zi yang shu yuan 紫陽書院 College in Ziyang and at the Gu jing jing she 討經精舍 College in Hangzhou. He compiled the collection Chun zai tang quan ji 春在堂全集, including the two medical texts Du shu yu lu 讀書餘錄, with forty-eight paragraphs of Su wen exegesis, and Shen shang san zi jue 枕上三字訣. The exact dates of compilation of these texts are not known.

In 1924 a man named Qiu Qingyuan 裘慶元 gave the title *Nei jing bian yan* 內經辯言 (Discussion of the Words in the *Nei jing*) to Yu Yue's *Su wen* commentary in the *Du shu yu lu* 讀書餘錄 and included it as an individual text in a collection with the title *San san yi shu* 三三醫書.

#### 4. TWO JAPANESE COMMENTATED SU WEN VERSIONS OF THE EDO PERIOD

#### 4.1. Tamba Genkan's Su wen shi

Japanese scholarship has contributed significantly to the exegesis of the  $Huang\ Di\ nei\ jing$ . The first Japanese scholar to compile a completely annotated version of the  $Su\ wen$  was Taki Genkan 多紀元簡 (1755–1810). He is usually quoted under the name Tamba Genkan 丹波元簡; occasionally, Chinese and Japanese literature refers to him as the "great Tamba" (大丹波) to distinguish him from his two sons, Tamba Gen-in 丹波元胤 and Tamba Genken 丹波元亂 of Whom also were noted  $Su\ wen$  scholars.

Tamba Genkan was educated as a traditional literary scholar; in addition, he studied medicine to follow his father, a renowned physician and medical professor. Eventually Tamba Genkan succeeded his father in his teaching position; his unique erudition enabled him to write and publish numerous philological studies of ancient medical texts.

In compiling his Su wen study, the Su wen shi 素 問 識 (Understanding the Su wen), Tamba Genkan quoted numerous Chinese authors, beginning with Wang Bing, and added his own views at the end of his list of previous comments on a specific issue. Whenever he decided to correct what he thought was an erroneous interpretation by an earlier author, his point succeeded the error directly. Where he quoted only one earlier author and did not add a comment of his own, he was convinced that the earlier comment was correct. Among his predecessors, he considered Wang Bing, Ma Shi, Wu Kun, Zhang Jiebin, Zhang Zhicong, and Gao Shishi most important.

Tamba Genkan used ancient and more recent philological tools to justify his arguments; hence he quoted from the *Shuo wen* 説文, the *Er ya* 爾雅, the *Guang ya* 廣雅, and others, and also from the writings of Duan Yucai 段玉裁 (1735-1815) and Wang Niansun 王念孫 (1734-1832). Whenever possible, he provided evidence on the meaning of a term or phrase from its occurrence in nonmedical literature, referring to the *Shi jing* 詩經, the *Chu ci* 楚

辭, the  $\mathit{Zuo\,zhuan}$  左傳, the  $\mathit{Gong\,yang\,zhuan}$  公羊傳, the  $\mathit{Shi\,ji}$  史記, the  $\mathit{Li\,ji}$  禮記, and the  $\mathit{L\"u}$  shi chun qiu 呂氏春秋, among other sources. An example is the introduction of Huang Di in the opening statement of  $\mathit{Su\,wen}\,1$ . Tamba Genkan quoted more than ten ancient titles to substantiate his view on the correct interpretation of these lines.

Like his Chinese contemporaries, he also applied more recent methodologies in his comments, in particular, pointing out rhyme structures and homophones.<sup>54</sup>

#### 4.2. Tamba Genken's Su wen shao shi

Tamba Genkan's son is usually quoted under the name Tamba Genken 丹波元堅 (1795–1857). The major difference between his *Su wen* edition, *Su wen shao shi* 素問紹識 (Continued [Attempts to] Understand the *Su wen*), and that of his father was his inclusion of references to the *Tai su*, fragments of which had meanwhile been discovered in Japanese libraries. <sup>55</sup> In addition, he drew on the most recent Chinese scholarship that had reached Japan only after his father's death. An unknown portion of his comments stem from his brother Tamba Gen-in. <sup>56</sup>

#### V

# A Survey of the Contents of the *Su wen*

#### 1. THE LITERARY SETTING

The *Huang Di nei jing su wen* is a compilation of fragmentary texts written by an unknown number of authors in a period lasting from about the second or first century B.C. to the second century A.D. Some passages may have been written even later. It may well be that several of the headings of the seventynine discourses of the textus receptus denoted a treatise prior to its inclusion in the *Su wen* collection. Also, some of the titles quoted explicitly in the *Su wen* discourses may have been titles of treatises incorporated elsewhere in the *Su wen*. However, none of the texts that found entrance in the *Su wen* has survived as an independent text.

The formation of vessel theory and of the yin-yang and five-agents doctrines of systematic correspondence was part of a wide-ranging intellectual movement in Chinese natural philosophy whose beginnings can be seen in the fourth and third centuries B.C. A corollary of this development was a quickly growing community of literati and literary patrons who collected, disseminated, and made use of the texts conveying the new knowledge. The bibliographic section of the Han dynastic history and also the collections of texts unearthed from several tomb sites since the early 1970s bear witness to the production and also to the widespread availability of such texts.

The absence of all the unearthed texts from the official bibliographies of the time is a clear sign that the latter should be considered selective. Obviously, they listed only a part of all texts circulating during the Han era. We do not know, however, what proportion of existing literature found entrance on the official lists and how much remained exclusively in private hands.

The possibility cannot be excluded that the medical books referred to in

the bibliographic section of the  $Han\,shu\,$  were, at least in part, used as sources by the compilers of the  $Su\,wen$ . However, the  $Su\,wen$  presumably incorporated a much larger number of original texts, none of which appears to have made it into any of the official bibliographies. The same could be said of all the titles quoted or mentioned in the  $Su\,wen$  discourses, none of which is attested elsewhere. When Wang Bing added the "seven comprehensive discourses" in the eighth century, thereby increasing the  $Su\,wen$  by 50 percent, he was able to draw on a vast corpus of texts presumably written during the Han era and transmitted through the centuries without being listed in any of the private or public book lists. Titles such as  $Tai\,shi\,tian\,yuan\,ce\,\,$ 太始天元册, "Book on the Supreme Beginning of the Original [Qi] of Heaven,"  $Tian\,yuan\,ij\,\,$ 天元紀, "Arrangements of the Original [Qi] of Heaven," and  $Tian\,yuan\,ce\,\,$  天元册, "Book on the Original [Qi] of Heaven," are attested only in the  $Su\,wen$ ; apparently they denoted the same text.

References to textual sources in the *Su wen* can be divided into three groups. First, there are more or less apparent cross-references to passages found elsewhere either in the *Su wen* or in the *Ling shu*. Second, a number of texts that must have existed parallel to texts included in the *Su wen* are quoted at greater or lesser length. Third, several titles are mentioned as references to texts that appear important in a specific context but are not quoted verbatim.

論言 治痿者獨取之陽明 何也

The Discourse states: "To treat limpness, take it only from the yang brilliance." Why is that?<sup>3</sup>

Ling shu 5 states:

故痿疾者取之陽明

"Hence, in case of limpness, take it from the yang brilliance."4

Su wen 74 has the following quotation:

The Discourse states:

"[The movements in the vessels] at Man's Prognosis and at the Inch Opening correspond to each other.

As if one pulled a rope of equal diameter [through both locations]. This is called 'balanced.'" $^5$ 

In comparison, Ling shu 48 has the following wording:

The Inch Opening masters the center; Man's Prognosis masters the exterior. The [movements in the vessels] at these two [locations] correspond to each other; they go together and they come together. As if one pulled a rope of equal diameter [through both locations]. In spring and summer, [the movement] is slightly stronger at Man's Prognosis; in autumn and winter, it is slightly stronger at the Inch Opening. If it is this way, this is called a "balanced person."

Obviously, both the passage from *Su wen* 74 and the passage from *Ling shu* 48 originated from a third "discourse." The metaphor of a rope of identical diameter to denote an identical movement in the vessels at the two locations Man's Prognosis and Inch Opening was quoted faithfully in *Su wen* 74; a person is balanced or, as we would say, healthy if no difference can be felt in the movements in the vessels at Man's Prognosis and the Inch Opening. *Ling shu* 48, in contrast, quotes the metaphor too; however, it does not believe it. Seasonal changes must show in the movement in the vessels; hence in spring and summer, the rope, that is, the movement in the vessels, is a little stronger at Man's Prognosis; in autumn and winter, it is a little stronger at the Inch Opening. Rather than perfect identity of movements at Man's Prognosis and the Inch Opening, it is this slight difference that signals a condition of "balance" or health.

The references to "the classic(s)" pose similar problems. One of the texts mentioned in the Su wen without being quoted is titled Mai jing K E, "Vessel Classic." That is, use of the term jing was not restricted to the few "inner classics" and "outer classics" listed among the medical texts in the bibliographic section of the dynastic history of the Han. However, in Su wen G, G Bo responds to a fundamental question posed by Huang Di by referring him to "the classic," as if this text was so basic that one could expect everyone in the field to have read it:

[Huang] Di:

"Greatly excessive" and "inadequate," what does that mean?

Oi Bo:

This is [outlined] in the classic.<sup>7</sup>

Wang Bing proposed that this is a reference to a discussion of concepts of excesses and inadequacies in *Su wen* 19; Gao Baoheng et al. pointed out

that while *Su wen* 19 was devoted to excesses and inadequacies in the vessels, the current notions of "great excess" and "inadequacy" pertained to excesses and inadequacies of periodic qi, a topic treated in *Su wen* 69 and 70.8 At any rate, when Qi Bo told Huang Di, "This is outlined in the classic," the text he appears to have had in mind, if it was not the parallel listing of this topic in *Su wen* 19, 69, or 70, may have been the source of either of these *Su wen* discourses. In fact, several further references to "the classic" suggest that by the time the *Su wen* texts were compiled, one core text, if not a small number of titles, had gained so much authority that it was, or they were, respected as "the classic," or "the classics," by most or all scholars concerned. Hence the author(s) of *Su wen* 77 could make the following statement.

The art of the sages, it sets an example for all mankind.

Judgment and mind must be based on laws and rules.

If one follows the classics and observes the calculations and accordingly practices medicine with due reverence, this will be beneficial to all mankind.

Unfortunately, we do not know whether this statement, by referring to "the classics," was meant to say that medical *Fachprosa* had already become a literary genre broad enough to distinguish between "classic" texts worth being remembered for a long time to come and others whose contents were considered of less central value. We move on firmer ground when we examine references to "the classic" in *Su wen* 35.

#### Oi Bo:

The Classic states:

"Do not pierce [a patient with] an intensely burning heat.

Do not pierce [a patient with] a torrential movement in the vessels.

Do not pierce [a patient with] an incessant sweating."

#### Hence

it is because the disease is in full advance against [the proper qi] that it cannot be treated yet. . . .

The outbreak of the disease is like the heat of fire, like [the coming of] wind and rain: one cannot do anything against it.

#### Hence,

when the Classic states

"[to pierce] right at the moment when [the disease] abounds must result in destruction; [when a disease is pierced] after it has weakened, [the success of an] intervention will be most obvious,"

then this is explained by what was said above.<sup>10</sup>

*Ling shu* 55 has parallel wordings. Bo Gao, the informant of Huang Di in the *Ling shu* dialogue, first quotes the ancient treatise on military tactics, *Sun* 

zi~bing~fa 孫子兵法, by Sun Bin 孫臏 of the fifth century B.C., before quoting from a treatise Ci~fa 刺法, "Patterns of Piercing," a passage in which Sun Bin's military strategy reappears in a medical context:

The Patterns of Warfare (Bing fa 兵法) state:

"Do not move directly against an abounding qi; do not attack a line of soldiers in full advance."

The Patterns of Piercing (Ci fa 刺法) state:

"Do not pierce [a patient with] an intensely burning heat.

Do not pierce [a patient with] an incessant sweating.

Do not pierce [a patient with] a torrential movement in the vessels.

Do not pierce [a patient whose] disease and [movement in the] vessels go against each other." . . .

Hence it is said

"At the moment when it abounds, do not dare [to pierce; this would result in] destruction-harm.

If one pierces [the disease when] it has already weakened, the [success of the] intervention will be most obvious.<sup>11</sup>

The text quoted as "the classic" in the *Su wen* is quoted as "Patterns of Piercing," *Ci fa*, by the *Ling shu*. This could be explained in several ways, of course, including that the *Ci fa* was considered among insiders "the classic" text on the issues discussed. <sup>12</sup>

Su wen 77 emphasizes the important role of "classic" texts, even though in this context it may be that "classics" refers to the Confucian classics. The author may have meant to convey that to be a good physician is as demanding as to be well versed in the Confucian corpus. Nevertheless, at least one later commentator read "classics" as a reference to medical classics. He added his listing of core titles:

Observe the calculations, treat according [to their indications], and do not miss the structures of the transporters.

If [a physician] is able to apply this art,

he will never be in any danger for his entire life.

If he is not familiar with the structures of the transporters,

what is densely compacted in the five depots will boil. . . .

He diagnoses a disease and fails to recognize it.

This is called to miss the regular [pattern].

If [a physician] carefully observes these [rules in] treatment,

he is on one level of understanding with the classics.

< The Upper Classic, The Lower Classic, To Estimate and Measure, Yin and Yang, The Abnormal and the Normal, The Five Inside>13

A text named *Shang jing*  $\pm$   $\bowtie$ , "Upper Classic," is mentioned and quoted in the *Su wen* a total of four times.<sup>14</sup> It is referred to three times together

with another text,  $Xiajing \uparrow \not\equiv$ , the "Lower Classic." <sup>15</sup> Upper Classic and Lower Classic may have constituted two volumes of one large text in the same way as the various Nei jing and Wai jing, "Inner Classics" and "Outer Classics," listed in the Han bibliographies. The passages quoted from the Upper Classic and the Lower Classic in the Su wen are too short to permit any conclusions about conceptual differences between them.

The remaining four titles identified by an unknown commentator as classic texts are listed here with titles that have caused some confusion. For example, *Kui du* 接度, "To Estimate and Measure," is a compound referring to a diagnostic procedure rather than to a book title. However, at the four locations in *Su wen* 15, 19, 46, and 77 where this compound appears, it is always mentioned in a context implying a listing of book titles. That is, in *Su wen* 15, *To Estimate and Measure* is named in one breath with the compound *Qi heng* 奇恒, "The Abnormal and the Normal." In *Su wen* 19 it is listed with the compounds *Wu se* 五色, "The Five Complexions," *Mai bian* 脈變, "The Changes in the [Movement in the Vessels]," and *Qi heng*, 奇恒, "The Abnormal and the Normal." In *Su wen* 46, in addition to *Qi heng*, *Shang jing* (Upper Classic), and *Xia jing* (Lower Classic), a *Jin kui* 金匮 is mentioned together with the *Kui du*. Finally, in *Su wen* 77, the list of "classic texts" quoted above names two additional titles, *Yin yang* 陰陽, "Yin and Yang," and *Wu zhong* 五中, "The Five Inside."

No passage from *Kui du*, "To Estimate and Measure," is quoted literally in the *Su wen*. However, a short exchange between Huang Di and Qi Bo in *Su wen* 15 provides some hints at the contents of this text and also of *Qi heng*.

Huang Di asked:

I have heard:

the [texts] *To Estimate and Measure* and *The Abnormal and the Normal*, what they expound is not identical.

How are their [contents] to be used?

Qi Bo responded:

As for To Estimate and Measure,

this [text expounds how] to measure whether a disease is at the surface or in the depth.

As for The Abnormal and the Normal, this [text discusses] abnormal diseases. 16

Although  $\mathit{Kui}\ du,\ \mathit{Qi}\ \mathit{heng},\ \mathit{and}\ \mathit{several}\ of\ the\ other\ compounds\ identified\ here\ as\ book\ titles\ are\ never\ explicitly\ referred\ to\ as\ such\ in\ the\ \mathit{Su}\ \mathit{wen},\ the\ context\ and\ definitions\ provided\ by\ Qi\ Bo\ imply\ that\ they\ were\ meant\ to\ convey\ more\ than\ just\ names\ of\ methods\ or\ nosological\ concepts.\ The\ same\ is\ true\ of\ several\ other\ at\ first\ sight\ rather\ enigmatic\ compounds.\ A\ good\ example\ is\ \mathit{Bi}\ \mathit{lei}\ 比\ {\mathfrak A}\ ,$  "Comparison\ of\ the\ Likes."

Obviously, "comparison of the likes" was a diagnostic method in the same

way as "to estimate and measure." In this sense, the compound *bi lei* appears in *Su wen* 76, 77, and 78.

Huang Di sat calmly.

He summoned Lei Gong and asked him:

Having been taught the art and reciting the texts, it appears you are able to consider a broad variety of teachings, to reach [an ability] to compare the likes, and to penetrate and become one with the structures of the Way. Speak to me about where you excel. 17

You did not draw [on the method of] comparing the likes. Hence, your knowledge has not [reached the level of] understanding yet. 18

Those who are experts in the [movement in the] vessels, for them it is essential to rely on [such methods as] comparing the likes, [comparing] the abnormal and the normal, and the natural approach and thereby to acquire the respective knowledge.<sup>19</sup>

Given the listing of the three compounds *bi lei*, *qi heng*, and *cong rong* in the latter passage, however, it is quite possible to interpret all three of them as book titles. After all, we have found the compound *qi heng* in contexts suggesting lists of titles. In *Su wen* 81, *cong rong*, the "natural approach," also appears in a list of book titles.

Lei Gong requested:

[I, your] subject teach [medical] practice, and [thereby] I transmit it. When I give lessons, they are based on the discourses in the classics, [including] the *Natural Approach*, and the *Patterns of Physical Appearance*, *Yin and Yang*, and *Piercing and Cauterization*, as well as the nourishing effects of drugs prepared as decoctions.<sup>20</sup>

Hence the short excerpt quoted from *Su wen* 77 above could also be read in the following way:

Those who are experts in the [movement in the] vessels, for them it is essential to rely on [such texts as] *Comparison of the Likes, The Abnormal and the Normal,* and *The Natural Approach* and thereby to acquire the respective knowledge.

"Comparison of the Likes" may have been an early Chinese term for considering correspondences between assumed physiological or pathological processes and diagnostic parameters. "The Natural Approach" may have been an alternative to overly strict adherence to theoretical patterns in diagnosis. Hence, at least for the time being, that is, until a lucky find brings

to our eyes the texts in question, such diagnostic procedures as comparison of the likes, a visual assessment of normal and abnormal states, and the natural approach may be seen as evidence of opposition against domination by theoretical constructs in medicine. This, of course, reminds one of controversies of a similar type in ancient Europe.

The largest group of texts mentioned in the *Su wen* whose titles suggest a certain proximity of their contents was concerned with the movement in the vessels. In addition to the *Mai jing* 脈經, the "Classic on the [Movement in the] Vessels," four other titles emphasize the importance on vessel theory in early Chinese medical literature. They include a *Jing mai* 經脈, "Conduit Vessels," a *Mai bian* 脈變, "Changes in the [Movements in the] Vessels," a *Mai fa* 脈法, "Patterns of the [Movements in the] Vessels," and a *Mai yao* 脈要, "Essentials of the Vessel [Movements]."

Several texts seem to have focused on therapy, including the Ci fa  $\not = 1$   $\not = 1$ 

To conclude this survey, a total of about twenty-seven titles of texts are named in the *Su wen*. Thanks to the editors of the *Su wen*, the memory of these texts was kept alive along with the few literary monuments of the Han dynasty, such as the *Nan jing* or the *Shang han za bing lun*, that have been transmitted through the centuries. All these sources together provide an impression—albeit preliminary—of a flourishing Han-era culture of *Fach-prosa* concerned with human and health sciences. It is only with this rich and multifaceted *Fach-prosa* in mind that we can make sense of the astonishing heterogeneity of theoretical approaches and the impressive diversity of conceptual levels that are outlined below.

#### 2. THE YIN-YANG DOCTRINE

#### 2.1. The Discovery of Dualism

The *Su wen* was written at a time when at least its authors and their intellectual community were firmly convinced they lived in an environment penetrated and governed by fairly understandable natural laws.<sup>22</sup> These laws expressed themselves in the generation, activities, transformations, and disappearance of all beings, as well as in their interactions. Chinese naturalists

had identified them as based on dualistic and pentic principles and had named the former yin and yang, the latter  $wu \ xing \ \Xi \ \tilde{\tau}$ .

There is enough evidence available to conclude that the term xing, at the latest in the second century B.C., replaced the term de 德, attested in early sources. Dong Zhongshu 董仲舒 and other Han-era Confucian authors, Neininger proposed, chose xing to replace de because the latter had been discredited through its use by the "recipe masters"  $(fang shi \, \bar{r} \, \pm)$  by the time of the Qin dynasty. The term xing, in particular the notion of  $wu \, xing \, \Xi \, \bar{\tau}$ , "five xing," had denoted five types of virtuous behavior, as for instance in the Liji 禮記, Xiang yin jiu yi 鄉飲酒義, where "five xing" are indentified as suitable "to correct oneself and to stabilize the country." Possibly, to separate terminologically the "five virtues" in nature from the "five virtues" in man, the latter, beginning with Dong Zhongshu, were called  $wu \, chang \, \Xi \, \bar{\pi}$ , "the five constant [virtues in man]," and the former were designated  $wu \, xing$ .<sup>23</sup>

Both *de* and *xing* appear to have conveyed the identical meaning of "virtues" or "agents" in the sense of forces that make certain things or processes happen.

Apart from the fact that this is an early appearance, possibly dating to the fourth century B.C., of the phrase *wu xing*, we encounter here the term *xing* in an administrative context. The five mythological "offices" listed are responsible for enacting specific policies not only in human society but also concerning natural phenomena.

Given the development of notions of cyclical recurrences or phases of activity of the five *xing*, a reading of "five phases" has become popular in Western literature. <sup>25</sup> In our translation we follow Harper who in his translation and discussion of the Mawangdui manuscripts adopted Marc Kalinowski's suggestion to translate *wu xing* as "five agents." <sup>26</sup> The word *agent* maintains, as Harper points out, some of the material aspects of the *xing* as they are used in accounts of natural processes. A good medical example is the account of gestation in the Mawangdui medical text *Tai chan shu* 胎產書 where the bestowal of Water, Fire, Metal, Wood, and Earth/Soil on the fetus in the fourth through eighth months of gestation enables blood, qi, muscles, bones, and skin to form. <sup>27</sup>

An exhaustive historical account of the emergence and development of the yin-yang and five-agents doctrines has yet to be written. Nevertheless, from their appearance in the *Su wen* it is obvious that, as simplistic as their terminology may be, these doctrines reflect a rather complex perception of human existence in a dynamic world.

Maybe it was an awareness of the necessity for two sexes to meet to produce offspring that, in some remote period of intellectual history, paved the way for a recognition of the importance of the coexistence and interaction of opposites for the continuation of life. In this regard, terms such as *xiong* # and ci #, as well as pin # and mu #, may have preceded the terms pin and pin pin had been introduced to categorize male and female variants of animals, and perhaps it is not too far-fetched to assume that in an agricultural society the breeding of cattle and other domesticated animals offered the initial hints at the existence of a dualism in nature.  $^{28}$ 

In a second step, the notion of pairs of opposites as prerequisites for the generation of new life may have been expanded to become an explanation of the workings of the entire universe. New terms were required to reflect the broad philosophical applicability of this paradigm, and it was found appropriate to reinterpret the designations of the northern and southern slopes of hills, yin and yang, as terms signifying a ubiquitously applicable notion of phenomena opposed to each other while also forming an inseparable union.

When the Yijing 易經 stated, "It is because hard and soft push each other that changes and transformations occur," or "when heaven and earth interact, all the myriad beings participate," the terms gang 剛 and rou 柔 and tian  $\mathcal{F}$  and di 地, respectively, reflected the same idea as yin and yang; but only the latter proved sufficiently abstract to achieve widest use and stand for the paradigm per se. Hence the Guan zi 管  $\mathcal{F}$ , a text partly dating from the third century B.C., stated: "[The sequence of the seasons of] spring, autumn, winter, and summer reflects the alternative appearance of yin and yang. The length of the seasons reflects the operations of yin and yang. The alternations of day and night reflect the transformations from yin to yang [and vice versa]." In the end, yin and yang were used not merely as labels categorizing opposites, but they were seen as abstract principles themselves, permeating all microcosms within the one grand macrocosm.

At the same time, the coexistence of these opposites was recognized as a dynamic process, as suggested by the changes from day to night and back to day, the succession of high and low tides, the sequence of the annual seasons, and many other natural phenomena. Similar to the Hellenic philosophical dictum *panta rei*, "everything flows," the notion of permanent movement was an integral aspect of the earliest perception of natural laws in China. The title of the *Book of Changes*, *Yi jing* 易經, is a well-known symbol of this understanding.

The dependence of a farming economy on the regular recurrence of spring and autumn, of seasons to sow and to harvest, must have been a powerful suggestion to believe in an ideal of regularity and overall balance in the long-term changes from domination to weakness and back to domination of ei-

ther aspect of a pair of opposites. The availability of food, and hence the guarantee of well-being, depended on the regular recurrence of spring and autumn, as well as on an overall balance of sunshine and rain, of humidity and dryness, of warmth and cold, and so on. The yin-yang doctrine, as *Su wen* 5 emphasized, extended such impressions and experiences to all realms of existence, including an understanding of human health and illness:

Yin and yang, they are the Way of heaven and earth, the fundamental principles [governing] the myriad beings, father and mother to all changes and transformations, the basis and beginning of generating and killing, the palace of spirit brilliance.<sup>33</sup>

Heaven and earth, they are the above and the below of the myriad beings. . . . Yin and yang, they are the beginning of the myriad beings. 34

Several statements in the *Su wen* emphasize the fundamental significance of yin and yang for mankind. *Su wen* 1 and *Su wen* 25 recall this fact:

The people of high antiquity, those who knew the Way, they modeled [their behavior] after yin and yang.<sup>35</sup>

In high antiquity there were the true men. They upheld [the patterns of] heaven and earth, and they grasped [the regularity of] yin and yang.  $^{36}$ 

The physical appearance of human life, it does not leave yin and yang.<sup>37</sup>

The details of the yin-yang categorization of the universe, of the immediate environment of human existence, and of morphological elements and physiological functions of the human organism are not presented in the *Su wen* in one single large and encompassing table; they are dispersed in the context of numerous treatises. At the time these texts were written, the yin-yang doctrine had passed through a history of several centuries and constituted a commonly known pool of associations and categorizations. No authors felt it necessary to outline the system in its entirety; they simply reminded their readers of those segments of the doctrine that seemed required in a given narrow context. An example are the Huang-Lao manuscripts unearthed from a Mawangdui tomb in 1973 and dating from a period covering decades preceding and subsequent to the unification of the empire in 221 B.C.:

Heaven is yang, earth is yin.

Spring is yang, fall yin.

Summer is yang, winter yin.

Daytime is yang, nighttime yin.

The larger state is yang, the smaller yin. . . .

The ruler is yang, the minister yin.

The superior is yang, the inferior yin.

The male is yang, the female yin.

The father is yang, the son yin.

The elder brother is yang, the younger brother yin. . . .

All of the yang categories emulate heaven. Heaven exalts proper order.

Overstepping proper order is dissemblance. . . .

All of the yin categories emulate the earth. The virture of the earth is being

#### One short list of general correspondences is given in Su wen 5:

placid and quiet, properly ordered and tranquil.<sup>38</sup>

Yin is tranquillity, yang is agitation.

Yang gives life, yin stimulates growth.

Yang kills, yin stores.

Yang transforms qi, yin completes physical appearance.<sup>39</sup>

The clear yang is heaven; the turbid yin is the earth.  $^{40}$ 

Water is yin; fire is yang. Yang is qi; yin is flavor.<sup>41</sup>

The East is yang. . . . <sup>42</sup>

The West is yin.<sup>43</sup>

Su wen 6 and Su wen 9 continue:

Heaven is yang, the earth is yin.

The sun is yang, the moon is yin.<sup>44</sup>

Su wen 7 presents a categorization of activities and characteristics:

That which leaves is yin; that which arrives is yang. That which is quiet is yin; that which moves is yang. That which is retarded is yin; that which is accelerated is yang. <sup>45</sup>

It would be futile, though, to attempt to prepare lists of all yin-yang categorizations; they would be endless, as *Su wen* 6 points out:

As for the yin and yang [correspondences in man], count their [associations] and [you] can [reach] ten; expand these [associations] further and [you] can [reach] one hundred. Count these [associations] and [you] can [reach] one thousand; expand them further and [you] can [reach] ten thousand. The [associations] exceeding ten thousand are countless, and still their essential [principle] is one. 46

The medicine of systematic correspondences transferred the yin-yang doctrine from its general philosophical context to the issue of health and illness. To understand the well-being and the pathologies of the organism, one of the first tasks to be achieved was to map the entire body and its normal and abnormal functions as yin or yang. A rather systematic list of the ensuing categorizations appears in *Su wen* 4:

Speaking of the yin and yang of man, then the outside is yang, the inside is yin.

Speaking of the yin and yang of the human body, then the back is yang, the abdomen is yin.

Speaking of the yin and yang among the depots and palaces of the human body, then the depots are yin and the palaces are yang.

The liver, the heart, the spleen, the lung, and the kidneys, all these five depots are yin.

The gallbladder, the stomach, the large intestine, the small intestine, the bladder, and the triple burner, all these six palaces are yang.<sup>47</sup>

Even though such information could be regarded as redundant, *Su wen* 6 applies the outer-inner categorization as yang and yin to the labeling of the vessels in the body:

Those in the outer region, they are yang [vessels]; those inside, they are yin [vessels].<sup>48</sup>

In view of the movements felt in the vessels, Su wen 20 explained:

All [movements in the] vessels at the nine indicators that are in the depth, fine, suspended, and interrupted, they are yin and they rule in winter. [All movements] that are abounding, racing, panting, and frequent, they are yang and they rule in summer.<sup>49</sup>

Finally, isolated remarks such as the following are interspersed in the text:

The region below the eyes is yin<sup>50</sup>

because it is "below" its reference location, that is, the eyes, and

The four limbs, they are yang<sup>51</sup>

because they are the outreaching extremities of the body.

The mapping of the entire body as yin or yang enabled a physician to know the nature of a disease breaking out in a yin or yang region and initiate an appropriate therapy, as we shall see later on. Here an example is quoted from Su wen 23, with a final statement on straightforward yin-yang classifications:

Yin diseases break out in the bones. Yang diseases break out in the blood. Yin diseases break out in the flesh. Yang diseases break out in winter. Yin diseases break out in summer.<sup>52</sup>

When evil [qi] enters the yang [section], craziness results. When evil [qi] enters the yin [section], a block results. When it strikes the yang, then this causes peak illness. When it strikes the yin, then this causes muteness.<sup>53</sup>

# 2.2. The Fourfold Subcategorization

The yin-yang doctrine, as indicated earlier, was by no means restricted to applying a yin or yang label to entities regarded as forming a pair of opposites. The foremost objective of an application of the doctrine of systematic correspondences was to understand and hence influence processes in general and bodily as well as mental functions in particular, be they regarded as signs of health or disease. Obviously, a simple dualism of two opposites presented a paradigm insufficient to cover gradual changes passing through intermediate stages. This concerns, first of all, the seasons of the year, where winter and summer are undoubtedly yin and yang respectively while spring and autumn have characteristics of both yin and yang, and it concerns the seasons of a single day, as Su wen 4 explained:

In yin is yin; in yang is yang. From dawn to noon, this is the yang of heaven; it is the yang in the yang. From noon to dusk, this is the yang of heaven; it is the yin in the yang. From early evening to the crowing of the cocks, this is the yin of heaven;

it is the yin in the yin.

From the crowing of the cocks to dawn, this is the yin of heaven; it is the yang in the yin.<sup>54</sup>

The yin-yang mapping of the body parts required a more differentiating categorization too. For example, the heart was categorized as a yang depot, and the lung was categorized as a yin depot. Given that the earliest Chinese medical texts describe the lung as located above the heart, the reasons for associating the former with yin and the latter with yang are not quite obvious, if one takes morphology as the decisive criterion. On the other hand, the heart was associated with fire and with the season of summer, which, naturally, is a yang in yang season. The lung was associated with metal and with autumn, that is, with a yin in yang season. Hence it appears that these associations of heart and lung were decisive for their yin-yang categorization, even though this conflicted with the relative position of the two organs in the body.

The blood, it may be added here, despite its red color and despite being closely linked to the heart, was categorized as yin—the decisive criterion being its pairing with qi. Qi is light, mostly invisible; and if let free, it rises. Hence it is considered yang. Blood is a thick liquid; and if let free, it flows downward. Hence it must be categorized as yin.

At any rate, both heart and lung are located in the upper part of the body, above the diaphragm, which constitutes the border line between the yang, upper, and the yin, lower, region. Hence the heart is a yang in yang organ; the lung is a yin in yang organ.

In the lower, that is, yin part of the body, the liver was identified as a yang depot and the kidneys as a yin depot. One might point out, as a justification of this categorization, that in ancient Chinese descriptions of human morphology, the liver is located above the kidneys. However, in comparison with the heart/lung categorization, the prime criterion for identifying the liver as yang and the kidneys as yin might have been the association of the liver with wind and spring, that is, with a yang in yin season, and of the kidneys with water and winter, that is, with a yin in yin season.

One final problem is the integration of the fifth organ, the spleen, in the fourfold yin-yang categorization. Wang Bing resorted to an association of the spleen with the foot major yin conduit and hence with the maximum yin category in the sixfold subcategorization of the yin-yang dualism (see below); he explained the *Su wen 4* identification of the spleen as an extreme yin in yin depot with the following logic: "The spleen is a yin depot. It is situated in the central burner (i.e., in the yin region below the diaphragm). Because a major yin [depot] is situated in a yin [region], it is called extreme yin in yin." The author of *Su wen 4* had no reason to contemplate such issues but merely stated:

The back being yang, the yang in the yang is the heart.

The back being yang, the yin in the yang is the lung.

The abdomen being yin, the yin in the yin are the kidneys.

The abdomen being yin, the yang in the yin is the liver. The abdomen being yin, the extreme yin in the yin is the spleen. $^{56}$ 

The classification of pharmaceutical qualities was another area that required an at least fourfold subcategorization of the yin-yang dualism. "Flavor is yin, . . . qi is yang,"<sup>57</sup> says *Su wen* 5. However, how is one to distinguish items of strong flavor and weak flavor, or those of strong qi or weak qi? *Su wen* 5 explains:

That which is of strong flavor is yin; that with weak [flavor] is yang of yin. That which is of strong qi is yang; that with weak qi is yin of yang.<sup>58</sup>

The meaning of these two sentences appears straightforward at first glance. A "strong flavor" may be a very bitter or a very salty flavor, in contrast to a "weak flavor," referring to a slightly bitter or slightly salty flavor. The same applies to "strong qi" and "weak qi." Hence contemporary texts used the terms hou 厚 and bo 薄 in the sense of strongly or weakly pronounced qualities. <sup>59</sup> However, beginning with the drug descriptions in the pharmaceutical literature of the Yuan dynasty, certain flavors (sour, bitter, and salty) and qi (warm, hot, and balanced) were identified as "strong" per se and hence as yin in yin flavors or as yang in yang qi. In contrast, acrid, sweet, and neutral were classified as "weak" per se, that is, as yang in yin flavors, while cold and cool were labeled as weak, that is, yin in yang qi. Two short statements in *Su wen* 5 following the two sentences quoted above offer clues as to which notions of "strong" and "weak" at least one of the text's contributing authors had in mind. The first statement is

When the flavor is strong, then outflow [results]; when it is weak, then penetration results.<sup>60</sup>

The second statement, following a few lines later and possibly written by a different author, notes:

Acrid [flavor] and sweet [flavor] effuse and disperse and are yang, sour [flavor] and bitter [flavor] cause gushing up and outflow and are yin.<sup>61</sup>

Reading all three statements together, one may conclude that acrid and sweet are yang in yin flavors while sour and bitter are yin in yin flavors. Substances with strong flavor cause outflow; that is, they drain. Hence substances with a sour and bitter flavor that drain and are categorized as yin in yin are those of strong flavor. That is, if the three statements quoted above were written by more than one author, at least one of them did not have a "very sour" or "very bitter" flavor in mind when he wrote of strong flavor but sour and bitter flavor per se.

A rhetorical question in *Su wen* 4 may have been formulated to introduce an outline of the significance of a fourfold subcategorization within the yin-yang doctrine for an understanding of the nature and location of diseases:

Why would one want to know about yin in yin and yang in yang?

This is because

in winter, diseases are in the yin [sections];

in summer, diseases are in the yang [sections].

In spring, diseases are in the yin [sections];

in autumn, diseases are in the yang [sections].

In all cases one must look for their location to apply needles and [pointed] stones. <sup>62</sup>

#### 2.3. The Sixfold Subcategorization

A yin-yang categorization of processes passing through more than four stages required a differentiation of the yin-yang dualism exceeding the fourfold categorization. The Mawangdui manuscripts are the earliest known literary documents to offer evidence of the elaboration of a sixfold subcategorization; as we shall see in the discussion of the vessel theories in the *Su wen*, the authors of the Mawangdui texts labeled a total of eleven vessels: two great yang vessels, two yang brilliance vessels, two minor yang vessels, two great yin vessels, two minor yin vessels, and one ceasing yin vessel.<sup>63</sup>

The stimulus that prompted the elaboration of such a sixfold subcategorization can no longer be determined. It is also unclear what the terms "yang brilliance" and "ceasing yin" were meant to convey initially. In Su wen 6, yang brilliance (yang ming 陽 明) was placed between major yang and minor yang. Similarly, ceasing yin (jue yin 厥陰) was placed between major yin and minor yin. A quantification is not immediately visible, at least at first glance.

Maybe yang brilliance and ceasing yin were designations of a middle position between the two ends of states understood as the presence of much yang or yin and very little yang or yin, respectively. However, as we shall see below, in *Su wen* 24, minor yang and ceasing yin were listed in the center, with major yang and major yin, on the one side, and yang brilliance and minor yin, on the other side, occupying the positions of the extremes.

At any rate, with the sixfold subcategorization of the yin-yang dualism, it was possible not only to integrate, in the *Su wen*, a total of twelve conduits into the yin-yang doctrine and at the same time to assign them individual qualities but also to describe assumed hierarchies and the flow of qi among the conduits and organs in the body with much greater differentiation than would have been possible through an application of the basic yin-yang dualism or its fourfold subcategorization.

*Su wen* 6 employed a meaningful metaphor to point out "the division and (at the same time) unity" of the three yang and three yin:

In the division and unity of the three yang [vessels], the major yang is the opening; the yang brilliance is the door leaf; the minor yang is the pivot.<sup>64</sup>
In the division and unity of the three yin [vessels], the major yin is the opening; the ceasing yin is the door leaf; the minor yin is the pivot.<sup>65</sup>

This image of a structure consisting of an opening, a door to close it, and a pivot standing in the opening and holding the door was quite suited to convey the notion of a unity of three items, which, even though each remained separate and fulfilled its specific function, contributed to a larger whole. If one were to seek for a quantitative notion in this image, the opening may be extreme yang. The door, meant to close the opening, may be identified as extreme yin, while the pivot, linking the opening and the door, may have been thought to represent a middle position. The origin of all dualistic thinking, that is, the notion of two sexes forming a pair required to produce offspring, was not helpful in elucidating a triple yin and triple yang paradigm.

The foremost application of the sixfold subcategorization within the yinyang doctrine lies in a labeling of the twelve conduits, although it remains unclear why six yin and six yang conduits were associated with yin and yang terms that may have reflected quantitative states originally. *Su wen* 24 has the following list:

Foot major yang [conduits] and [foot] minor yin [conduits] constitute exterior and interior.

[Foot] minor yang [conduits] and [foot] ceasing yin [conduits] constitute exterior and interior.

[Foot] yang brilliance [conduits] and [foot] major yin [conduits] constitute exterior and interior.

These are the yin and yang [conduits] of the feet.

Hand major yang [conduits] and [hand] minor yin [conduits] constitute exterior and interior.

[Hand] minor yang [conduits] and [hand] heart ruler constitute exterior and interior.

[Hand] yang brilliance [conduits] and [hand] major yin [conduits] constitute exterior and interior.

These are the yin and yang [conduits] of the hands.<sup>67</sup>

The pairing "exterior and interior" has no morphological significance here. It refers to two sets of organs, one of which (the so-called palaces: bladder, gall, stomach, small intestine, triple burner, and large intestine) is categorized as yang and "exterior," the other of which (the so-called depots: kidneys, liver, spleen, heart, heart enclosure, and lung) is categorized as yin and "interior." <sup>68</sup>

#### 2.4. An Eightfold or Tenfold Subcategorization?

It may well be that the *Su wen* contains traces of yet another yin-yang subcategorization. *Su wen* 9 states:

The heart... is the major yang in the yang. It is penetrated by the qi of summer.

The lung . . . is the major yin in the yang. It is penetrated by the qi of autumn. The kidneys are the minor yin in the yin. They are penetrated by the qi of winter.

The liver . . . is the minor yang in the yang.<sup>69</sup>

If extrapolated, the system indicated here should include either four or five subcategorizations of yin and yang. In the first case, the complete system should include the following categories:

yang, subcategory major yang yang, subcategory minor yang yang, subcategory major yin yang, subcategory minor yin yin, subcategory major yang yin, subcategory minor yang yin, subcategory major yin yin, subcategory minor yin

In the second case, the complete system would be as follows:

yang, subcategory major yang yang, subcategory yang brilliance yang, subcategory minor yang yang, subcategory major yin yang, subcategory ceasing yin yang, subcategory minor yin yin, subcategory major yang yin, subcategory yang brilliance yin, subcategory minor yang yin, subcategory major yin yin, subcategory ceasing yin yin, subcategory minor yin

This system is attested nowhere. The *Ling shu*, however, has two passages that might, with some imagination, be interpreted as rudimentary evidence of its earlier existence. *Ling shu* 41 categorizes the depots as follows:

heart, yang, subcategory major yang lung, yin, subcategory minor yin liver, yin, subcategory minor yang spleen, yin, subcategory extreme yin kidneys, yin, subcategory major yin<sup>70</sup>

In a passage preceding this list, the "yin of the hand" conduit is categorized as yang, subcategory minor yin.

A similar, albeit not entirely identical, listing appears in *Ling shu* 1. The only difference is the categorization of the lung as basically yang rather than yin.

heart, yang, subcategory major yang lung, yang, subcategory minor yin liver, yin, subcategory minor yang spleen, yin, subcategory extreme yin kidneys, yin, subcategory major yin<sup>71</sup>

The asymmetric nature of the two subcategorizations in *Ling shu* 41 and *Ling shu* 1 suggests that a notion of five depots was linked here to a yin-yang categorization whose original context was already lost by the time these texts were written.

In comparing all the yin-yang categorizations and subcategorizations, we encounter a characteristic of the basic paradigm of systematic correpondences. Any item that one of the various subparadigms characterizes as possessing a specific quality may nevertheless be categorized by another paradigm and be assigned a different quality in addition. To remain in the context of the organs, as we have seen earlier, the lung was labeled a yin in yang organ on the basis of the fourfold subcategorization within the doctrine of yinyang dualism; it is identified as major yin in the yang on the basis of the sixfold subcategorization. Later on, in the discussion of the five-agents doctrine, we shall encounter the labeling of the lung as one of the five agents.

With each such categorization, the network of perceived correspondences was woven tighter. As the example of the lung demonstrated, though,

the complexity of the system unavoidably led to contradictions. Because the lung is located above the heart it should be yang rather than yin, and the heart should be yin rather yang. Some of the divergences, as for instance between Ling shu 1 and Ling shu 41, may be attributed to writing errors, but errors do not account for all the contradictions.

At least one ancient Chinese writer emphasized such contradictions to denounce the entire paradigm of systematic correspondences as absurd. Nevertheless, the contradictions were not considered relevant by a majority of Chinese philosophers and never jeopardized the acceptance of the yinyang and five-agents doctrines in their general validity as guides to the workings of nature in general and of the human organism in particular.

## 2.5. Yin-Yang Physiology, Pathology, and Diagnosis

In the *Su wen* tradition, the health of a human organism depended on balanced exposure to the various climatic factors, such as wind, cold, and heat, and on unimpeded and proper flow of these and other so-called qi through vessels in the body. Because normal and abnormal conditions emerged either in the vessels or in the organs associated with them, both physiology and pathology, as well as diagnosis of disease, were predominantly outlined in terms of the yin-yang categorizations of the various qi, on the one hand, and of the respective functional and morphological entities, on the other. Once again, it should be emphasized that the *Su wen* does not outline a single complete system of physiology and pathology in yin-yang terms.

From his analysis of structural layers in the *Su wen*, Tessenow concludes that by the time the *Su wen* was compiled several systems existed applying yin-yang categorization to physiology, diagnosis, treatment, and so on. The editors of the *Su wen* brought these systems together. They may never have striven to create a homogeneous system; or they may have attempted but failed to integrate all competing and limited systems into one comprehensive and logically consistent system. Hence numerous internal contradictions and inconsistencies, as well as divergencies among the various treatises, mark the application of yin and yang categorization to physiology, pathology, and diagnosis in the *Su wen*.

As I explain in more detail below, qi physiology and pathology involved two major concepts. One concerns an impact on the body by yin and yang qi whose origin or nature is not further specified; the other concerns an impact by qi identified as cold, heat, and so on. An example of a concurrence of both concepts is the following statements in *Su wen* 29. The underlying notion is often one of plug and socket; yin and yang intruders enter the organism and pass the body through their specific counterparts. Hence a practitioner ought to know the yin-yang categorizations, first, of

all morphological entities; second, of all functions of these morphological entities and other processes, be they normal or abnormal; and third, of all possible factors outside of man that may intrude into the organism and act as pathogenic agent.

When one is invaded by a robber wind or depletion evil, the yang [conduits] receive it.

When food and drink are consumed without restraint, when rising and resting occur out of time, the yin [conduits] receive it.<sup>73</sup>

When the yang [conduits] receive it, then it enters the six palaces. When the yin [conduits] receive it, then it enters the five depots.

When it enters the six palaces, then the body becomes hot, and one lies down when it is not the proper time. In the upper [part of the body this] causes panting exhalation.

When it enters the five depots, then distention and blockage result.

In the lower [part of the body this] causes outflow of [undigested] food....

Hence,

the yang [conduits] receive the wind qi; the yin [conduits] receive the dampness qi.

Hence.

the yin qi rises from the feet, moves upward to the head, and moves down along the arms to the tips of the fingers. The yang qi moves up from the hands, reaches the head, and moves down to the feet. . . .

{Hence it is said:

Yang diseases move up to the extreme [top], and descend. Yin diseases move down to the extreme [bottom], and rise.}

Hence.

if one was harmed by wind, the upper [parts of the body] receive it first. If one was harmed by dampness, the lower [parts of the body] receive it first.<sup>74</sup>

Cold qi is categorized as yin in yang because the qi, in contrast to the flavor, is identified as yang while cold and cool, in contrast to hot and warm, are known to be yin. Presumably, harm caused by cold climate could be termed harm caused by a yin qi. *Su wen* 31, though, describes a detailed passageway of cold through the organism that can hardly be reconciled with the statement just quoted that "Yin diseases move down to the extreme [bottom],

and rise." Cold, *Su wen* 31 informs, is always received by the major yang conduits first, whence it is transmitted to the yang brilliance, the minor yang, the major yin, the minor yin, and the ceasing yin conduits.

Yet another sequence is claimed by *Su wen* 31 in the case of a "double affection by cold." This disease can last for three days. Each day, two further conduits receive it. First the major yang and the minor yin conduits, then the yang brilliance and the major yin conduits, and finally the minor yang and the ceasing yin conduits. No immediate rationale for these differences is apparent.

In treatment, the yin-yang categorizations of the organs affected by a disease and the conduits to be treated may overlap. For example, in the case of a heart disease, Su wen 22 and 32 recommend piercing the hand minor yin and the hand major yang conduits.<sup>75</sup> The former are directly associated with the heart; the latter are associated with the small intestine. The small intestine in turn is the correlate of the heart in the inner-outer pairing of depots and palaces. The same applies to the treatment of diseases in the remaining organs listed in Su wen 32.

The same treatise *Su wen* 32, however, advocates another therapeutic pattern whose underlying yin-yang correspondences are not at all clear, at least at first glance. It is difficult to decide whether a suggestion to pierce the hand yang brilliance and the hand major yin conduits where "a heat disease begins with pain in the hands and arms," to pierce the major yang conduit in the neck in case of a "heat disease that begins in the head," and to pierce the foot yang brilliance conduit in case "a heat disease begins in the feet and shin bones" resulted from sheer experience or from theorizing based on yinyang correspondences among the conduits to be pierced, the nature of the disease, and the location it has chosen.

Similarly, in diagnosis, when *Su wen* 20 ascertains that in "those whose pupils are high, their major yang [qi] is insufficient. . . . (and in) those whose eyes are turned upward, their major yang [qi] is interrupted,"<sup>77</sup> the correspondences between an insufficiency or interruption of major yang qi, which is also the qi of bladder and small intestine, on the one hand, and the pupils being "high" or the "eyes being directed upward," on the other, elude any attempts to perceive obvious associations. One explanation could be that the major yang conduits are the conduits passing the eyes most closely.

Certain dreams are of diagnostic value because their contents offer direct hints at pathological conditions:

When the yin [qi] abounds, then one dreams of wading through a big water, and is in fear. When the yang [qi] abounds, then one dreams of big fires burning. When both yin and yang [qi] abound, then one dreams of mutual killings and harmings.<sup>78</sup>

Yin-yang physiology, pathology, and diagnosis are discussed further in sections 4, 5, 6, and 7 below.

#### 3. THE FIVE-AGENTS DOCTRINE

#### 3.1 General Remarks

In contrast to the dualism underlying the yin-yang doctrine, the pentic numerology of the five-agents doctrine lacks an obvious antecedent in man's natural environment. The only occurrence of the number five in nature that is immediately visible is the number of the fingers and toes. Hence Yu Zihan et al. have speculated that the ancients started from the significance of fingers and toes to emphasize that the most important phenomena in the world were grouped in five.<sup>79</sup> It is difficult to imagine, though, how the mere existence of five fingers or toes might have given rise to the concept of five agents, that is, to a doctrine suggesting a complex dynamic relationship among five categories subsuming virtually all phenomena perceivable by man. The origin of the five-agents doctrine remains obscure.

It is not clear, for example, to what extent, at some initial stage of the formation of the notion of systematic correspondences, a pentic categorization of phenomena may have competed with a sixfold categorization unaffected by the sixfold yin-yang categorization. The difficulties of subsuming all phenomena under a pentic grouping are evident not only in the persistence of the concept of the six palace organs but also in occasional discussions concerning the number of depot organs. After all, the presence of such morphological entities as brain or uterus was no secret to ancient Chinese naturalists, and, as will be pointed out later, <sup>80</sup> there is evidence in the *Su wen* of discussions about how to acknowledge these organs in the system of correspondences.

While the five-agents doctrine clearly came to dominate the concept of systematic correspondences, the *Su wen* is not free of exceptions. For example, in *Su wen* 5, communications are said to exist between the qi of heaven and the lung, the qi of the earth and the throat, the qi of wind and the liver, the qi of thunder and the heart, the qi of grain and the spleen, and the qi of rain and the kidneys. Nowhere else in the *Su wen* was the throat attributed the status of depot organ.

Several of the classic Chinese texts ascribed to the final centuries of the Zhou era contain more or less elaborate references to the five-agents doctrine. The different stages of the complexity of presumed correspondences as well as the diversity of the patterns of correspondences apparent from these texts offer evidence of a formative period whose exact beginnings and length nevertheless remain unclear. The destruction of many ancient texts during the reign of the first Qin emperor, Qin shi Huang Di, and their sub-

sequent reconstruction, as well as the rewriting of texts from the various feudal states in the process of the unification of culture and society in the Qin era, preclude precise attribution of each and every statement in the texts as they exist today to the centuries before or subsequent to the Qin dynasty.<sup>82</sup>

Nevertheless, it is at least possible to point out that the appearance of the five-agents doctrine in texts such as the *Shang shu* 尚書, the *Zuo zhuan* 左傳, the *Guo yu* 國語, the *Guan zi* 管子, and the *Lü shi chun qiu* 呂氏春秋 has little in common with and may be considered a developmental stage prior to the contents of the textus receptus of the *Huang Di nei jing*. It is only with the *Huai nan zi* 淮南子 and the *Chun qiu fan lu* 春秋繁露 by Dong Zhongshu of the second century B.C. that first parallels between the five-agents correspondences in the *Huang Di nei jing* and these nonmedical texts appear. However, even as late as in Yang Xiong's 揚雄 *Tai xuan* 太玄 and in Ban Gu's 班固 *Bai hu tong yi* 白虎通義 of the first centuries B.C. and A.D., no perfect agreement is to be found with the five-agents doctrine in the *Huang Di nei jing*.

At least two conclusions may be drawn from this. First, the authors of the medical texts that found entrance into the *Huang Di nei jing su wen* appear to have elaborated the five-agents doctrine in view of their own peculiar areas of interest, thereby introducing patterns of correspondences and interactions that are absent from other texts. Second, if we date the compilation of the *Huang Di nei jing* texts to the first century B.C. and the first and second centuries A.D., the development of the five-agents doctrine must have stopped at this time for no immediate reason. The status quo reached in the *Huang Di nei jing* became the standard reference for subsequent centuries.

One exception, though, is the use of the five-agents doctrine in the context of the wu yun liu qi  $\mathbb{E}$   $\mathbb{E}$   $\mathbb{R}$  doctrine in treatises 66 through 74 of the textus receptus of the Su wen. Here patterns of correspondences and interactions among the five agents are applied that do not agree with the patterns outlined elsewhere in the Su wen. Although there is little doubt that treatises 66 through 74 were added to the text by Wang Bing in the eighth century, the fact that the contents and the rhymes of these treatises seem to follow Later Han–era thought and pronunciation makes it rather difficult to identify them as results of a later development.  $^{83}$ 

# 3.2. Early References to Pentic Categorizations

It is not at all clear whether the following statement by Guo Zihan 國子罕 in the *Zuo zhuan*, Duke Xiang twenty-seventh year, can be dated to the eighth century when Duke Xiang of the state of Qin is reported to have lived, whether it was added to the *Zuo zhuan* only by Liu Xin 劉歆 (d. A.D. 23), who rearranged a version of the *Zuo zhuan* he had found in the imperial archives and who may have "inserted fabrications of his own,"84 or whether it found

entrance into the text at some time between these two end points bridging a period of seven centuries.

Heaven brings forth the five materials ( $wu\ cai\ {\it \Xi}\ {\it H}$ ); the people make use of all of them. To relinquish even one of them is impossible. <sup>85</sup>

Du Yu 杜預 (d. A.D. 284) has interpreted *wu cai* here as including "metal, wood, water, fire, and soil." In contrast, a use of the term *wu cai* in the *Zhou li* 周禮, Dong guan, kao gong ji, 冬官, 考工記, in the statement "Check whether they are straight or bent to prepare the *wu cai* and to distinguish among the tools used by the people," was commented on by Zheng Xuan 鄭玄 (127–200): "These *wu cai*, [they include] metal, wood, leather, jade, and soil."<sup>86</sup>

We do not know to what degree Zheng Xuan's and Du Yu's interpretations were justified. Possibly neither of these two ancient usages of *wu cai* was related to the five-agents doctrine. All we may assume is that for some reason at some time in the latter half of the first millennium B.C. the number five assumed general significance in the grouping of things.

The occurrence of pentic groupings such as wu shi 五事,"five affairs," wu wei 五味,"five flavors," wu se 五色,"five colors," and wu cai 五采,"five allotments," in a total of thirty-seven locations  $^{87}$  is evidence of this trend. Nevertheless, ancient texts such as the Zhou li and the Zuo zhuan refer to numerous groupings of six, seven, or eight as well. Why a five-xing doctrine was eventually developed,rather than a six- or seven-xing doctrine,and why quite a few of the groupings of six withstood a temptation to scale them down into groupings of five can no longer be clarified. We do not even know,for instance,whether the appearance of a grouping of six sacrificial animals,liu sheng 六牲,in the zhou li 周禮 zhou zhou

None of the early references to five or six agents can be interpreted as proof of the existence of a notion of elements in the sense of the ancient Greek notion of basic elements constituting each and every item. Rather, it appears, the Chinese notion of five agents, from its very beginning, was meant

to group phenomena in their most essential categories. These essential categories may be present everywhere, and, as is stated in the *Guo yu*, Zheng yu, 國語, 鄭語, "the ancient kings mixed soil with metal, wood, water, and fire to generate the hundred items."<sup>93</sup> That is, nature supplies soil, metal, wood, water, and fire, but it is man who combines them to generate something new.

### 3.3. Early Notions of Correspondences among Phenomena

A grouping of numerous phenomena, such as flavors, organs, and sacrificial animals, in five basic representatives each is one thing, the view of a relationship among all such groupings and of a dynamic interaction among the five agents within each individual grouping is another. The postulation of such relationships and interactions, however, lies at the core of the doctrine of systematic correspondences in general and of the five-agents doctrine and the yin-yang doctrine in particular.

For the most part, the *Shang shu* 尚書 simply offers examples of groupings in five, with no hints at relationships or interactions. The one exception in the *Shang shu* is the treatise Hong fan 洪範, where we encounter the first pattern of pentic correspondence—if, indeed, the respective *Shang shu* section is older than the *Guan zi*.

The five agents, the first is water, the second is fire, the third is wood, the fourth is metal, the fifth is soil.

Water is moistening that which is below. Fire is flaming upward.

Wood is bent and straight.

Metal is compliance and resistance.

Soil, then, is sowing and reaping.

Moistening that which is below generates salty [flavor].

Flaming upward generates bitter [flavor].

Bent and straight generates sour [flavor].

Compliance and resistance generates bitter [flavor].

Sowing and reaping generates sweet [flavor].94

This passage is noteworthy for at least two reasons. First, it applies the term  $xing \ 77$  to denote the five agents water, fire, wood, metal, and soil. However, at the same time it fails to convey the meaning commonly associated with xing in secondary and tertiary publications today, that is, the notion of the passage of a dynamic process from one phase to the next. Even the

sequence of the five agents does not comply with either the sequence of mutual generation or that of mutual control or destruction, both of which are fundamental in the five-agents doctrine. Hence it is impossible to conclude from this statement in the Hong fan why the term xing was preferred against the term fu, also encountered in the grouping of six fu in the Shang shu. It may well be, of course, that this statement from Hong fan is a later fabrication that was inserted at a time when the term xing had already been introduced to convey exactly the notion that is absent in the Hong fan statement.

Second, although the Hong fan statement fails to convey any notion of an interaction among the five agents, or among the categories of phenomena they stand for, it indicates a correspondence between these agents and a second grouping of five flavors. One may assume that such a widening of a mere enumeration of five items to a fivefold categorization of diverse phenomena assumed to depend on each other preceded the notion of an interaction among these categories.

The *Guan zi*, section 8, You guan 幼官,  $^{96}$  and a possibly younger section 40, Si shi 四時,  $^{97}$  are among the earliest texts establishing links between several groupings of five (with only the section Si shi including the grouping wood, fire, soil, metal, and water), thereby reflecting the broadest categorization of phenomena in a system of correspondences to date. Section 41 of the *Guan zi*, Wu xing 五行 (Five Agents), possibly written in the third century or later, may also contain a first trace of a specific sequence in a continuous cyclical occurrence of a limited group of phenomena:

In antiquity, Huang Di generated the five tones on the basis of their slow and fast [soundings], thereby ordering the five bells. . . . Once he had regulated the five tones, he established the five agents to order the heavenly seasons, and [he set up] the five official ranks to order the positions of man. <sup>98</sup>

The annual seasons offer what may be the most suitable sequence of five phenomena, one evolving from the other, with the end of the sequence inevitably being the beginning of another, endless repetition of this same sequence. The passage just quoted from section 41 of the *Guan zi* continues with a uniquely systematic application of the five-agents categorization of phenomena to the sequence of seasons; it divides the year into five periods of seventy-two days each, thereby establishing a model that is referred to in passing in *Su wen* 50 and 79.

Traditionally, though, only four seasons were distinguished. Two solutions to fit them into the evolving five-agents doctrine were introduced. One was to postulate the existence of a fifth season; this resulted in the conceptualization of a season called late summer. The other was to avoid an association of the central agent, soil, with any single season and associate it with all four seasons instead. This second solution was adopted by other sections of the

Guan zi and by Dong Zhongshu 董仲舒 (179-104), author of the Chun qiu fan lu 春秋繁露.

A sequence of seasons is experienced as a presence and subsequent weakening of one season followed by a quick or slow strengthening of the next, and so on, suggesting an image of an eternal succession of rise, domination, and fall of a limited number of actors.

If we trust the record in the *Shi ji*, Feng chan shu, 史記, 封禪書, at some time in the middle of the third century B.C., that is, in the period immediately preceding the transition from the Zhou to the Qin dynasty, a certain Zou Yan 鄒衍 had established a theory of a "periodicity of the five virtues,"  $wu\ de\ zhi\ yun\ \Xi$  德之  $\mathbb{Z}^{.99}$  This was said to be a doctrine associating the rise and fall of the early rulers Yellow Emperor, Yu, Tang, King Wen, and so on, with the sequence of the five agents. As Mark Edward Lewis noted, the origin of the five-agents theory may not have been linked to any desire to give expression to a perceived harmony in nature (as modern Western interpretations of it tend to claim); rather, it served to legitimize violence applied in the transition from one dynasty to the next by pointing out that "conquest" was the most natural of all processes observed in man's environment.  $^{100}$ 

No firsthand records of the alleged contribution by Zou Yan have been preserved, however.  $^{101}$  A first detailed account has been transmitted through the  $L\ddot{u}$  shi chun qiu 呂氏春秋, a text compiled in 239 B.C.  $^{102}$  Also, it should be noted that the early sources do not attribute the term wu xing 五行 to Zou Yan, which may be seen as further evidence against the notion, widely accepted in Western secondary literature in the final decades of the twentieth century, that his doctrine of a transition from one ruler to the next warranted a rendering of wu xing as "five [transitory] phases."

The fact is, Chinese literature before the Western Han provides little evidence of the presence of a fully developed five-agents doctrine or even of usage of the term wu xing, "five agents," as a general term symbolizing specific dynamics in a system of pentic correspondence per se. Two early sources use the term wu xing in an identical phrase in a sense suggesting the presence of a sequence of mutual domination. The Sun zi bing fa 孫子兵法, generally attributed to the fifth century B.C., and the Mo zi 墨子, whose author lived in the fifth century B.C., too, have the statement: 五行無常胠, "the five agents do not always dominate." <sup>103</sup> In the Sun zi bing fa, this passage is the first in a series referring to cyclical natural phenomena, such as the four seasons and the appearance and disappearance of the sun and the moon. Hence, the wu xing too may have been thought to constitute a sequence of cyclically recurring and alternatingly dominating phenomena. A "statement" (shuo 說) in the Mozi corpus suggests a somewhat different meaning. It points out that if fire melts metal it is because much fire is present.<sup>104</sup> That is, the mutual domination of the five agents depends on quantitative relationships. The appearance of an identical statement in two very different sources and the critical undertone in the Mozi statement indicate that the notion of a sequence of mutual domination of the five agents may have been common knowledge by the time the Sunzi bing fa and the Mozi were written. The only question that remains is whether the respective text portions were indeed written as early as the fifth century or at a later time.

What can be discerned in other texts are increasingly complex patterns of pentic correspondences in the  $L\ddot{u}$  shi chun qiu and the Guan zi of the third century B.C., in the Huai nan zi and the Chun qiu fan lu of the second century B.C., and in the Tai xuan and the Bai hu tong yi of the first centuries B.C./A.D. A comparison of these patterns gives evidence of the heterogeneity of the results of late Zhou to early Han dynasty attempts to unravel a tissue in which all visible and invisible phenomena appeared linked by the threads of yin-yang and five-agents correspondences.

### 3.4. Early Patterns of Correspondences

It may be impossible to determine exactly which of the patterns of correspondences in late Zhou to early Han texts came first. Even if we agree on a historical sequence among the texts themselves, we cannot be sure whether all the contents of a specific text date from the same early author or whether they are interspersed with additions or changes introduced by later editors. With this caveat in mind, tables 1 through 7, below, lend themselves to comparison. <sup>105</sup>

Five groupings—the five colors, the five cardinal directions, the five organs, the five flavors, and the five seasons—appear in five texts preceding the *Su wen* as well as in the *Su wen*. Three groupings—the five numbers, the five odors, and the five orifices—appear in four texts preceding the *Su wen* as well as in the *Su wen*. That is to say, those groupings that appear in four, five, or all six texts preceding the *Su wen* as well as in the *Su wen* itself are of phenomena that can be directly related to a naturalistic perception of human existence and of human dependence on the natural environment. The body parts, the emotions, the qi, the sounds of one's voice, the qi in nature, that is, wind, heat, and so on, as well as the grains, pentic groupings of which appear in the *Su wen* and in one or two previous texts, continued this naturalistic inclination of the pentic correspondences.

Ancient authors selected only a very limited number from the vast array of natural, social, metaphysical, and many other categories of phenomena perceived by humankind to express their notions of systematic correspondences. Only ten pentic groups were mentioned in at least five of the seven texts presenting notions of systematic correspondences. Another twenty or so were mentioned only in one, two, three, or four of the texts. It is difficult to imagine that these notions had another origin than to grasp naturalistic correspondences among man and his environment.

TABLE 1. Pentic Correspondences Listed in the Twelve Sections of the So-called Twelve Monthly Arrangements (Shi er yue ji + 二月紀) and in the Two Sections Ying tong 應同 and Dang bing 蕩病 of the  $L\ddot{u}$  shi chun qiu

VIRTUES: wood, fire, [soil], metal, water

TONES: jue, zhi, gong, shang, yü

COLORS: virid, red, yellow, white, black ORGANS: spleen, lung, heart, liver, kidneys FLAVORS: sour, bitter, sweet, acrid, salty

SEASONS: spring, summer, ----, autumn, winter

NUMBERS: eight, seven, five, nine, six

ODORS: rancid, burned, aromatic, frowzy, rotten DAYS: jia yi, bing ding, wu ji, geng xin, ren gui

емрековs: Tai Hao (= Fu Xi), Yan Di, Huang Di, Shao Hao (= Jin Tian  $\, {\pm} \, {\mathcal F} \, ),$ 

Zhuan Xu

SPIRITS: gou mang (spirit of trees), zhu rong (spirit of fire), hou tu (spirit of soil),

ru shou (spirit of the West), xuan ming (spirit of water)
GRAINS: wheat, beans, panicled millet, hemp, glutinous millet

CREATURES: shelled, feathered, naked, hairy, armored

SACRIFICIAL ANIMALS: sheep, cock, ox, dog, pig

GODS: of household, of oven, of soil, of door, of roads

Of the ten most often quoted pentic groupings, two concern morphological entities of man (i.e., the organs and the orifices), four concern characteristics of living or dead substances (i.e., colors, flavors, tones, and odors), and three refer to man's geographic and temporal environment (i.e., cardinal directions and seasons). The tenth group, numbers, offers a hint at the importance of numerology in ancient naturalism.

At least in view of the types of pentic groupings prevalent in the ancient sources listed above, the impact of Zou Yan's sociopolitical application of the five-agents doctrine at first remained quite limited. However, the attempts by Dong Zhongshu, the foremost Confucian philosopher of the Han dynasty, to link social and natural phenomena and processes in one comprehensive explanatory and normative system may have had a more profound influence on the perception of the five-agents doctrine than is visible today from the predominantly naturalistic lists of associations in late-twentieth-century secondary literature.

# 3.5. The Status Quo of the Five-Agents Doctrine in the Su wen

The *Su wen* drew on the five-agents doctrine in at least twenty-six of its seventy-two pre–Wang Bing treatises. The role of the five-agents doctrine in the "seven comprehensive discourses" added by Wang Bing in the eighth century is even more significant and is discussed in the Appendix.

### TABLE 2. Pentic Correspondences Listed in the Guan zi

VIRTUES: wood, fire, soil, metal, water

TONES: jue, yü, gong, shang, zhi

COLORS: virid, red, yellow, white, black

CARDINAL DIRECTIONS: East, South, Center, West, North

ORGANS: spleen, liver, heart, kidneys, lung FLAVORS: sour, bitter, sweet, acrid, salty

SEASONS: spring, summer, four seasons, autumn, winter

NUMBERS: eight, seven, five, nine, six

ORIFICES: nose, eyes, lower orifices, ears, mouth DAYS: *jia yi*, *bing ding*,——, *geng xin*, *ren gui* 

BODY PARTS: bones, qi, skin-muscles, nails, blood WEAPONS: spear, halbard, arrow, sword, shield

QI: wind, yang, ----, yin, cold

A comparison of the approximately fifty pentic groupings referred to in these twenty-six treatises with the pentic groupings in the textual sources that preceded the *Su wen* suggests that the authors of the *Su wen* did not simply continue an established tradition. Rather, it seems, they quoted some older groupings, rearranged others, and introduced numerous new ones that had not appeared before. For example, no text prior to the *Su wen* is known to have pentic groupings of sounds (i.e., wailing, shouting, etc.), of depletions and repletions, of dominations and measurements, of evils, ruling qi, and prohibitions. In particular, the pentic groupings of organs, orifices, and body parts and their systematic correspondences with the virtues/agents, colors, cardinal directions, and so on, are unique to the *Su wen*.

While the *Lü shi chun qiu*, the *Guan zi*, the Shi ze xun of the *Huai nan zi*, and the *Tai xuan* associated the spleen with wood, virid, the East, and spring, the Di xing xun of the *Huai nan zi*, the *Bai hu tong yi*, and the *Su wen* chose to place the liver here instead. Similarly, only the Di xing xun of the *Huai nan zi*, the *Bai hu tong yi*, and the *Su wen* associated the heart with fire, red, the South, and summer, while the *Lü shi chun qiu*, the Shi ze xun of the *Huai nan zi*, and the *Tai xuan* associated the lung with fire, and so on, and the *Guan zi* preferred to put the liver in this position. Apart from the *Bai hu tong yi*, the *Su wen* is the only text, though, that tied the spleen to soil, yellow, the Center, sweet, and late summer, and it is the only source linking the eyes to the liver, the tongue to the heart, the mouth to the spleen, the nose to the lung, and the ears to the kidneys.

For the most part, it is impossible to trace the motives behind a change in the system of correspondences. From today's perspective it sounds quite reasonable to link the condition of the skin to the condition of the lung; but we do not know why the authors of the *Su wen* preferred this association over that of skin and heart, as was outlined in the *Guan zi*. Similarly, there is no

### TABLE 3. Pentic Correspondences Listed in the Huai nan zi

A: section Tian wen xun 天文訓

VIRTUES: wood, fire, soil, metal, water

TONES: jue, zhi, gong, shang, yü

CARDINAL DIRECTIONS: East, South, Center, West, North

SEASONS: spring, summer, ——, autumn, winter

DAYS: jia yi, bing ding, wu ji, geng xin, ren gui

EMPERORS: Tai Hao, Yan Di, Huang Di, Shao Hao, Zhuan Xu

AIDES: gou mang, zhu ming, hou to, ru shou, xuan ming

SPIRITS: Jupiter, Mars, Saturn, Venus, Mercury

ANIMALS: virid dragon, vermilion bird, yellow dragon, white tiger, xuan wu

### B: section Di xing xun 墜 形訓

COLORS: virid, red, white, black, yellow

CARDINAL DIRECTIONS: East, South, West, North, Center

ORGANS: liver, heart, lung, kidneys, stomach
ORIFICES: eyes, ears, nose, yin opening, mouth
GRAINS: wheat, rice, glutinous millet, beans, corn (?)
BODY PARTS: sinews, blood yessels, skin/hide, bones, flesh

#### C: section Shi ze xun 時則訓

VIRTUES: wood, fire, soil, metal, water

TONES: jue, zhi, gong, shang, yü

COLORS: virid, red, yellow, white, black

CARDINAL DIRECTIONS: East, South, Center, West, North

ORGANS: spleen, lung, heart, liver, kidneys FLAVORS: sour, bitter, sweet, acrid, salty

SEASONS: spring, summer, late summer, autumn, winter

NUMBERS: eight, seven, five, nine, six

ODORS: rancid, burned, aromatic, frowzy, foul DAYS: jia yi, bing ding, wu ji, geng xin, ren gui

GRAINS: wheat, beans, panicled millet, hemp, glutinous millet

CREATURES: shelled, feathered, beelike, hairy, armored

SACRIFICAL ANIMALS: sheep, cock, ox, dog, pig

WEAPONS: spear, halbard, sword, lance, duan (?)

way of knowing why the *Guan zi* chose to point out correspondences between spleen and nose, as well as liver and mouth, while the *Su wen* associated the spleen with the mouth, the nose with the lung, and the eyes with the liver.

However, as Chinese historians have pointed out, there are some exceptions.  $^{106}$  The association of the organs in the Shi ze xun of the *Huai nan zi* with the cardinal directions appears to have resulted from the positioning of sacrificial animals at the moment the relevant viscera were removed from them. The head of the animals pointed toward the south. The lung, located

#### TABLE 4. Pentic Correspondences Listed in the Chun qiu fan lu

VIRTUES: wood, fire, soil, metal, water

TONES: jue, zhi, gong, shang, yü

CARDINAL DIRECTIONS: East, South, Center, West, North SEASONS: spring, summer, late summer, autumn, winter

TRANSFORMATIONS: birth, growth, transformation, gathering, storage

POSITIONS: left, front, center, right, behind

nearest to the head, was removed first and was associated with the south. The kidneys were removed last; their location in the animal pointed toward the north. The heart was positioned in the center, and the spleen was removed from the left and the liver from the right. $^{107}$ 

The Di xing xun of the *Huai nan zi* of the second century B.C. as well as the biography of Chunyu Yi in the *Shi ji* of 90 B.C. identified the stomach as a "depot" organ equivalent to lung, heart, liver, and kidneys, and both associated it with the center and with the color red. This is different from the *Su wen*, which associated the center with the spleen and which identified the stomach no longer as a "depot" but as a "palace" organ, on a par with large and small intestines, gallbladder, and urinary bladder. As Yu Zihan et al. assume, it may well have been the significance of the spleen in animal sacrifices that helped it to replace the stomach as the organ in the center. <sup>108</sup>

The heart, which the *Xun zi*, Xian bi 荀子,鮮蔵 calls "the Lord of the physical body, and the ruler of spirit brilliance," was associated with the "virtue" soil and with the color yellow in the *Lü shi chun qiu*, the *Guan zi*, the Shi ze xun of the *Huai nan zi*, and the *Tai xuan*. In contrast, the Di xing xun of the *Huai nan zi*, the *Bai hu tong yi*, and the *Su wen* identified the heart with fire and with the color red. It may well be that these contradictory placements in the system of correspondences are closely tied to opposing interpretations of the legitimation of the succession of the former Han dynasty to the Qin dynasty, of the "New" dynasty of the usurper Wang Mang (45 B.C.—A.D. 23) to the Earlier Han dynasty, and of the Later Han dynasty to the interregnum of Wang Mang.

In 104 B.C. Emperor Wu (141–87 B.C.) of the former Han had officially adopted soil as the "virtue" of his dynasty; soil was the conqueror of water, the "virtue" associated with the preceding Qin dynasty. However, there was also a notion that Han was to be associated with fire, and for this reason Wang Mang adopted soil, the natural successor to fire, as the virtue of his "New" dynasty. In A.D. 26 the first emperor of the reestablished Han dynasty, the Eastern Han, Guang Wu di 光武帝 (5 B.C.-A.D. 57), chose fire to emphasize his legitimate continuation of the mandate of the former Han. 109

Hence the system of five-agents correspondences established by the Su

### TABLE 5. Pentic Correspondences Listed in the Tai xuan

VIRTUES: wood, metal, fire, water, soil

TONES: jue, shang, zhi, yü, gong

COLORS: virid, white, red, black, yellow

CARDINAL DIRECTIONS: East, West, South, North, Center

ORGANS: spleen, liver, lung, kidneys, heart FLAVORS: sour, acrid, bitter, salty, sweet

SEASONS: spring, autumn, summer, winter, four wefts

NUMBERS: eight, nine, seven, five, six

ODORS: rancid, frowzy, burned, rotten, aromatic

ORIFICES: nose, mouth, eyes, frontal yin opening, posterior yin opening

DAYS: jia yi, geng xin, bing ding, ren gui, wu ji (stems)

EMPERORS: Tai Hao, Shao Hao, Yan Di, Zhuan Xu, Huang Di

SPIRITS: gou mang (spirit of trees), ru shou (spirit of the West), zhu rong (spirit of

fire), xuan ming (spirit of water), hou tu (spirit of soil)

STATES: will, *bo*-soul, *hun*-soul, essence, spirit EMOTIONS: humaneness, anger, joy, grief, fear

wen authors reflects the status quo reached unofficially during the Earlier Han dynasty and confirmed officially during the Eastern Han dynasty. That only two alternatives appear to have competed, that is, a soil association and a fire association of the "ruling" heart, and the conspicuous absence of the five-agents doctrine from the Mawangdui manuscripts of 168 B.C. may be seen as further evidence supporting an assumption that the transfer of the doctrine of the five virtues/agents to an explanation of natural processes in general and of physiological and pathological developments in man in particular did not occur before the Western Han dynasty. Keeping these sociopolitical origins of the system of correspondences in mind, it is of course difficult to credit them with eternal value as natural laws.

In fact, the impact of these doctrines on a dynamically evolving natural science appears to have ended during the first centuries A.D. In chapter 14 of his  $Lun\ heng$  iff, Wang Chong  $\Xi$   $\tilde{\chi}$  (A.D. 27–ca. 100) ridiculed attempts to classify natural phenomena in accordance with the supposed mutual generation or domination of the five agents, and it took exactly one thousand years before, once again for sociopolitical reasons, the doctrine of systematic correspondences was resurrected as a foundation of physiology and diagnosis as well as pathology and treatment.  $^{110}$ 

# 3.6. The Significance of the Five-Agents Doctrine in the Su wen

In the *Su wen* the five-agents doctrine appears on two conceptual levels. On one level it merely serves to group phenomena. An example is a passage in *Su wen* 22:

#### TABLE 6. Pentic Correspondences Listed in the Bai hu tong yi

VIRTUES: wood, fire, metal, soil, water

TONES: jue, zhi, shang, yü, gong

COLORS: virid, red, white, vellow, black

CARDINAL DIRECTIONS: East, South, West, Center, North

ORGANS: liver, heart, lung, spleen, kidneys FLAVORS: sour, bitter, acrid, sweet, salty

ODORS: rancid, burned, frowzy, aromatic, rotten ORIFICES: eyes, ears, nose, mouth, the two orifices

EMPERORS: Tai Hao, Yan Di, Shao Hao, Zhuan Xu, Huang Di

SPIRITS: gou mang (spirit of trees), zhu rong (spirit of fire), ru shou (spirit of the

West), xuan ming (spirit of water), hou tu (spirit of soil)

STATES OF CHARACTER: humaneness, rite, righteousness, trustworthiness, wisdom

The five grains provide nourishment.

The five fruits provide support.

The five domestic animals provide enrichment.

The five vegetables provide filling.<sup>111</sup>

### Another example is the following paragraph quoted from Su wen 19.

An abounding [movement in the] vessels,

a hot skin,

a distension of the abdomen.

blockage in front and behind;

Mental and physical pressure,

these are called the five repletions.

A fine [movement in the] vessels, a cold skin, being short of qi, unimpeded outflow in front and behind,

beverages or food do not enter [the stomach], these are called the five depletions. 112

# A more elaborate example appears in Su wen 9:

The herbs generate the five colors; the changes undergone by the five colors are more than one can see.

The herbs generate the five flavors; the delicacies of the five flavors exceed one's perception.

The cravings and desires differ; each has something it communicates with.

Heaven feeds man with the five qi; the earth feeds man with the five flavors.

### TABLE 7. Selected Pentic Correspondences in the Su wen

AGENTS/VIRTUES: wood, fire, soil, metal, water

TONES: jue, zhi, gong, shang, yü

COLORS: virid, red, yellow, white, black

CARDINAL DIRECTIONS: East, South, Center, West, North

ORGANS: liver, heart, spleen, lung, kidneys FLAVORS: sour, bitter, sweet, acrid, salty

SEASONS: spring, summer, late summer, autumn, winter

NUMBERS: eight, seven, five, nine, six

ODORS: fetid, burned, aromatic, frowzy, foul ORIFICES: eyes, tongue, mouth, nose, ears DOMESTIC ANIMALS: cock, sheep, ox, horse, pig

GRAINS: wheat/barley, panicled millet, setaria millet, rice, bean

BODY PARTS: sinews, vessels, flesh, skin/hair, bones

STARS: Jupiter, Mars, Saturn, Venus, Mercury

QI: wind, heat, dampness, dryness, cold EMOTIONS: anger, joy, pensiveness, grief, fear

SOUNDS: shouting, laughing, singing, wailing, groaning

The five qi enter through the nose and are stored in the heart and in the lung. They cause the five complexions to be clear above, and the tones of the voice can manifest themselves.

The five flavors enter through the mouth, and are stored in the intestines and in the stomach. When the stomach has something stored,

it nourishes the five qi with that.

When the qi are generated in harmony, and when the body liquids are completed one after another,

then the spirit will of course be alive. 113

On a second conceptual level the five-agents doctrine serves to depict the human organism as a system of interrelated morphological units as well as physiological functions; to link these units and their functions to man's environment; and to explain interactions among the environment and the body as well as among the various units within the organism themselves.

Because the five-agents doctrine explains the effect of certain environmental agents, such as flavors as well as climatic factors, on physiological and pathological processes, it is also employed to provide a rationale for a therapeutic usage of these agents. On the basis of the interactions among the various units of the organism, the five-agents doctrine is used further to trace the transmission of diseases through the organism and to diagnose their current whereabouts.

Several of the Su wen treatises contain long lists of correspondences among

phenomena of the body and the surrounding world; these treatises read like basic introductions compiled to inform a hitherto ignorant readership of the essentials of a new worldview. For example, *Su wen* 4, starting from a listing of the five cardinal directions, outlines the following:

The eastern region; green-blue color.
Having entered, it communicates with the liver; its orifice opens in the eyes.
It stores essence in the liver.
<The disease it brings forth is shock.>
Its flavor: sour; its class: herbs and trees; its animal: chicken; its grain: wheat.
Its correspondence with the four seasons, above it is Jupiter. {Hence the qi of spring is in the head.}
Its tone: *jue*; its number: eight.
{Hence one knows that [its] diseases are located in the sinews.}
Its odor: fetid <sup>114</sup>

And so forth for South, Center, West, and North.

Su wen 5 offers the following list of correspondences, including medically relevant data on both the causation of disease and the therapeutic usage of specific interactions that may occur among the five agents.

The East generates wind; wind generates wood. Wood generates sour [flavor]. Sour [flavor] generates the liver. The liver generates the sinews. The sinews generate the heart. <The liver rules the eyes.>... The spirit, in heaven it is wind. on the earth it is wood. in the body it is sinews. Among the depots it is the liver; among the colors it is greenish; among the tones it is jue; among the voices it is shouting; among the changes and movements [of the body] it is grasping; among the orifices it is the eye; among the flavors it is sour; among the states of mind it is anger. [If] anger [causes harm, it] harms the liver; sadness dominates anger. [If] wind [causes harm, it] harms the sinews; dryness dominates wind.

[If] sour [flavor causes harm, it] harms the sinews; acrid [flavor] dominates sour [flavor]. $^{115}$ 

And so forth for South, Center, West, and North.

The last three lines of the above quotation from Su wen 5 are of particular interest here. They offer obvious hints at the notion of a potential of the five agents to mutually conquer or dominate each other. Sadness, dryness, and acrid flavor are associated with the agent metal. Anger, wind, and sour flavor are associated with the agent wood. Metal is able to cut or fell wood. Hence sadness is presumed to be able to dominate anger; 116 dryness is presumed to be able to dominate wind, and acrid flavor is presumed to dominate sour flavor. In a medical context this is to say that a person in a pathological state of anger can be healed if it is possible to generate in him the emotion sadness. In a situation in which wind has harmed the sinews it is advisable to let a patient experience dryness to cure him from the harm done to his sinews by wind. Finally, when consumption of too much sour flavor has harmed the sinews, this can be reversed by consumption of acrid flavor.

However, as is outlined in *Su wen* 10, "if one consumes large quantities of acrid [food], then the sinews become tense and the nails wither." That is to say, because acrid flavor is associated with the agent metal it is able to harm those parts of the body that are associated with the agent wood. The same paragraph states "if one consumes large quantities of sour [food], then the flesh hardens and shows wrinkles, and the lips peel." Flesh and lips are associated with the agent soil; sour flavor is associated with the agent wood. Because wood is able to penetrate, that is, conquer, soil, sour flavor, if consumed in large quantities, may harm the flesh.

A problem is encountered here because the statement in *Su wen* 4 to the effect that sour food can harm the sinews, even though both sour flavor and the sinews are associated with the same agent, wood, is difficult to reconcile with the statement in *Su wen* 10 informing us that the sinews are harmed by large quantities of acrid food. Why, one may ask, does consumption of sour food not add strength to the sinews given that both constitute one agent? Why does *Su wen* 23 emphasize: "The sour [flavor] proceeds to the sinews; in case of diseases in the sinews one must not consume sour [flavor] in large quantities." After all, as *Su wen* 5 states: "Sour [flavor] generates the liver," and as *Su wen* 10 states, "the liver longs for sour [flavor]" and "the correlate of the liver is the sinews." Similarly, *Su wen* 23 points out: "Sour [flavor] enters the liver," and it adds: "The liver rules the sinews." As a last example, *Su wen* 44 states: "The liver rules the body's muscles and flesh." That is, while the system of correspondences points out associations among phenomena, its purely metaphorical reasoning allows for a significant de-

gree of ambiguity when it comes to an explanation of interactions occurring among these phenomena.

The reasoning underlying the notion of mutual domination among the five agents is outlined in Su wen 25:

When wood meets metal, it is felled.

When fire meets water, it is extinguished.

When soil meets wood, it is penetrated.

When metal meets fire, it is destroyed.

When water meets soil, it is interrupted [in its flow].

These [five processes] apply to the [interactions among] all the myriad beings; their [validity] is never exhausted. $^{126}$ 

The *Su wen* does not provide a similarly clear-cut statement on the reasoning underlying the notion of mutual generation among the five agents. However, from several treatises it is obvious that metal was presumed to generate water, water was presumed to generate wood, wood was presumed to generate fire, fire was presumed to generate soil, and soil in turn was presumed to generate metal.

In *Su wen* 19, both notions of mutual domination and mutual generation are explicitly combined in a discourse pertaining to the presumed course a qi takes that is transmitted in the organism from one of the organs to the next:

The liver receives qi from the heart. It transmits it to the spleen. The qi rests in the kidneys. Death occurs when it reaches the lung. 127

That is, the liver represents the agent wood. It is said here to receive qi from the heart. The heart is associated with the agent fire, fire being the son of wood. The liver transmits its qi to the spleen, which is associated with the agent soil. Soil is the agent that is conquered by wood. The qi of the liver can take rest in the kidneys. The kidneys are associated with the agent water, that is, with the mother of wood. In contrast, when the liver qi reaches the lung—the agent metal that is able to fell wood—death results. All remaining four passages of qi can be explained this way.

Prognosis was important in ancient medicine; it served both to protect a practitioner from treating incurables and being accused of being responsible for their eventual death and to establish expertise at a time when no government-controlled exams blocked the way of the incompetent and permitted the expert to proceed. Hence the *Su wen* contains numerous passages enabling a practitioner to calculate the future course of a disease and the fate of his patients.

A prognostic discourse in *Su wen* 22 offers another example of a simultaneous application of the notions of mutual domination and mutual generation. Of the five possibilities of diseases in the depot organs, the kidney disease may serve as example.

When a disease is in the kidneys,

it will heal in spring.

If it does not heal in spring,

it will become serious in late summer.

If [the patient] does not die in late summer,

[the qi] will be maintained through autumn.

[The patient] will rise in winter.

He must strictly abstain from anything burning, from hot food, and from warm clothes.  $^{128}\,$ 

The kidneys represent the agent water. Spring is wood, that is, the son of water. Late summer is soil, that is, the natural conqueror of water. Autumn is metal, that is, the mother of water. Winter is water. Things that burn, hot food, and warm clothes serve to generate dryness. This is, of course, antagonistic to the agent water.

The passage in Su wen 22 continues:

Kidney diseases heal at jia and yi days.

If they are not healed at jia and yi days,

[the disease] will become serious at wu and ji days.

If [the patient] does not die at wu and ji days,

[the qi] will be maintained through geng and xin days.

[The patient] will rise at ren and gui days. 129

*Jia* and *yi* days correspond to wood. *Wu* and *ji* days correspond to soil. *Geng* and *xin* days correspond to metal. *Ren* and *gui* days correspond to water.

In case of kidney diseases

[the patient] feels better at midnight.

[These diseases] are severe during the final thirds of all four [quarters of a day].

In the late afternoon they calm down. 130

Midnight is associated with the agent water. The final thirds of all four quarters are ruled by soil, the conqueror of water. Late afternoon is associated with metal, that is, with the mother of the agent water. The underlying principle was explicated at the end of the discourse:

When evil qi has settled in the body, [the resulting disease] will be aggravated when [it meets] with [a time associated with an agent that] dominates [the agent associated with the respective depot].

When it reaches [a time associated with an agent] which [the agent associated with the respective depot] generates, it will be healed.

When it reaches [a time associated with an agent] which [the agent associated with the respective depot] does not dominate, it will become more serious. When it reaches [a time associated with an agent] by which [the agent associated with the respective depot] is generated, it will be maintained. When it has found its own place [the patient] will rise.

One must first determine the [movement in the] vessels of the five depots. Then one is in a position to speak about the times when [a disease] is minor and serious,

and about the times of [a patient's] death or survival. 131

Occasionally the usual order of mutual domination is not upheld, and it may well be that the text of such passages is corrupt. For example, in *Su wen* 19, it is stated:

```
If a massive depletion results from joy, then the qi of the kidneys takes advantage [of this depletion]; from anger, then the qi of the liver takes advantage [of this depletion]; from sadness, then the qi of the lung takes advantage [of this depletion]; from fear, then the qi of the spleen takes advantage [of this depletion]; from anxiety, then the qi of the heart takes advantage [of this depletion]. 132
```

Joy is the emotion associated with the heart. Hence, extreme joy causes a depletion of qi in the heart. The heart is associated with the agent fire. Hence the agent water, the natural enemy of fire, immediately takes advantage of the void in the heart. As the agent water is associated with the kidneys, it is the qi of the kidneys that moves into the heart.

Anxiety is the emotion associated with the lung. Hence extreme anxiety causes a depletion of qi in the lung. The lung is associated with the agent metal. Hence the agent fire, the natural enemy of metal, immediately takes advantage of the void in the lung. As the agent fire is associated with the heart, it is the qi of the heart that moves into the lung.

While the metaphorical reasoning underlying these two processes, as well as the fourth line (water and soil), is in perfect agreement with the rules of mutual domination among the five agents, the second and third lines in the paragraph quoted from Su wen 19 above are not.

Both anger and the liver are associated with the agent wood. Sadness in several instances stands for pensiveness and is associated with the agent soil. Soil, however, is not dominated by metal; it is the mother of metal. One may assume either that the notion of mutual domination in the five-agents doctrine was applied incoherently here or that the two lines are simply corrupt

and should be read as follows to agree with the logic of the remaining three lines:

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[If a massive depletion results] from anger (= wood), then the qi of the lung (= metal) takes advantage [of this depletion]; from pensiveness (= soil), then the qi of the liver (= wood) takes advantage [of this depletion].
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The *Su wen* authors placed considerable emphasis on the concept of transmission of diseases through the body. The paths a disease takes are governed by the rules formulated in the five-agents doctrine, as in the following example quoted from *Su wen* 65.

```
In the case of a heart disease, first [the patient experiences] heartache. [After] one day he coughs.
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[Within the next] three days the flanks [experience] propping [fullness and] pain.

[Within the next] five days there is obstruction {no passage}; the body aches and the limbs are heavy.

If [the disease] has not ended [within the next] three days [the patient will] die,

in winter at midnight, in summer at noon.<sup>133</sup>

A heart disease may be transmitted to the lung, that is, from the organ associated with the agent fire to the organ associated with the agent dominated by fire, that is, metal. Coughing is a sign indicating that the disease has arrived in the lung. From the lung the disease may be transmitted to the liver, that is, to the organ associated with the agent wood. Metal cuts wood. Propping fullness in the flanks is a sign indicating that the liver is affected. Wood moves or penetrates soil. Hence the disease is transmitted further from the liver to the spleen, that is, the organ associated with the agent soil. Closure, bodily pain, and heavy limbs are attributed to an affection of the spleen; hence they are signs indicating that the spleen is affected. With the passage from the heart to the lung, then to the liver, and finally to the spleen, the disease has run its course.

Midnight is the time of day associated with water; water extinguishes fire. Hence patients will die in winter, a season associated with water as well, at midnight when the force of water is particularly strong. Noon is the time of day associated with fire, as is the season summer. During noon in summer, the force of fire is particularly pronounced. If a heart disease happens to end in the spleen in summer without being cured within three days, patients will die at noon. This, then, is another example where the simple metaphorics underlying the notions of mutual domination and mutual generation in the

five-agents doctrine do not necesserily permit meaningful reasoning. If it is obvious why the pronounced force of water is likely to kill a patient with a disease originating in the heart, that is, in the agent fire, it is less obvious why the pronounced force of fire should be able to have the same effect. Zhang Jiebin, a seventeenth-century medical author, commented that both extreme weakness and extreme strength result in destruction. <sup>134</sup>

Knowledge of the paths of transmission of diseases through the organism was important not only for prognostics but also for diagnosis, treatment, and prevention. A practitioner adhering to the theories of systematic correspondence was expected since the Song dynasty to determine the present location of a disease, to treat it in its current state, and to prevent it from moving on. The five-agents doctrine in the *Su wen* provided early insights into relevant correspondences, as for instance in *Su wen* 9 where a list informs that

```
the heart, . . .
its fullness manifests itself in the blood vessels . . .
the lung, . . .
its fullness manifests itself in the skin . . .
the kidneys, . . .
its fullness manifests itself in the bones . . .
the liver, . . .
its fullness manifests itself in the sinews . . .
the spleen, . . .
its fullness manifests itself in the muscles. 135
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Similarly, Su wen 10 offers the following correspondences:

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The correlate of the heart are the vessels; its splendor [appears in] the complexion....
The correlate of the lung is the skin; its splendor [appears in] the body hair....
The correlate of the liver are the sinews; its splendor [appears in] the nails....
The correlate of the spleen is the flesh; its splendor [appears in] the lips....
The correlate of the kidneys are the bones; their splendor is the hair on the head. 136
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That is, a skin problem can be traced to the condition of the lung; any deviation from an ideal state might also be evident in the condition of a patient's body hair. A problem in the bones can be traced to a depletion in the kidneys; any deviation from a state considered normal may also manifest itself in the condition of a person's hair on the head.

Su wen 23 traces belching, coughing, talkativeness, swallowing, and yawning to the five depot organs:

In the heart [the qi] causes belching. 137

The Tang-era commentator Wang Bing explained these correspondences on the basis of metaphors suggested by the five-agents doctrine: "[Belching] reflects fire flaming upward. Smoke leaves together with the flames. The heart does not accept anything dirty. Hence belching leaves from it." <sup>138</sup>

Su wen 23 continues:

In the lung [the qi] causes coughing. 139

Wang Bing commented: "[Coughing] reflects the unyielding hardness of metal. When one knocks at it it produces a sound. Hence when evil strikes the lung, coughing is the result." <sup>140</sup>

Su wen 23:

In the liver [the qi] causes talkativeness. 141

Wang Bing: "It reflects the branches and twigs of trees (= wood), and the branching off of physical appearances. Speech displays what is hidden. Hence it originates from the liver." 142

Su wen 23:

In the spleen [the qi] causes swallowing. 143

Wang Bing: "[Swallowing] reflects the enclosing and containing carried out by the soil. All things return to [its] interior, and are accepted by it. Hence [the spleen qi] causes the swallowing." 144

Su wen 23:

In the kidneys [the qi] causes yawning. 145

Wang Bing: "[Yawning] reflects water flowing down. When it rises, it creates clouds and fog. The qi is blocked in the stomach. Hence yawning is generated there." <sup>146</sup>

While the metaphors of the five-agents doctrine enabled Wang Bing to suggest a more or less stringent explanation of all five of these correspondences, only two relationships hold in the light of modern reasoning, those between the lung and coughing and between spleen and swallowing—if we consider spleen as identical here with stomach. One might interpret this passage, therefore, as an example of a pentic set of correspondences that originated from two empirically valid observations to which were added three

purely theoretical constructs. However, the criteria resorted to by the ancient naturalists to link belching and heart, yawning and kidneys, and talkativeness and liver remain hidden.

The same may be said in view of another statement in *Su wen* 23, associating five body liquids with the five depot organs:

The heart generates sweat. The lung generates snivel. The liver generates tears. The spleen generates saliva. The kidneys generate spittle.<sup>147</sup>

In view of the five-agents correspondences useful in diagnostics, changes in the production of sweat suggest underlying changes in the condition of the heart, changes in the production of snivel suggest underlying changes in the condition of the lung, and so on. From today's perspective, the association of heart and sweat, of lung and snivel, and of spleen (i.e., stomach) and saliva appears reasonable. Increased heart activity, noticeable through increased heartbeat, may go along with increased sweating. A common cold affecting the lungs and causing coughing may be accompanied by a running nose. The direct link between the oral cavity and the stomach, as well as the close association between appetite, digestion, and the production of saliva, may not have been hidden to ancient naturalists. In contrast, the association of tears with the liver is explicable only in terms of the five-agents correspondences linking the eyes, the orifice where tears leave the body, with the liver. The association of spittle with the kidneys is a purely theoretical construct too.

While we cannot be sure whether the paths of reasoning underlying the associations just quoted proceeded from empirically valid observations to theorization, most pentic associations escape any such interpretation. An example, also from *Su wen* 23, are the "images reflecting the five [movements in the] vessels." These "images" may be understood as projections of the characteristics of the seasons associated with them; it is questionable, however, whether an uninitiated practitioner would be able to perceive empirically the qualities listed below.

The liver [movement in the] vessels is string[like]. The heart [movement in the] vessels is hook[like]. The spleen [movement in the] vessels is intermittent. The lung [movement in the] vessels is hair[like]. The kidney [movement in the] vessels is stone[like]. 148

One important aspect of the five-agents doctrine is the periodicity of ruling of the five agents in a circular arrangement. The concept of periodicity of ruling was emphasized strongly in the doctrine of "five periods and six qi"

(wu yun liu qi  $\Xi$   $\mathbb{Z}$   $\mathbb{Z}$   $\mathbb{Z}$ ) expounded in the "seven comprehensive discourses," Su wen 66 through 74. Lisewhere it is mentioned explicitly in Su wen 22 in the introductory statement of a lengthy passage on the alternating rule of the qi associated with the five depot organs in correspondence with the passage of the five seasons:

As for the five agents,

these are metal, wood, water, fire, and soil.

Alternately they resume high and low ranks.

Through them one knows [whether a patient] will die or survive.

Through them one decides about completion or destruction, and

[through them] one determines the [status of the] qi in the five depots,

the time when [a disease] is minor or serious, and

the time of [a patient's] death or survival. . . .

The liver rules in spring.

The foot ceasing yin and the [foot] minor yang [conduits] rule [its] treatment. Its days are jia and  $\gamma i...$ 

The heart rules in summer.

The hand minor yin and the [hand] major yang [conduits] rule [its] treatment. Its days are *bing* and *ding*. . . .

The spleen rules in late summer.

The foot major yin and the [foot] yang brilliance [conduits] rule [its] treatment. Its days are wu and ji...

The lung rules in autumn.

The hand major yin and the [hand] yang brilliance [conduits] rule [its] treatment.

Its days are geng and xin. . . .

The kidneys rule in winter.

The foot minor yin and the [foot] major yang [conduits] rule [its] treatment. Its days are ren and gui. <sup>150</sup>

That is, a practitioner should not be surprised to feel different movements in the vessels in the course of the five seasons. He should be alarmed, though, if he feels a movement in the vessels that does not correspond to the current season. The notion of mutual domination among the five agents helps to assess the seriousness of a situation. That is, as *Su wen* 18 points out, if in winter one feels a stonelike movement in the vessels, that is considered "normal," because a stonelike movement is associated with winter. If, however, in winter a hooklike movement in the vessels appears, this signals "summer disease," because a hooklike movement is associated with fire while winter is associated with water. Similarly, in autumn a hairlike movement in the vessels, associated with autumn and metal, is considered normal while a stringlike movement, associated with spring and wood, suggests a "spring disease."

Lest an unjustified impression of stringency in the *Su wen* is created, it should be added here that *Su wen* 16 suggests a very different path of qi through the organism in the course of a year, based on a sixfold division of annual seasons:

In the first month, and in the second month, . . . the qi of man is in the liver.

In the third month, and in the fourth month, . . . the qi of man is in the spleen.

In the fifth month, and in the sixth month, . . . the qi of man is in the head.

In the seventh month, and in the eighth month, . . . the qi of man is in the lung.

In the ninth month, and in the tenth month, . . . the qi of man is in the heart.

In the eleventh month, and in the twelfth month, . . . the qi of man is in the kidneys. 151

To conclude, the *Su wen*, therefore, is an important witness of the Hanera transfer of the paradigm of systematic correspondence to the natural, human, and health sciences. It is not a collection of philosophical treatises; it is a compilation of medical texts. These texts were written to provide evidence of the integration of human normal and abnormal conditions, that is, of human health and illness, in the natural environment, and they served to spread knowledge of the manifestations and of a suitable treatment of disease. Their prime intention was not philosophical reasoning per se but to give medical advice and discuss health care. Such advice and discussions are often informed by philosophy, with the yin-yang and five-agents theories being resorted to most prominently. If we refer to these as "doctrines of systematic correspondence" rather than as doctrines of correlation, this is to hint at the fact that the *Su wen* shows no traces of a true, that is, bidirectional, correlation among phenomena in nature and man.<sup>152</sup>

All phenomena are tied together, the *Su wen* authors agreed, in a closely knit network of correspondences; nothing stands alone. Man should be aware of these correspondences so as to be able to safeguard his health and ensure for himself smooth passage through his life cycle, from birth, to growth, adulthood, and aging, to his death. Knowledge of the correspondences among his physical constituents, his likes and dislikes, his normal and abnormal states, on the one hand, and all the flavors, smells, climatic conditions, cardinal points, and so on, in his environment, on the other, allows man to adapt and thereby to survive.

In this regard, man has to take his natural environment as something given. The underlying notion of correspondence in the *Su wen* does not entail a notion of correlation in its true sense because man has no way to ma-

nipulate the natural order. His behavior may spell good luck or disaster if he complies with or acts against natural order, but this order has an unquestionable normative priority, and man must obey or perish. He cannot impose his will on nature. He is free to go with this order or to oppose it, but he cannot change it. This is the basic message underlying references in the *Su wen* to both the yin-yang and the five-agents doctrines.

#### 4. THE BODY AND ITS ORGANS

## 4.1. Su wen Morphology

As a text concerned with conditions of health and disease in the human organism, the *Su wen* naturally employs a detailed vocabulary for the morphological structure of the body. Virtually all tangible, macroscopic body parts that can be linked to normal and abnormal processes are mentioned in passing in the *Su wen* treatises. For the most part, the *Su wen* authors did not consider it necessary to explain the meaning of the respective terms. That is, the vocabulary and the morphology it represented were common knowledge among the literate strata of the Han-era population of the first centuries B.C. and A.D.

There are very few instances where a definition suggests that the realm of everyday language was left and that potential readers may have been unaware of a special technical term. An example is the following passage, most likely a later insertion in the surrounding text.

Above the assisting bone, below the transverse (i.e., pubic) bone, this is the "bolt bone."

That which is on both sides of the hip bone is called "trigger."

The knee divide is the "lower leg bone joint."

The bone on both sides of the knee is the connection with the lower leg bone.

Below the [connector] bone is the "assistant [bone]."

Above the assistant [bone] is the "knee bay."

Above the knee bay is the joint.

The transverse bone of the head is the "pillow [bone]." 153

### 4.2. Chest and Abdomen

The largest number of morphological terms in the *Su wen* appear in the context of descriptions of normal and abnormal conditions of the trunk and its inner organs. In the "chest," for example, patients may feel pain, <sup>154</sup> or "propping fullness." It is separated from the "abdomen" by a "horizontal membrane plane," that is, the "diaphragm," which may or may not be "obstructed." The abdomen may be enlarged in certain pathological situations. <sup>158</sup> In its center, indicating a dividing line between the "upper ab-

domen" and the "lower abdomen," is the "navel," whose general area may have pain.  $^{159}$ 

To the sides of the abdomen are the "upper two flanks" where a patient may experience feelings of fullness<sup>160</sup> or even "propping fullness."<sup>161</sup> A special term suggests the separate concept of a "lateral abdomen," *miao*  $\rlap{!}\!\!\!/$  . This lateral abdomen may be cool if the movement in the vessels is inadequate in winter, <sup>162</sup> and it may feel pain originating from the lumbar region. <sup>163</sup> On the back is the "spine," which may ache <sup>164</sup> and which may be bent to a degree that a patient is unable to raise it again. <sup>165</sup> Inside the "backbone" is at least one vessel, <sup>166</sup> which may be a passageway of evil qi moving upward. <sup>167</sup> The spine is flanked by the network vessels of the supervisor vessel. <sup>168</sup> The lower section of the spine and its immediate environment constitute the "lower back." This is another location where one may feel pain; <sup>169</sup> it may stiffen to a degree that one is unable to turn around and sway. <sup>170</sup> The spine ends in the "sacrum," <sup>171</sup> which is adjoined by the "buttocks." <sup>172</sup> Occasionally, it is necessary to "pierce where the lower back and the sacrum intersect, above the two hip bones and the buttocks." <sup>173</sup>

Although the Su wen, in contrast to the Ling shu, does not refer to the anus as gang  $\mathbb H$  directly, it occasionally speaks of the "yin orifices" or "yin" when the context suggests a reference to the anus or to the male and female genital regions. <sup>174</sup> The "male stalk," however, is mentioned in the Su wen, as is the "perineum," the region between male and female genital organs and the anus. <sup>175</sup>

Chest and abdomen enclose the various organs. In the chest, the "lung" is situated with, as Wang Bing described it in a separate note, several "lobes spreading through the chest."<sup>176</sup> Its morphological structure is compared to a "canopy covering the heart."<sup>177</sup> Occasionally it makes noises. <sup>178</sup> The "heart," situated immediately below the lung, was known to be linked to the blood "vessels."<sup>179</sup> Of all the organs, the heart is most dangerous to harm with a needle. Patients who are victims of such malpractice will die the same day. <sup>180</sup> "Spleen" and "stomach," located in the upper abdomen, are closely attached to each other, separated only by a membrane. <sup>181</sup> The opening at the lower [end] of the "stomach duct" may be obstructed. <sup>182</sup> "When the food does not move down, [this is because] the stomach duct is barred." <sup>183</sup>

Regarding the vicinity of the stomach, we encounter a term that should attract particular attention; as *Su wen* 18 informs us:

The large network [vessel] of the stomach

is called xu li.

It penetrates the diaphragm, and connects with the lung.

It surfaces below the left breast.

The movement in this [vessel] is reflected by [movements of] the garment. . . . <If the movement is reflected by the garments below the breast, the basic qi leaks.> $^{184}$ 

Nowhere else in the *Su wen* is a "large network [vessel] of the stomach" mentioned; the term *xu li*, too, occurs only here. Its characters make no sense in Chinese, although Chinese and Japanese philologists have offered numerous explanations to the contrary. It would be going too far to see a distant echo here of the notion of the stomach juices called *chyloi* in the Hippocratic writings. Nevertheless, we may read the "large network [vessel] of the stomach is called *xu li*" as an anachronistic parallel to the *ductus chyliferus* found in Europe by anatomists more than one thousand years after the compilation of the *Su wen*.

The "large network [vessel] of the stomach" is not the only vessel that is named only once in the *Su wen* (and never again in any subsequent text) and that remained outside the system of the twelve regular conduits. *Su wen* 41 lists a "separator vessel,"<sup>185</sup> a "yin companion vessel,"<sup>186</sup> and a few others, neither the courses nor the functions of which are attested here or elsewhere. It is unknown whether the reference to these vessels was based on any morphological knowledge and if so where such knowledge may have originated.

On the left side of the stomach is the "liver." Farther down and adjacent to the lower back are the "kidneys." Because they constitute the organ located at the lowest point in the trunk, this is where the water normally collects. <sup>188</sup> In a pathological situation, however, the kidneys may "suffer from desiccation," while the lung, the uppermost organ, may "assemble water." Two other organs that normally store body liquids are the "urinary bladder" and the "gallbladder"; they too are located in the lower abdomen. In certain cases, pressing the bladder "causes internal pain as if hot water had been poured over [the lower abdomen]." Directly "tied to the kidneys" by its vessels is the "uterus," the location of pregnancy. <sup>193</sup> When a woman experiences amenorrhea, "[this is because] the uterine vessel is closed. . . . {It is attached to the heart and forms a network inside the uterus}."

Finally, the small and large intestines are mentioned. They may experience "flushing," which may in turn cause piles. 195

# 4.3. The Head

The second largest group of morphological terms in the *Su wen* was used to describe the head and its orifices. The "skull," containing the "brain," the "hair on the head," the "forehead," the "face," which may convey a bloated appearance, <sup>196</sup> the "lips," which may "peel," <sup>197</sup> the "cheeks" and the "chin," which may turn red, <sup>198</sup> as well as the "nose," which may suffer from nosebleed <sup>199</sup> or blockage <sup>200</sup> and whose "nasal column" may experience decay when affected by a disease that may be identified in hindsight as leprosy, <sup>201</sup> and the "jaws"—literally, "carriage of teeth" <sup>202</sup>—all may manifest signs of diseases affecting the functions of the organs in chest and abdomen.

This is also true for the "teeth," which may wither, $^{203}$  for the "ears," which may be closed and unable to hear, $^{204}$  for the "eyes," which may be unable to see $^{205}$  and which indicate impending death if they are deeply sunk into their sockets, $^{206}$  for the "eyebrows," $^{207}$  for the "canthi of the eyes," which may suffer from ulcers, $^{208}$  for the "tongue," the base of which may be stiff, $^{209}$  for the "throat," which may become dry, $^{210}$  and for the "gullet," which may become impassable so that beverages and food do not move downward. $^{211}$ 

## 4.4. The Extremities

The third group of technical terms in the *Su wen* concerns the morphology of the extremities. As was the case with the various parts and regions of the head, the extremities may exhibit ailments whose deeper causes are to be found in the organs. Hence the "shoulder" and the "shoulder blades" may have pain or may be hot in the case of an excess of fire qi.<sup>212</sup> When the "shins" are swollen, this may be a sign of kidney disease; when they are painful, this may be attributed to a lung disease;<sup>213</sup> and when they are "sore," this may indicate a liver disease.<sup>214</sup> Similarly, the "thigh bones" as well as the shins may experience lameness,<sup>215</sup> the "feet" may be unable to "support the body,"<sup>216</sup> and the "limbs" in general may be "sluggish."<sup>217</sup>

"Joints" are named because "if piercing them causes liquid to leave [the body, the patient] will not be able to bend and stretch [the respective joint any longer],"218 which is particularly true of the "elbow."219 "Fingers" are able to hold things, and the "palms" are able to grasp.220 "As for the knees, they are the palaces of the sinews. When [a person] cannot [freely] bend and stretch, and if while walking he is bent forward and leans [on a stick], his sinews will soon be worn out."221 Similarly, "if one, when piercing the kneecap, makes liquid leave [the knee], this causes [the patient] to limp."222

# 4.5. General Structural Elements and Mobile Agents

The "skin" may be tense,  $^{223}$  and the "body hair" may fall out  $^{224}$  or break off.  $^{225}$  Diseases in the body may cause the "bones" to wither or to dry up.  $^{226}$  The "sinews" may become tense and cramped,  $^{227}$  or they may "slacken," while the "flesh" may be numb or have a feeling as if insects were moving in it.  $^{229}$  The "muscles" may wane  $^{230}$  or may become numb,  $^{231}$  while certain "membranes" turn dry in the event of internal disease.  $^{232}$ 

Several terms denote passageways of the various liquids and vapors permeating the body. "The passageways of the five depots, they all emerge from the conduit tunnels, and they serve to pass the blood and the qi."<sup>233</sup> "Passageways of water" are mentioned once; they are said to originate in the "triple burner," but it is unclear which anatomical structure either of these terms may have referred to.<sup>234</sup> Equally unclear is the meaning of references to "mar-

row holes," said to be situated at the "base of the gums," "behind the neck," and at the "upper opening of the spinal bones."  $^{235}$  The "marrow" can decrease,  $^{236}$  and it can melt.  $^{237}$  Occasionally a patho-

The "marrow" can decrease, <sup>236</sup> and it can melt. <sup>237</sup> Occasionally a pathological condition makes a patient vomit "liquids." <sup>238</sup> The "gall" may flow away, <sup>239</sup> and so does "sweat" if the "skin structures" are open. <sup>240</sup> "Blood" appears not only as nosebleed <sup>241</sup> or other types of bleeding; <sup>242</sup> it may also turn up in the stools <sup>243</sup> or by way of hemorrhage. <sup>244</sup> Bloodletting, of course, was a major aim of early vessel therapy and is frequently described in the *Su wen*.

The passage of "urine and stools" is a diagnostic parameter that cannot be neglected,  $^{245}$  as is the excretion of "pus" $^{246}$  or an unusual flow of "tears." Both "rough urination" and "clear snivel" may be signs of a bladder (or uterus, depending on how one reads the character bao 炮) block. $^{247}$  The qi, finally, is one of the most prominent mobile agents in the organism; it is of both physiological and pathological significance. We shall take a closer look at its treatment in the Su wen in another context. $^{248}$ 

With the exception of terms such as "waterways," "conduit tunnels," "marrow holes," and "triple burner," and even though we cannot be sure whether the terms rendered as "muscles" and "sinews" did indeed pertain to those tissues that are termed "muscles" and "sinews" today, none of the approximately seventy-five terms listed above causes a major problem in terms of morphological identification. Ancient Chinese medicine did not require a special technical nomenclature accessible only to experts. This applies not only to such easily accessible features as ears, nose, and shoulders but also to the organs hidden from the eyes under normal circumstances, such as stomach, heart, uterus, and all the others located in the chest and abdomen.

The *Su wen*, in contrast to the *Nan jing* of the first century A.D., does not delineate the inner organs one by one in terms of morphological location, diameter, circumference, or capacity. And yet there is no doubt that the *Su wen* authors meant all the names of inner organs quoted above to refer to the same tangible morphological entities that they refer to today. A physician who inadvertently punctured the heart or the lung of a patient with his needle killed this person not because he affected an "orbis" or a "cardiac system" or a "pulmonary system" but because he struck internal organs, which were as well defined morphogically and locally in Chinese antiquity as they are today.

Whenever one needles the chest and the abdomen, one must stay clear of the five depots.

If one strikes the heart, this leads to death within a circulation [period].

If one strikes the spleen, this leads to death within five days.

If one strikes the kidneys, this leads to death within seven days.

If one strikes the lung, this leads to death within five days.

If one strikes the diaphragm, this always causes harm to the center. The disease may be healed, but [the patient] must die within one year.<sup>249</sup>

It is true that ancient Chinese naturalists saw these organs as linked to other entities in the organism in a way that is difficult to reconcile with current morphological and physiological knowledge, and the functions the *Su wen* authors attributed to the organs and their respective correlates often differ from those identified today. Nevertheless, there is no need to reject a translation of *xin* as "heart," of *xue* as "blood," or of wei as "stomach." The organs and the other body parts are universals; only some of the functions attributed to them may be time-bound and culture-specific.

# 4.6. Toward a Hierarchy of Human Organs

When the concept of a systematic correspondence of all phenomena was applied to the realm of body parts and their functions in the second and first centuries B.C., a common morphological knowledge, unstructured by any theory and expressed in the vernacular terms listed above, had to be categorized to fit the demands of the yin-yang and five-agents doctrines. Most important in this context was the attribution of physiological and pathological significance to the inner organs and other body parts.

Two major tasks had to be achieved. First, a set of core organs was to be identified that could be considered responsible for normal and abnormal, that is, physiological and pathological, processes that were understood to maintain or jeopardize life. Those organs and other body parts that were not identified as core organs were to be classified as secondary, in that their condition usually reflected the condition of one or more of the primary organs.

Early Chinese texts documenting the formative period of this *zang xiang* doctrine are entirely apodictic. Unlike their Greek counterparts, ancient Chinese authors did not often allow their readers to participate in the processes and arguments that led them to their definitions and interpretations. All one

can trace in the ancient texts are stages of what must have been a lively and controversial intellectual debate. Hence the factors that let certain assumptions appear plausible in the second or first century B.C. cannot be identified in detail today.

We may presume that an unknown range of empirical knowledge of the association of human organs with certain physiological and pathological functions, as well as with other organs and body parts, was supplemented by theorizing stimulated by cultural and socioeconomic as well as sociopolitical variables. That is, the association of the stomach with digestion may have been discovered empirically, but the replacement of the stomach as a core organ by the spleen may have been prompted, as was pointed out earlier, by sacrificial concepts and practices.

It appears quite impossible to trace the origins of the attribution of the heart, the lung, and other individual core organs with their respective functions. We may state, however, that ancient Chinese naturalists witnessed a fundamental restructuring of their socioeconomic and sociopolitical environment in the time of transition from the Warring States period, with its many individual units fighting for survival or supremacy, to a well-structured united China where all parts contributed to the well-being of the organism of the state. It is exactly this revolution that may have lent plausibility to a new view of the organism of the human body as a system of interrelated and mutually dependent organs.

Terms such as zang 藏 and fu 府, both originally denoting "storage facilities" or "storehouses," were borrowed to designate two sets of core organs, presumably because these organs were assumed to fulfill functions in the human body that were considered to parallel those functions associated with the zang and fu in the national economy.  $^{251}$ 

The zang, which I translate briefly as "depots," were meant to store what is essential to maintain existence. The fu pose a problem. The term appears in Han-era texts in two different metaphorical contexts. These are, first, the meaning "storehouse" and, second, the meaning "administrative center" or "palace." Ideally, each occurrence of the term fu should be examined for its metaphorical significance, with fu being translated in some instances as "storehouse" and in other instances as "palace." This is quite unfeasible, however, as more often than not it is impossible to identify which metaphorical association (if any) an author may have had in mind when he used the term fu. In my earlier translation of the Nan jing, as well as in the current translation of the Su wen, I have preferred to render fu as "palace" only. One should keep in mind, though, that this English term reflects only one of the two metaphors conveyed by the Chinese original.

One of the main functions of the *zang* was to store items for an extended period (if not for good), whereas the *fu* were seen as places where important things are received only temporarily to be handled, assigned, and trans-

mitted. The locus classicus lending plausibility to these metaphors are two commentaries in *Su wen* 11:

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{As for the so-called five depots, they store the essence qi and do not drain [it]. Hence, even if they are full, they cannot be replete.

As for the six palaces, they transmit and transform things but do not store [them]. Hence, they [may be] replete, but they cannot be full.}

{{The reason is as follows.

When water and grain enter the mouth, then the stomach is replete and the intestines are empty. When the food moves down, then the intestines are replete and the stomach is empty. Hence [the text] states: "replete but not full, full but not replete."}}
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The interpretations of the main text offered in these commentaries by unknown authors possibly of the first or second century A.D. or even later may reflect views valid at the time they were written—centuries after the first appearance of the metaphor *fu* in medical literature, that is, in the Mawangdui manuscripts of the early second century B.C.

Harper has suggested translating fu in the Shi wen +  $\square$  manuscript of the Mawangdui texts as "cavity." Harper's reading extends the immediate image conveyed by the original metaphor, "storehouse." It is nevertheless congruent with the functions explicitly assigned to the fu in some treatises of the Su wen other than Su wen 11, as well as in nonmedical literature. These functions, it appears, are not necessarily those of "transmitting and transforming things," as the commentaries in Su wen 11 had it. As Su wen 17 states:

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The vessels, they are the fu of the blood. . . . The head, it is the fu of essence brilliance. . . . The back, it is the fu of that which is in the chest. . . . The lower back, it is the fu of the kidneys. . . . The knees, they are the fu of the sinews. . . . The bones, they are the fu of the marrow. ^{254}
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That is, in the Su wen, the fu are enclosures housing and sheltering something important. In its original sociocultural context, this may have been literature in a collector's library, or a prince, a king, or an emperor in a palace; it is the blood, the essence brilliance, and so on, in the human body. In the opening lines of Su wen 5, even the philosophical concept of yin and yang was associated with the functions of a fu.

Yin and yang, they are the Way of heaven and earth, the fundamental principles [governing] the myriad beings, father and mother to all changes and transformations, the source and origin of generating and killing, the palace of spirit brilliance.

Wang Bing commented: "Fu is gong fu 官府, 'palace'. That is to say, it is where birth and death, and all changes and transformations, have their origin. Why? Because spirit brilliance resides in it." $^{255}$  An identical meaning of fu is suggested by an account in the  $Bai\ hu\ tong\ yi\ 白虎通義,$  a record of the debates between schools of Confucian learning that took place in the White Tiger Hall of the imperial palace in Luoyang in A.D. 79:

The stomach is the palace of the spleen. The spleen rules the supply of  $gi.^{256}$ 

A more precise metaphorical wording can hardly be expected: the "palace," fu fi, or stomach, houses the governor, the "ruler," zhu  $\pm$ , or spleen. Interestingly, the notion of "depot" is entirely absent from this account. The Bai hu tong yi continues:

The bladder is the palace of the kidneys. The kidneys rule drainage. 257

To assign to the kidneys the function of ruling drainage is hard to reconcile with the notion of the kidneys as a "depot which stores but does not drain" in  $Su\ wen\ 11$ . Fu, in the sense of "palace," is introduced in the  $Bai\ hu\ tong\ yi$  in a metaphorical projection of the basic structural elements of the united Chinese empire onto the human organism. Just as the empire combined several previously independent states that were "ruled" by governors  $(zhu\ \pm)$  now, the human organism consisted of several "ruling" organs, formerly (i.e., in the Mawangdui manuscripts) described as independent entities, now perceived as forming a system of interrelated and interdependent functional units.

The ruling organs in the human body sit in "palaces" just as the governors in the various regions of the empire. As the latter are responsible for adminstrative functions and rule over people, the organs in the body fulfill important administrative duties such as "the supply of qi" and rule over subjects identified as "vessels," "skin," and so on.

Obviously, the view of the primary organs lung, heart, spleen, stomach, and kidneys as "ruling" organs did not always overlap with their metaphorical designation as "depots." *Su wen* 23, however, lists both metaphors side by side:

What the five depots store: The heart stores the spirit.

The lung stores the *po*-soul.

The liver stores the *hun*-soul.

The spleen stores the sentiments.

The kidneys store the mind.

These [relationships] are called "what the five depots store."

What the five depots rule:

The heart rules the vessels.

The lung rules the skin.

The liver rules the sinews.

The spleen rules the flesh.

The kidneys rule the bones.

These [relationships] are called "the five rules." 258

In *Su wen* 8 we encounter another metaphorical classification of the core organs. It was borrowed from the context of bureaucratic stratification to denote a hierarchy of the organs concomitant with their individual functions; only the heart is called a "ruler" here:

The heart is the official functioning as Ruler.

Spirit brilliance originates in it.

The lung is the official functioning as Chancellor and Mentor.

Order and regulation originate in it.

The liver is the official functioning as General.

Planning and deliberation originate in it.

The gallbladder is the official functioning as Rectifier.<sup>259</sup>

Judgments and decisions originate in it.

The *dan zhong* is the official functioning as Minister and Envoy.

Joy and happiness originate in it.

The spleen and the stomach are the officials functioning as granary.

The five flavors originate from them.

The large intestine is the official functioning as Transmitter along the Way. Changes and transformations originate in it.

The small intestine is the official functioning as Recipient of what has been Perfected.

The transformation of things originates in it.

The kidneys are the official functioning as Operator with Force.

Technical skills and expertise originate from them.

The triple burner is the official functioning as Opener of Channels.

The passageways of water originate in it.

The urinary bladder is the official functioning as Regional Rectifier.

The body liquids are stored in it. . . .

All these twelve officials must not lose [contact with] each other.<sup>260</sup>

This listing is noteworthy for several reasons. First, two of the terms employed,  $zhong\ zheng\$  中  $\mathbb E$ , "rectifier," and  $zhou\ du\$ 州都,"regional rectifier," were not introduced into Chinese bureaucratic nomenclature before the North-South division immediately after the Han era. It is thus justifiable to assume that this entire passage was formulated and inserted in the  $Su\ wen$  only in the third century A.D.

Second, the classification of the heart as ruler is a view adopted by several authors.  $Xun\ zi$ , Xian bi 荀子, 鮮蔽, as we saw earlier, called the heart "the Lord of the physical body, and the ruler of spirit brilliance."  $Xun\ zi$ , Tian lun 荀子, 天論, says, "The heart occupies the central void to govern the five officials."  $Guan\ zi$ , Xin shu shang 管子, 心術上 confirmed, "The heart occupies the position of Lord in the body." However, this was only one perspective that found entrance into the  $Su\ wen$ . At least three competing notions must have existed, as is attested by dissenting statements elsewhere in the  $Su\ wen$ .

Su wen 79 documents a dramatic little dialogue between Huang Di and Lei Gong. When Huang Di asked him which organ he considered "most precious," Lei Gong referred to the liver but was immediately rebuked by Huang Di, who was able to quote several texts offering a message to the contrary. Lei Gong was ashamed or surprised enough to retreat for an entire week before he continued his discussions with Huang Di:

Huang Di sat calmly.

While he looked down upon the eight farthest [regions], and rectified the qi of the eight winds,

he asked Lei Gong:

The categories of yin and yang, and the Way of the conduits and vessels, that is what is ruled by the five inside.

Which depot is the most precious?

Lei Gong responded:

Spring, [that is] jia and yi, [that is] virid.

Inside it rules the liver.

It governs for seventy-two days;

this is the main season for the vessels.

[I, your] subject consider this depot to be the most precious.

[Huang] Di:

Still,

reading the *Upper* [Scripture] and the *Lower Scripture*, the *Yin and Yang*, and *The Natural Approach*,

that which you state to be precious is the most inferior [there].

Lei Gong went to fast for seven days.

In the morning he resumed his seat to attend [Huang Di].<sup>261</sup>

Since the *Lower Scripture*, the *Yin and Yang*, and *The Natural Approach* are no longer extant, it is impossible to know which of the core organs these texts may have assigned the top position when they assigned the liver the "most inferior" status. However, two further variants are apparent in the *Su wen* itself. *Su wen* 44 sees the lung as both morphologically and hierarchically superior to all the others:

The lung is the chief of the depots. It is the canopy covering the heart. <sup>262</sup>

Whereas the heart, the liver, and the lung are "depot" organs, located in the center of the organism, *Su wen* 9 attributes a chief position to the gall-bladder, an organ usually defined as a "palace," that is, as occupying a secondary position situated in the periphery:

Altogether eleven depots. They receive decisions from the gallbladder. <sup>263</sup>

From its context, it is obvious that this statement is a later insert. Its origin and the exact time of its insertion are unknown. However, *Su wen* 47 confirms the view expressed here at least partially when it states:

The liver is the general in the center. It takes its decisions from the gallbladder. The gullet serves as its messenger.<sup>264</sup>

The passage quoted earlier from *Su wen* 8 identified the gallbladder as "the official functioning as Rectifier. Judgments and decisions originate in it." These "judgments and decisions" are those to be made by a person. This is different from the two statements in *Su wen* 9 and 47 just quoted. They convey the idea that the activities of other organs are decided by the gallbladder.

Aside from the observation that to pierce the heart brought about faster death than piercing any other organ,  $^{265}$  no empirical basis can be claimed to justify assigning the status of ruler,  $zhu \pm$ , Lord,  $jun \mp$ , chief,  $zhang \pm$ , or "decision maker" to the heart, the lung, the liver, the gallbladder, or any other of the core organs. In Su wen 1, the life cycle of an individual is tied to the arrival and eventual departure of qi in the kidneys; hence one might assume they occupied a primary position. The fact is that the notion of a hierarchy among the organs is a purely cultural construct, stimulated by the perception of the human body as a replica of the state.

Meng Naichang has suggested that the two alternative views, "the lung is the chief" and "the liver is most precious," may have originated from the competition between the states of Qin and Qi in 288 B.C., in the final years of the Warring States period, when Qin Zhao wang 秦昭王, ruler of the for-

mer, proposed being called "Western Emperor," xi~di 西 帝, while Qi Min wang 齊 湣, ruler of the latter, proposed for himself the title "Eastern Emperor," dong~di 東 帝.  $^{266}$ 

The lung, being associated with the agent metal and with the cardinal direction of the West in the five-agents doctrine of systematic correspondence, may have been considered the logical "chief" organ by naturalists in Qin, while the liver, being associated with the agent wood and the cardinal direction of the East, may have been considered "most precious" in Qi. Political aspirations have been voiced in the guise of medical terminology in China quite a few times; hence that both Qin and Qi, bowing to pressure from outside, quickly renounced the self-conferred title di, "emperor," did not necessarily preclude the generation of competing concepts of lung or liver as rulers in the organism. On the contrary, such metaphors are ideal ways of promoting political messages when circumstances are not ripe or are too dangerous to voice them openly. However, Meng Naichang's identification of the lung versus liver views is difficult to accept because it supposes that as early as the first half of the third century B.C. the conceptual links between lung and West, on the one hand, and liver and East, on the other, were known to enough people to provide the metaphor with hidden force. No such evidence exists to date.

Nevertheless, the origin of the association of organs with government or bureaucratic metaphors can be traced to the late Zhou dynasty. In fact, an early reference to such concepts does appear in the work of Meng zi (trad. 372–289 B.C.), who pointed out in his treatise Gao zi shang  $\mbox{\it fighth}$ : "The roles fulfilled by ears and eyes as officials do not include thinking. . . . The role fulfilled by the heart as an official is to think." Meng zi's statement is informative in that it proves not only an early use of sociopolitical metaphors in a physiological context but also the existence of widespread knowledge of this context per se.

### 4.7. Depots, Palaces, Containers, and Officers

In the process of categorizing and ranking organs as primary and secondary, various models came to be introduced by different authors. Again, it is difficult to assign exact dates to the ancient text passages recording these models. Also, because of the mostly apodictic nature of ancient Chinese medical texts, it is impossible to know with certainty why eventually one model, distinguishing between "depots" and "palaces," appears to have been accepted for twenty centuries to come.

It is not clear why two groups of organs, the depots and the palaces, were distinguished in the first place. As the controversies surrounding their definitions indicate, no clear-cut morphological or functional criterion existed to separate one group from another. Arguments one could think of

in hindsight include, perhaps, empirical evidence of the seriousness of injuries to the heart, the lung, the liver, and the kidneys, suggesting their classification as "ruling" organs. Stomach, large intestine, and small intestine are closely related, both morphologically and functionally, in the passage and transformation of food. The urinary bladder and the gallbladder may have seemed related to some ancient observers, whereas others disagreed. The triple burner is a purely theoretical construct and need not concern us here.

The *Nan jing*, most likely compiled during the Eastern Han, that is, not much later than or even contemporaneous with the bulk of the *Su wen* texts, is very clear about the morphological structure of all core internal organs. Such knowledge, if not received from outside, may have come from dissections. Hence we cannot dismiss the possibility that insights resulting not only from observation of wounds on the battlefield or of views offered in the process of the crueler forms of capital punishment but also from the dissections of criminals ordered during the interregnum of Wang Mang (45 B.C.–A.D. 23) stimulated such detailed reports and influenced the debate over depots and palaces.<sup>268</sup>

The *Zhou li*, Yī shi zhang 周禮, 醫師章, a text on the "Rites of the Zhou" compiled, as current scholarship suggests, during the interregnum of Wang Mang between the early Han and Eastern Han dynasties, <sup>269</sup> spoke of "nine depots," *jiu zang* 九藏, without naming them individually. Zheng Xuan 鄭玄 (127–200), the famous commentator of the Eastern Han, read this statement as

The proper depots are five; in addition there are the stomach, the bladder, the large intestine, and the small intestine. $^{270}$ 

This was written, we should recall, at a time when, according to traditional interpretations, the *Su wen* was already long established as an authoritative text. Why, one might ask, did Zheng Xuan, one of the most learned men of the time, omit the gallbladder and the triple burner from his commentary? Did he intend to name only those "nine depots" he thought the authors of the *Zhou li* had had in mind when they wrote their text, or did he intend to imply that the "nine depots" he mentioned were those known in his own time? Both the gallbladder and the triple burner had been mentioned in the *Shi ji* 90 B.C.; they were named in *Su wen* 4 as palace organs.<sup>271</sup>

The unknown author of a text passage adopted in *Su wen* 9 perpetuated the "nine depot" view; however, another unknown author added a noteworthy commentary later on. Rather than straightforwardly reject the number 9 and declare the statement in question false or at least obsolete, he attempted to reconcile it with what may have become the dominant view in his time or in his school of learning:

The nine divisions are the nine fields; the nine fields are the nine depots.

{For sure, the physical depots ( $xing\ zang\ 形$  藏) are four, the spirit depots ( $shen\ zang\ 神$  藏) are five. Together this makes nine depots to correspond to them.}

The term "physical depots" occurs nowhere else in ancient medical literature; a first interpretation was offered by Wang Bing in the eighth century:

The "four physical depots" are, first, the temples of the head; second, the ears and the eyes; third, the mouth and its teeth; and fourth, the chest and the center. They are named [physical depots] because segments of physical appearance constitute these depots.

The "five spirit depots" are, first, the liver; second, the heart; third, the spleen; fourth, the lung; and fifth, the kidneys. They are named [spirit depots] because [each of them] stores a spirit inside. The liver stores the hun-soul, the heart stores the spirit, the spleen stores the sentiments, the lung stores the po-soul, the kidneys store the mind. Hence these two [types of depots] are distinguished. $^{273}$ 

The commentary provided by Wang Bing on the meaning of "spirit depots" is in keeping with the contents of several passages in the Su wen; but there is no further evidence to corroborate his view on the "physical depots." "Four depots," without the modifier "physical," are mentioned once more in the Su wen  $^{274}$  and once in the Ling shu,  $^{275}$  in both cases without explanation.

Su wen 11 offers perhaps the best insights into some of the questions that were asked in the process of categorizing organs as depots and palaces. The dialogue constructed here, consisting of different time layers, is a rare example of the arguments that may have been exchanged.

Huang Di asked:

I have heard:

of the prescription gentlemen

some consider the brain and the marrow to be depots;

others consider the intestines and the stomach to be depots;

still others consider them to be palaces.

[Being ignorant] I dare to ask about these contradictions;

all say of themselves they are right.

I do not know the Way of their [reasoning];

I should like to hear an explanation for this.

#### Qi Bo responded:

The brain, the marrow, the bones, the vessels, the gallbladder, and the uterus, these six are generated by the qi of the earth.

They all are stored in the yin, and they resemble the earth.

Hence,

they store and do not drain;

they are called extraordinary palaces.

Now,

the stomach, the large intestine, the small intestine, the triple burner, and the urinary bladder,

these five are generated by the qi of heaven.

Their qi resembles heaven.

Hence.

they drain and do not store.

{They receive the turbid qi of the five depots.}

They are called palaces of transmission and transformation.

{These are [locations] where nothing can stay for long, [but where things] are transported and drained.}

<The po-gate, too, is engaged by the five depots. Water and grain cannot be stored [there] for long.>

{As for the so-called five depots,

they store the essence qi and do not drain [it].

Hence,

even if they are full,

they cannot be replete.

As for the six palaces,

they transmit and transform things but do not store [them].

Hence,

they [may be] replete, but they cannot be full.}

{{The reason is as follows.

When water and grain enter the mouth,

then the stomach is replete and the intestines are empty.

When the food moves down,

then the intestines are replete and the stomach is empty.

Hence [the text] states: "replete but not full, full but not replete."}}<sup>276</sup>

Nowhere else does the text record suggestions to view the brain, the marrow, the vessels, the bones, and the uterus, as well as in a later insert the *po*gate (most likely the anus), as core organs in the sense of "palaces." The term "extraordinary palaces" is found only in this passage. One of the commentaries clearly favors the five depots and six palaces model; it is apodictic and does not really contribute to the preceding discussion.

In  $Su\ wen\ 9$ , we witness another attempt at setting things straight, but the historical order is reversed. The core text offered a listing of the heart, the lung, the kidneys, and the liver. In what Tessenow identifies as the first supplement, a passage on the spleen was added. To this was added a later insert specifying the stomach, the large intestine, the small intestine, the triple burner, and the bladder and calling all of these organs "containers,"  $qi\ \Xi$ ; that is, "they are able to transform the dregs. They are [the places] where

the flavors are turned around and enter and leave." This insert is followed by a commentary, summing it all up:

{Altogether eleven depots. They receive decisions from the gallbladder.}<sup>277</sup>

That is to say, the core text (including its first supplement) listed those five depot organs that came to be acknowledged as such in subsequent centuries. A later insert added five organs, designated by its author with a term attested nowhere else but close in meaning to both "depot" and "palace," that is, "container." Perhaps this was, as we know now, an unsuccessful attempt to replace the terms zang  $\bar{m}$  and fu  $\bar{m}$  with a term that was both less a social metaphor and closer to the presumed physiological tasks of the organs in question. Finally, a commentary spoke of "eleven depots," a number that could be arrived at only if the gallbladder was included.

The gallbladder, as pointed out above, is usually referred to as a palace organ. As such, it was named for the first time, as far as we can see now, in the  $Han\ shi\ wai\ zhuan\$ 韓氏外傳, a text attributed to Han Ying 韓嬰 of the second century B.C. Since the  $Han\ shi\ wai\ zhuan$  is an anthology of anecdotes compiled from earlier sources, the origin of the following definition is difficult to determine; however, it informs us that the term fu was as equivocal a metaphor for a set of organs in the body in the early Han era as is its literal translation, "palace," today.

What is meant by "six fu"?

The throat, the palace where [goods] are measured and entered.

The stomach, the palace of the five grains.

The large intestine, the palace of transportation.

The small intestine, the palace of acceptance and abundance.

The gallbladder, the palace of accumulated essence/semen. The urinary bladder, the palace of the body liquids.<sup>278</sup>

The gullet, mentioned as a "messenger" of the gallbladder in *Su wen* 47, appears to have been replaced in the six palaces model by the triple burner, a purely theoretical concept possibly paralleling ancient European notions of a *calor innatus*, an innate source of warmth responsible for changing temperatures in the human organism. That it was first mentioned in the biographical account of the lives of Bian Que and Chunyu Yi in the *Shi ji* of the early first century B.C. may suggest that the concept of the triple burner was introduced to China from a foreign culture or that it was only in the early Han era that Chinese naturalists sought explanations for the warmth or heat in the living and for the cold in the dead. The *Bai hu tong yi* answered the same question that was asked in the *Han shi wai zhuan* by including the triple burner rather than the throat:

The six fu, what does that mean? It means large intestine, small intestine, stomach, bladder, triple burner, and gallbladder.<sup>279</sup>

Although we are inclined to witness a clear-cut historical development here, with one concept superseding an older one, in view of all these data one might hesitate to state that there was an ongoing line of development beginning at some time in the late Zhou with suggestions of four, five, six, nine, or more organs and ending in a generally acknowledged system of five depots and six palaces. What is witnessed in the various treatises of the *Su wen* and of some other early texts is a controversial debate that got nowhere. Even as late as in the third century A.D., as we have seen above, the editors of *Su wen* 8 could start the listing of the official functions of all the organs with the following rhetorical question:

Huang Di asked:

I should like to hear [the following]:

How do the twelve depots engage each other, and what is their hierarchy?<sup>280</sup>

The listing that follows  $^{281}$  does not speak of zang gapsign but refers to shi er  $guan + \exists gapsign$ , "twelve officials" or "twelve officers." This is where the debate ended in the Su wen. Presumably, when the Su wen was put together, perhaps as early as the latter half of the third century A.D., in the version that served Quan Yuanqi as the basis of his version in the sixth century, the editors combined whatever textual fragments they could find, without necessarily eliminating all remnants of earlier dissent.

But for the most part, the *Su wen* conveyed the model of five depots and six palaces, a model that fit the doctrines of five agents and yin yang best. It may therefore be that post-Han texts based in the doctrines of systematic correspondence, such as the *Huangfu Mi jia yi jing* and the *Mai jing* of the third century A.D., as well as a few others, spoke of five depots and six palaces. The final breakthrough, though, occurred only beginning with the Song-Jin-Yuan period of the twelfth through fifteenth centuries, when the doctrines of systematic correspondence achieved political significance in attempts to generate a pharmacology and to enhance the status of practicing physicians. It was in this context that the five depots and six palaces model was acknowledged as classic.

# 4.8. Links between Organs and Orifices

The conceptualization of a certain number of primary and secondary organs, that is, the identification of the significance of individual organs and their respective functions in the organism, appears to have been paralleled by recognition of specific links among the core organs and other body parts. I have pointed out possible early hints at such links in the work of Meng zi

and that these links eventually formed the basis of the *zang xiang* doctrine, that is, of a belief in the manifestation in external body parts of diseases that have primarily affected the core organs.

The *Guan zi*, in a section possibly dating from the third century B.C., not only recorded early links between various categories of phenomena on the basis of the five-agents doctrine, it may also be the first source known to-day associating the core organs with specific orifices. According to its authors, probably scholars from the state of Qi,<sup>282</sup> the nose was linked to the spleen, the eyes were linked to the liver, the lower orifices were linked to the heart, the ears were linked to the kidneys, and the mouth was linked to the lung.<sup>283</sup>

A different view was documented in the *Huai nan zi*, Di xing xun. Except for the link between the liver and the eyes, all remaining associations were identified differently; that is, the ears were openings associated with the heart, the nose was seen as the opening of the lung, the lower orifice was linked to the kidneys, and the mouth was associated with the stomach. At least from today's perspective, most of these associations are meaningful. Nevertheless, in its section Jing shen xun, one version of the *Huai nan zi* relates yet another perspective when it refers to the eyes as ruled by the lung, to the nose as ruled by the kidneys, to the mouth as ruled by the gallbladder, and to the ears as ruled by the liver.<sup>284</sup>

The *Tai xuan jing*, compiled in A.D. 6, associated the nose with the kidneys, the mouth with the liver, the eyes with the lung, the urinary orifice and the ears with the kidneys, and the anus with the heart.<sup>285</sup>

The  $Bai\ hu\ tong\ yi$  of A.D. 79, finally, quoting a  $Chun\ qiu\ wei\ yuan\ ming\ bao$  春秋維元命苞, repeated the associations proposed by the Di xing xun of the  $Huai\ nan\ zi$ , with the sole exception that the mouth was now linked to the spleen rather than to the stomach. This, of course, reflects the replacement of the stomach with the spleen as depot organ, as discussed above. Elsewhere, in its section Qing xing 情性, the  $Bai\ hu\ tong\ yi$  repeats the quote from the  $Chun\ qiu\ wei\ yuan\ ming\ bao$  but specifies "two openings," the urinary orifice and the anus, as linked to the kidneys. Perhaps because the  $Bai\ hu\ tong\ yi$  was the outcome of a controversial discussion about the authenticity of old and new text versions of the Confucian classics, it is not surprising that the Qing xing section continues:

Others say: the mouth is the indicator of the heart, the ears are the indicators of the kidneys. Others say: the liver is tied to the eyes, the lung is tied to the nose, the heart is tied to the mouth, the spleen is tied to the tongue, and the kidneys are tied to the ears. 286

The morphology of the two kidneys may have suggested an association with the two ears. The link between lung and nose may have been discovered in animals. The remaining associations are purely hypothetical. Su wen 5 proposed a list of associations that agrees with none of the texts just quoted. Here, the opening of the lung is the nose, the opening of the heart is the tongue, the opening of the spleen is the mouth, the opening of the kidneys is the ears, and the opening of the liver is the eyes. Su wen 4, in turn, links the ears to the heart and the two lower orifices to the spleen, with the three remaining associations identical to those in Su wen 5. This, of course, is the position of the Qing xing section of the Bai hu tong yi, which dates back to the list of associations proposed in the section Di xing xun of the Huai nan zi.

If there was a line of development from the *Huai nan zi* to the *Bai hu tong yi* to the *Su wen*, as was proposed by Yu Zihan et al.,<sup>287</sup> this would indicate that the nonmedical texts were closer to the morphological facts than was the *Su wen*. For the Di xing xun section of the *Huai nan zi*, we can state that a majority of three associations, between lung and nose, between kidneys and lower orifice(s), and between stomach and mouth, are meaningful from an empirical perspective. With the stomach replaced by the spleen, only two associations make morphological sense in the Qing xing section of the *Bai hu tong yi* and in *Su wen* 4: those asserted to exist between nose and lung and between kidneys and lower orifices. In *Su wen* 5, then, with the kidneys linked to the ears, only the association between lung and nose is morphologically justified.

4.9. The Organism as a System of Morphological Entities and Their Functions Above we have examined the identification of the individual primary and secondary organs and the links that were established between the core organs and the orifices. Over time, the entire body was perceived as an organism, that is, as a system of tangible organs and secondary body parts closely related to each other not only morphologically but also functionally. As Su wen 44 states:

The lung rules the body's skin and body hair. The heart rules the body's blood and vessels. The liver rules the body's sinews and membranes. The spleen rules the body's muscles and flesh. The kidneys rule the body's bones and marrow.<sup>288</sup>

Because of such associations, a disease in the "ruler" affects the subordinates, and, vice versa, if the subordinates are affected by a disease for too long, it will spread to the ruler and jeopardize its well-being too. Hence *Su wen* 43 has the following account of consequences resulting from neglect of a disease affecting specific body parts.

When a bone block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the kidneys.

When a sinew block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the liver.

When a vessel block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the heart.

When a muscle block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the spleen.

When a skin block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the lung.<sup>289</sup>

When the spleen is hot, then the stomach dries, and one is thirsty. The muscles and the flesh are numb. This develops into limpness of the flesh.<sup>290</sup>

The links between rulers and palaces, as well as between rulers and subordinates, are the conduits and vessels. They transport blood as well as proper or evil qi, thereby serving to transmit well-being or disease from one part of the organism to another, either from the top downward or from the lower levels upward, either from inside to outside or from outside to inside. All imaginable threats and avenues of danger arising in a state itself or encroaching on it from outside, affecting the rulers first or originating in their subordinates, were reflected in the ailments to which a human organism might succumb. This was the holistic view of health and disease on which the *Su wen* was based.

#### 5. BLOOD AND QI

No extraordinary intellectual capabilities or philosophical reasoning is required to realize the importance of breath and blood for the sustenance of life. The effects of suffocation by blocking the nose and mouth, as well as of prolonged bleeding from wounds inflicted in battle or received by accident, should be considered sufficient evidence of the existence of two constituents

of the body that deserve particular attention. These constituents were named haima and pneuma in ancient Greek medicine; they were termed xue  $\pm$  and qi  $\pi$  in ancient Chinese medicine.

While there is no problem in rendering *xue* and *haima* in the same way, as "blood," in today's language, a similar one-to-one equivalent for *qi* is difficult to name. Marielene Putscher has pointed out the many meanings that were added, in historical layers, to the original notion of pneuma as breath.<sup>291</sup> No single modern term exists that could encompass all these meanings and layers. The concept of qi also has undergone numerous emendations and reinterpretations, and it should not be surprising that it is impossible to subsume all these emendations and reinterpretations under one concept and under one term in twentieth-century usage. No one could render the European term *spiritus* adequately into modern Chinese; its application extends from *spiritus camphoratus* to *spiritus animalis* to *spiritus sanctus*, a continuum of meanings lacking a common denominator in Chinese.

In early Chinese medical texts, the heterogeneity of meanings associated with the term qi was not as far advanced as in later centuries. Harper has argued convincingly that a translation of qi as "vapor," "retaining the sense of qi as something material but simultaneously volatile and pervasive," is quite adequate for a reading of the Mawangdui manuscripts, as long as certain denotations that were associated with "vapor" in old Western medical usage are not allowed to intrude.  $^{292}$ 

Beginning with Anaximenes of the 6th century B.C., ancient Greek philosophers spoke of pneuma instead of air/aer when they described the primordial stuff pervading the universe, a stuff that is constantly moving and that, through conglomeration and dispersion, forms all things. Pneuma is etymologically related to *pnein*, "to breathe." Given the ancient Chinese association of qi with breath cultivation in macrobiotic hygiene, it is here where at least a few parallels between ancient Greek and ancient Chinese perceptions may be postulated.

By the time the treatises that found entrance into the Su wen were written, a wealth of philosophical, macrobiotic, and medical considerations had been attached to the term qi.<sup>294</sup> While "it is not clear whether qi originated as a word for atmospheric vapors (clouds, steam, etc.) which was generalized to encompass the source of human vitality and everything else; or whether qi was a term for the life-sustaining stuff received from food, drink, and air or breath, which was extended to the natural world,"<sup>295</sup> the composition of the standard graph suggests a parallel to the ancient Greek notion of "vapors originating from food" that figured so prominently in the biology of Aristotle and in some Hippocratic writings.<sup>296</sup>

However, usages in several contexts in the *Su wen* suggest that an original meaning of "vapor" had become highly abstracted in the meantime. For ex-

ample, it is difficult to imagine what changes a vapor has undergone in the vessels to "harm" it. Hence we have preferred, in the translation of the *Su wen*, a transliteration of *qi* as qi. Although this transliteration has the drawback of entirely obfuscating the conceptual roots of the term, it makes it easier to juxtapose and compare qi with pneuma, thereby differentiating between a uniquely Chinese and a uniquely European tradition regarding an increasingly complex understanding of a certain "material and yet volatile and pervasive" constituent of the human organism.

### 5.1. Blood

The developments in the terminology of blood vessels and conduits as well as in the move from bloodletting to qi manipulation, which appear to have taken place at some time between the late Zhou and early Han eras, suggest that the significance of blood was conceptualized earlier than that of qi. Blood, one of the Mawangdui manuscripts states, forms during the fourth month of pregnancy when "water is bestowed on" the embryo; vapor forms only during the fifth month, when "fire is bestowed on it."<sup>297</sup>

Elsewhere, the Mawangdui manuscripts mention blood in passing in the nonphysiological context of a blood abscess,  $^{298}$  and as a liquid leaving the body, for instance from hemorrhoids $^{299}$  or wounds. $^{300}$  However, on several occasions blood is referred to, sometimes with qi/vapor, reflecting physiological concepts of the importance of a continuing movement of these agents. As for instance in *Shi wen* + 問:

As a rule, the mainstay for ordering government must begin from the body. When blood and vapor ought to move yet do not move, this is called the calamity of blockage, and is something that controls the six extremities. So, the continuity of vapor and blood . . . cannot be set aside and forgotten. <sup>301</sup>

Notions of a state of repletion of blood as an ideal state are conveyed in another Mawangdui manuscript, the *Tian xia zhi dao tan* 天下至道談:

The gentleman dwells in peace and happiness. . . . [V]apor and blood are replete; and the body is light and lithe.  $^{302}$ 

A few lines later, however, the statement "vapor and blood are replete" appears in a pathological context. 303 Blood is known to congeal; 304 a diagnosis of "blood that has died" entails the death of that patient. 305

The full extent of what the authors of the Mawangdui manuscripts may have known about blood and of how they conceptualized its role in the organism cannot be gleaned from these texts. The *Su wen* too lacks a systematic discourse on the blood. Nevertheless, the 319 usages of the term *xue* in the *Su wen* reveal quite a bit about the notions associated with the flow of blood in the organism.

A special relationship was believed to exist between the blood and the heart. "All blood is tied to the heart." "The heart rules the body's blood and vessels." "Fullness" in the heart manifests itself in fullness in the blood vessels. 308

"The heart generates the blood." The blood, in turn, "generates the spleen." That is, the association of the blood with the core organs is not as one-dimensional as it might appear at first glance. At one place, the liver is said to play a role in the generation of blood and qi; elsewhere the liver is said to store the blood. 12

We can only speculate whether different schools of thought coexisted, one proposing a special relationship between blood and heart, others proposing one between blood and, for example, the liver, or whether these links between the blood and two different core organs were not regarded as contradictory and were developed by the same school. The latter assumption, at least, is somewhat justified by a statement associating a loss of blood through the lower orifices with a disease affecting the heart and the liver simultaneously and causing a "flush" in both of them. <sup>313</sup>

The close association between liver and blood is outlined in yet another context. From *Su wen* 10 we learn

When man lies down, the blood returns to the liver. When the liver receives blood, one can see. When the feet receive blood, one can walk. When the palms receive blood, they can grasp. When the fingers receive blood, they can hold.<sup>314</sup>

This is the only passage in the *Su wen* tracing specific functions of body parts to the presence of blood. This passage is also noteworthy because it informs its readers that the blood appears to leave the liver as an overnight shelter in the morning and returns there at night, that is, when a person lies down to sleep. No statement in the *Su wen* explicitly suggests the notion of blood circulation; as I discuss below, the only reference to circulation in the *Su wen* is an isolated statement speaking of the "contents of the conduits" in general.<sup>315</sup>

Like its physiological companion, the qi, the blood may reverse the direction of its flow and "move contrary [to its regular course] in the conduits." Blood can congeal inside the vessels, a pathological process that of course stops its flow. Again, this is not necessarily a circulation-type flow; it is often considered more like a movement "to and fro" in that the blood leaves a certain position and should return there later. Once it congeals, this of course is no longer possible. Hence

when someone has lain down and then walks out, and wind blows at him, and when the blood congeals in the skin, this is block.

When it congeals in the vessels, this is retarded flow. When it congeals in the feet, this is receding [qi]. In these three cases, the blood has passed but cannot return to the void it [has left]. 318

It is interesting to note that an unimpeded flow is to be striven for as an end in itself:

The sages arranged yin and yang [in such a way that their] sinews and vessels were in harmony, [their] bones and marrow were solid and firm, and [their] qi and blood both followed [their usual course]. If one carefully balances the five flavors, the bones are upright and the sinews are soft. As a result, qi and blood flow. 320

Unlike the flow of qi, which is discussed below, the mere flow of and hence supply with blood represents health; stagnation, blockage, reverse flow, and depletion in specific body parts represent disease. The warning against the detrimental effects of stagnation was derived from observations of the quality of flowing and stagnant water. A "flowing water" analogy is found both in the Jin shu 畫數 essay of the *Lü shi chun qiu* of 239 B.C. and in the *Mai shu* text of the Zhang jia shan manuscripts of perhaps the second century B.C.:

Now, the reason why flowing water does not become putrid and the doorway pivot is not devoured by bugs is because they move. 321

The blood itself is not an inert substance. Its proper flow is tied to the presence of warmth:

When heaven is cold and when the sun is hidden, then the blood in man congeals.<sup>322</sup>

When evil enters the vessels, if it is cold, then the blood congeals and freezes.<sup>323</sup>

When blood is exposed to an excessive intake of salty flavor, it will be harmed. 324

## Also,

to observe over a long time harms the blood.325

At least one passage in *Su wen* 62 speaks of "bad blood" and warns of the harmful, pathogenic effects it can cause when entering the conduits:

Look for the blood network [vessels], pierce them and let their blood. Do not allow bad blood to enter the conduits and generate a disease there.<sup>326</sup>

Pain is an indicator of the presence of both "undispersed" blood, that is, blood accumulations, <sup>327</sup> and depleted blood. <sup>328</sup> The idea of a pathological insufficiency or depletion of blood was as plausible to ancient Chinese physicians as it was to their Greek contemporaries. It was sometimes tied to blood loss, sometimes interpreted as resulting from excessive emotions, sometimes said to be associated with the phase of the moon, and sometimes seen in conjunction with an unbalanced distribution of blood in the yin and yang regions of the organism.

Blood, to sum up, is treated in the *Su wen* on a conceptual level that does not present a reader at the turn of the twenty-first century with any significant problems of understanding. Although modern physiological knowledge makes it impossible to repeat some of the statements quoted above, nothing of what has been said on "blood" in the *Su wen* is to be considered enigmatic or, judged from the context of ancient Chinese theories, absurd.

### 5.2. Qi

As viewed in references to it in the *Su wen*, qi is often a companion of blood; blood, however, is not necessarily a companion of qi. That is, it is more difficult to write about blood without mentioning qi than vice versa. As I elaborate in section 6, at some time during the early Han dynasty the diagnosis of disease through an assessment of the status of blood gave way to diagnosis by means of an interpretation of the qi movement in the vessels, and a treatment designed to let blood was replaced by an application of needles to influence the flow of qi. The *Su wen* documents all stages of these developments. It is obvious, however, that by the time most of the *Su wen* treatises were written, physiology and pathology and diagnosis and treatment were largely directed at manipulating the organism's qi.

Several treatises in the *Ling shu* suggest that the concept of qi resulted from an attempt at broadening an older concept of wind. In these *Ling shu* treatises, a development is visible from the perception of wind as a demon to its perception as a nonmetaphysical agent able to cause disease to a disease entity itself. This conceptual development includes growing recognition of an individual response to a common pathological factor. That is, at one time a question is raised as to why not all people fall ill even though everybody is stricken by wind.<sup>329</sup> The introduction of qi as an unavoidable environmental factor, as a physiological necessity, and as a potentially harmful agent represented a significant cultural achievement in the quest for answers to issues such as causation and response, or normality and deviation.

The Mawangdui manuscripts, interestingly enough, do not mention wind etiology. They are deeply imbued with the concept of vapor/qi. The "pathogenic conditions of vapor in the vessels," as Harper observes, "take several forms: surplus or insufficiency, vapor which moves in the wrong direction,

as well as blockage."<sup>330</sup> This, of course, is very much the list of pathogenic conditions associated in the *Su wen* with blood.

That is, if the Mawangdui manuscripts are to be identified as the earliest stages of a gradually unfolding application of the concept of qi in a medical context, qi conceptualization may have started from what was known about blood (albeit such knowledge is not attested in pre–Su wen texts). Subsequently, the concept of qi departed to ever more complex associations, leaving the concept of blood far behind. The stage of development encountered in the Su wen offers evidence of an increasingly widening gap between the levels of conceptualization achieved regarding qi and blood.

It is only through a comparison of the *Su wen* with the Mawangdui and Zhang jiashan manuscripts and other texts from the fourth to second centuries B.C. that another origin of qi conceptualization can be traced—macrobiotic thinking and breath cultivation.<sup>331</sup>

Read alone, the introductory paragraphs in  $Su\ wen\ 2$  simply reflect an idea of the human organism as an integrated part of the universal macrocosm. Or, as Harper puts it, " $Su\ wen\ 2$  opens with a discussion of harmonizing the body with the seasons . . . to demonstrate the correlation between the microcosmic body and macrocosmic processes across the seasons":  $^{332}$ 

The three months of spring, they denote effusion and spreading. In heaven and earth everything comes to life; the myriad beings prosper.

Go to rest late at night and rise early.

Move through the courtyard with long strides.

Dishevel the hair and relax the physical appearance, thereby cause the mind to come to life.

Generate and do not kill.

Give and do not take.

Reward and do not punish.

This is correspondence with the qi of spring, and it is the Way to nourish life.

Opposing it harms the liver.

In summer, this causes changes to cold, and there is little to support growth. 333

The same structure is repeated in the next three sections, devoted to appropriate behavior in summer, autumn, and winter. The aim of following the advice given here is to support complete identity between macrocosmic processes occurring in nature and physiological processes known to occur in the human organism. That is, in spring one has to behave in such a way that new "life is nourished" and that "growth" can happen in summer; in sum-

mer one has to behave in such a way that "growth is nourished" and that "gathering" can happen in autumn; in autumn one has to behave in such a way that "gathering is nourished" and that "storage" can happen in winter; and in winter one's behavior must ensure that "storage is nourished" and that renewed "generation" can begin in spring. This was a step away from or a tradition developing parallel to pure breath cultivation, whose primary aim was also to achieve a long life by nourishing the entire organism with "breath," "vapor," or qi. 334

Also in *Su wen* 2, the effects of losing accord with the seasons are delineated in more detail. To neglect the necessary correspondence between one's behavior, that is, one's personal hygiene, and the requirements of the seasons has an immediate effect on the well-being of the core organs.

If one acts contrary to the qi of spring, then the minor yang does not come to life. The liver qi changes internally.

If one acts contrary to the qi of summer, then the major yang does not grow. The heart qi is empty internally.

If one acts contrary to the qi of autumn, then the major yin does not collect. The lung qi burns and there is fullness.

If one acts contrary to the qi of winter, then the minor yin does not store. The kidney qi is turbid and in the depth.

Now.

the yin and yang [qi] of the four seasons, they constitute root and basis of the myriad beings. Hence, the sages in spring and summer nourish the yang, and in autumn and winter nourish the yin, and this way they follow their roots. 335

The first four paragraphs and the fifth paragraph quoted above do not really fit. To act contrary to the qi of a season is rather different from nourishing, in one's organism, the yin or yang qi, depending on whether the current season is spring and summer or autumn and winter. In the latter case, the four seasons are seen as supplying the myriad beings, including, of course, man, with yin or yang qi, and man does well to ingest as much as possible or just the adequate amounts. The message of the first four paragraphs is that the qi of each of the four seasons represents a specific quality rather than a "qi as something material but simultaneously volatile and pervasive," as we encountered it in the Mawangdui manuscripts. One should lead one's life

in harmony with this quality rather than strive for longevity by ingestion of a particular spring qi, summer qi, and so on.

It is difficult to reconstruct what exactly ancient Chinese naturalists may have thought. The concept of acting against may have been linked to warnings in some *Su wen* passages against dressing lightly when winter cold required one to dress in warm clothes, or against eating too much hot food when the season required one to consume something cooling. Also, several passages in the *Su wen* permit an interpretation of the qi of the seasons as concrete bestowals on the myriad beings. And yet, heterogeneous as the *Su wen* contents are, we may hypothesize that some authors had abandoned such donorrecipient concepts, moving, as the four paragraphs quoted from *Su wen* 2 suggest, toward an abstract notion of seasonal qi as an all-transcending, seasonally changing quality instead. The primordial stuff of the ancient Greeks received its particular qualities—warm, cold, moist, dry—from the seasons. <sup>336</sup> Notions of a comparable degree of abstraction may have found literary expression in some of the *Su wen* statements.

Returning to the donor-recipient concepts, two pairings can be distinguished in the *Su wen*: first, heaven and earth as donors bestowing yang and yin qi on the myriad beings; second, solid and liquid food bestowing qi on man. *Su wen* 16 links the heaven-and-earth-as-donors model to a six-step seasonal development in the course of a year. Human physiology follows this development in that "the qi of man" moves from the liver to the spleen to the head, and so on.

In the first month and in the second month, the qi of heaven begins to spread; the qi of the earth begins to effuse; the qi of man is in the liver.

In the third month and in the fourth month, the qi of heaven spreads properly; the qi of the earth effuses firmly; the qi of man is in the spleen.

In the fifth month and in the sixth month, the qi of heaven is abundant; the qi of the earth has moved upward; the qi of man is in the head.

In the seventh month and in the eighth month, the yin qi begins to kill; the qi of man is in the lung.

In the ninth month and in the tenth month, the yin qi begins to freeze; the qi of the earth begins to be closed in; the qi of man is in the heart.

In the eleventh month and in the twelfth month, the freezing is repetitive; the qi of the earth is enclosed; the qi of man is in the kidneys.<sup>337</sup>

Once again, this paragraph reminds one of the difficulties of sorting out the different conceptual levels in the *Su wen*. In hindsight, the notion of a qi moving in bimonthly steps from one body part to the next, at one time even leaving the core organs to reside in the head, neither overlaps with notions, expressed elsewhere, of a constant monodirectional or even circulatory flow nor agrees with models presented, for example, in *Su wen* 18 and *Su wen* 61. The former offers the following model of a fivefold movement in the course of the year.

```
[In spring,]
the true [qi] of the depots disperses into the liver.
The liver stores the qi of sinews and membranes. . . .

[In summer,]
the true [qi of the] depots penetrates into the heart.
The heart stores the qi of the blood and the vessels. . . .

[In late summer,]
the true [qi of the] depots provides moisture to the spleen.
The spleen stores the qi of the muscles and of the flesh. . . .

[In autumn,]
the true [qi of the] depots rises high into the lung to stimulate the passage of the camp [qi] and protective [qi], 338 of yin and yang [qi]. . . .

[In winter,]
the true [qi] of the depots descends into the kidneys.
The kidneys store the qi of the bones and of the marrow. 339
```

In Su wen 61, as in the paragraphs just quoted from Su wen 18, heaven and earth are not mentioned as sources of qi; rather, a general principle appears to be at work. In Su wen 18, this general principle divides the year into five periods, following the mutual-generation order of the five-agents doctrine. In Su wen 61, only four periods are left, and although the order of these seasons and their associated agents is reminiscent of the mutual-generation order of the five-agents model, the author of the text obviously saw no problem in omitting the central agent soil, thereby jumping from fire directly to metal. The latter agent is, of course, overcome or eliminated by the former:

In spring, the wood begins to govern.

The qi of the liver begins to emerge.

The liver qi is tense; the wind of this [season] is swift.

The regular location of the conduit vessels is in the depth.

Their qi is diminished.

It cannot enter the depth. . . .

In summer, the fire begins to govern.

The qi of the heart begins to grow.

The vessels are lean, and the qi is weak.

The yang qi remains [at its place] and overflows.

The heat steams the partings of the skin structures;

internally it reaches the conduits. . . .

In autumn, the metal begins to govern.

The lung moves forward to gather and kill.

The metal moves forward to dominate the fire.

The yang qi is at the confluences, and

the yin qi begins to dominate.

Dampness qi reaches the body.

The yin qi does not abound yet;

it cannot enter deeply yet. . . .

In winter, the water begins to govern.

The kidneys are about to close.

The yang qi is weak and diminished;

the yin qi is firm and abounds.<sup>340</sup>

It may well be that the author who wrote these lines was also the author, or at least had knowledge, of another passage in *Su wen* 29 pointing out that the agent soil rules no season of its own but dominates for eighteen days at the end of each individual season. Nevertheless, the following statement is not very helpful in solving the issue of the broken-generation order in the statement quoted from *Su wen* 61.

[Huang] Di:

The spleen does not rule [a specific] season;

how is that?

Qi Bo:

The spleen, that is the soil.

It governs the center.

Throughout the four seasons it tends the four depots.

In each [season] it is entrusted with government for eighteen days;

it cannot rule an [entire] season by itself.

The spleen depot is permanently endowed with the essence of the stomach,

[i.e., of] soil.

As for the soil,

by generating the myriad beings,

it takes heaven and earth as laws.

Hence

in the upper and lower [parts of the body] it reaches head and feet;

it cannot rule a [specific] season by itself.341

One wonders what criteria the editors of the earliest *Su wen* collection of treatises may have applied. Did they include all texts related to the issues treated here that they could find? Did they select, leaving out some, from a larger spectrum of relevant texts that were compiled—perhaps a little later—in the *Ling shu*? And if so, were the texts selected meant to convey a systematic knowledge of human existence and its links, in health and disease, with the natural environment? Or were these texts meant to be an anthology, providing readers with examples taken from as many schools of thought as possible? None of these questions will ever be answered satisfactorily; all we get from the *Su wen* is an impression of numerous excerpts from larger systems of ideas whose total extent remains hidden.

Scattered statements in *Su wen* 19, 21, and 29 are cases in point. As if taken from a much larger context, they convey ideas about the nutritive value of qi. If compared with the detailed hypotheses written down by Galen at approximately the same time as the *Su wen* collection was compiled, it is hard to assume that the knowledge of the supply of individual organs and body parts with qi that found entrance into the *Su wen* represents all the knowledge gained on this issue by physicians and other naturalists in ancient China.

The basic idea conveyed in Su wen 21 is one of an extraction of qi from the food in the stomach. In the stomach, an "essence" part of the qi is transmitted to the liver. In addition to the essence part of qi, a "turbid qi" is extracted from the food in the stomach; it is separated there from the essence part and is transmitted to the heart. Qi that is not needed by the liver is transmitted directly to the sinews. Essence that is "excessive" is transmitted directly to the vessels.  $^{342}$ 

Beverages, *Su wen* 21 continues, enter the stomach too. "Overflowing essence qi is transported upward to the spleen. The spleen qi spreads the essence, which turns upward to the lung."<sup>343</sup>

Apart from an interesting and yet isolated assertion that qi of food is transmitted to the liver, which is reminiscent of the passage of food through the organism claimed by Galen, the reader of *Su wen* 21 is left to speculate how the "stomach spreads essence to the liver" and why, of all places, it is the liver where the essence has to move first. After all, *Su wen* 29 offers a different view. It is a little less apodictic but must have been quoted from a context other than the statement that found entrance into *Su wen* 21; here the stomach transmits all its qi via the spleen.

[Huang] Di:

When the spleen has a disease and the four limbs do not function, how is that?

Qi Bo:

All the four limbs are supplied with qi by the stomach,

but [the stomach qi] is unable to reach the conduits [directly]. It is only because of the spleen that the [four limbs] get their supplies.

Now,

when the spleen has a disease and is unable to move the liquids on behalf of the stomach,

the four limbs are not supplied with the qi of water and grain.

[Their] qi weakens day by day;

the vessel paths are no [longer] passable.

The sinews and the bones, the muscles and the flesh,

none of them has gi to live.

Hence, they do not function.<sup>344</sup>

A little farther in the text, one of the few examples in the *Su wen* is encountered in which a physiological statement is met by a morphological-anatomical question. At some time and at least in one school of thought, such questions must have been meaningful, or they would not have been raised. One may wonder why such a tradition was not developed further and did not stimulate later generations to ask similar questions in view of the fact that the following dialogue was read by innumerable physicians, philosophers, and naturalists for almost two millennia.

#### [Huang] Di:

Spleen and stomach are connected through a membrane; nevertheless [the former] can move the liquids of the [stomach] on behalf of the [latter].

How is it that?

#### Qi Bo:

The foot major yin [conduit] is the third yin.

This vessel passes through the stomach, touches the spleen, and encloses the throat.

Hence, the major yin [conduit] moves qi on behalf of the [stomach] to the three yin [conduits].

As for the yang brilliance [conduit], it is the outside.

It is the sea for the five depots and six palaces.

It too moves qi on behalf of the [stomach] to the three yang [conduits].

The depots and the palaces, they all receive their qi from the yang brilliance through these [two] conduits.

Hence,

[it is they who] move the body liquids on behalf of the stomach.

When the four limbs are not supplied with the qi of water and grain,

they will increasingly weaken day by day.

The yin paths are no [longer] passable.

The sinews and the bones, the muscles and the flesh,

none of them has qi to live.

Hence,

they do not function.345

Regardless of whether further transmission occurs via the liver, the heart, or the spleen, it was generally accepted that the stomach acted as the primary source of qi in the organism. At least the *Su wen* contains no statement to the contrary. In addition to the account quoted above from *Su wen* 18, with its rather straightforward physiological and pathological views, *Su wen* 18 has a section presenting the concept of stomach-supply on a somewhat higher theoretical level. Accordingly, the vessels show a movement that should be a good mix of stomach qi and of qi originating in the core organs. How such a mix is achieved, readers are not told. They are informed, however, that well-defined aberrations from an ideal mix are signs of various degrees of disease and possibly fatal. Why a certain abnormal mix indicates a more or less severe disease, or even imminent death, is explained, in addition to the concept of a presence versus absence of stomach qi, in terms of the five-agents doctrine.

The system underlying the quote below is such that an absence of stomach qi is fatal. Presence of much stomach qi and a little qi associated with the respective season (i.e., in spring, qi of wood, which causes a stringlike movement; in summer, qi of fire, which causes a hooklike movement; in late summer, gi of soil, which causes a soft and weak movement; in autumn, gi of metal, which causes a hairlike movement; in winter, qi of water, which causes a stonelike movement) indicates a "normal" situation. A reversed mix of little stomach gi and much seasonal gi indicates a disease in the core organ associated with the respective season. A movement indicating a mix between stomach gi and a gi associated with that season which is representative of the agent dominating the agent of the present season (i.e., a hairlike/ metal movement mixed with stomach qi in spring/wood) is a disease associated with that dominating season, possibly indicating that the main problem is yet to come. Finally, a movement indicating a mix between stomach qi and much qi associated with the agent dominating the agent associated with the present season is called a "present disease."

The text is quoted here in full, including comments already added in antiquity and indicated here by curly brackets { }.

The regular qi of a normal person is supplied by the stomach.

{The stomach [qi] is the regular qi of the normal person.}

When someone has no stomach qi, that is called "movement contrary [to a regular course]."

A movement contrary [to a regular course results in] death.

When in spring [the vessels have] stomach [qi and exhibit a] slightly string[like movement], that is called "normal."

If it is mostly string [like] with diminished stomach [qi present], that is called "liver disease."

If it is only string[like] with no stomach [qi present], that is called "fatal."

If stomach [qi is present] and if [the movement] is hair[like], that is called "autumn disease."

If it is very hair[like], that is called "present disease."...

When in summer [one feels] stomach [qi together with a] slightly hook[like movement in the vessels], that is called "normal."

If it is mostly hook[like] with diminished stomach [qi present], that is called "heart disease."

If it is only hook[like] with no stomach [qi present], that is called "fatal."

If stomach [qi is present] and if one has a stone [like movement in the vessels], that is called "winter disease."

If [the movement is] very stone[like], that is called "present disease." . . .

When in late summer [one feels] stomach [qi together with] a slightly soft and weak [movement in the vessels], that is called "normal."

If [the movement is] mostly weak, with diminished stomach [qi present], that is called "spleen disease."

If it is only intermittent with no stomach [qi present], that is called "fatal."

If [the movement is] soft and weak, and also stone [like], that is called "winter disease."

If it is very weak, that is called "present disease." . . .

When in autumn [one feels] stomach [qi together with] a slightly hair[like movement in the vessels], that is called "normal."

If [the movement is] mostly hair[like] with diminished stomach [qi present], that is called "lung disease."

If it is only hair[like] with no stomach [qi present], that is called "fatal."

If [the movement is] hair[like] and if there is also a string[like movement], that is called "spring disease."

If it is very string[like], that is called "present disease."...

When in winter [one feels] stomach [qi together with] a slightly stone[like movement in the vessels], that is called "normal."

If [the movement is] mostly stone[like] with diminished stomach [qi] present, that is called "kidney disease."

If it is only stone [like] with no stomach [qi present], that is called "fatal."

If [the movement is] stone[like] if there is also a hook[like movement], that is called "summer disease."

If it is very hook[like], that is called "present disease." 346

#### Huang Di:

When one notices a [movement of the] true [qi of the] depots, this is called "fatal."

Why?

Qi Bo:

All the five depots are supplied with qi by the stomach.

{The stomach is the source of the five depots.}

The qi of the depots cannot arrive by itself at the hand great yin [conduit]; it is only in conjunction with the stomach qi that it can arrive at the hand great  $\sin^{347}$ 

Hence,

[the qi of] each of the five depots,

when its time [of dominance has come],

it is in its specific manner that it arrives at the hand great yin.

Hence

when evil qi dominates,

the essence qi is weakened.

Hence,

in the case of severe diseases, the stomach qi cannot arrive together with it at the hand great yin.

Hence,

the true qi of the depot appears alone.

When it appears alone, the disease has dominated the depot.

Hence.

this is called "fatal."348

We do not need to go into further detail to explain these paragraphs; the full extent of their meaning is discussed in the notes added to their translation. What is of interest here, however, is a gradual transition to elaborate notions of qi movements in the organism. The many different conceptual layers of the *Su wen* permit neither the presentation of its contents as one coherent system nor—at least for the time being—the tracing of a historical development. It is legitimate, though, to distinguish between various explanatory models and to analyze their respective degrees of theorization. Occasionally attempts are visible in the *Su wen* to bridge the models, for example when an ancient commentary in *Su wen* 7 states:

{As for the so-called yin [qi], these are the true [qi of the] depots. . . . As for the so-called yang [qi], this is the yang [qi] of the stomach duct,} $^{349}$ 

The *Su wen* is full of references to the yang qi and to the yin qi and to their importance for the life cycles of the myriad beings. In general, yang qi is defined as the qi bestowed by heaven, yin qi is the qi bestowed by the earth. Together with the changing qi influencing the myriad beings in the course of the seasons, the differentiation between yin and yang qi may have constituted an early, rather general model to explain health and disease, generation, growth, and decay. Hence *Su wen* 2 concludes:

Yin [qi], yang [qi], and the four seasons, they constitute end and beginning of the myriad beings,

they are the basis of death and life. Opposing them results in catastrophe and harms life. If one follows them, severe diseases will not emerge. This is called "to achieve the Way."<sup>350</sup>

As clear as such a statement may be, it leaves open the question how the qi enter the organism and how they are distributed in the body. It is here that the stomach-as-source model was developed. As we have seen, though, the qi transmitted from the stomach to the various body parts are not the only qi forming the movement in the vessels; the latter are also filled with the "true qi of the depots." It is nowhere specified, though, whether the true qi of the depots was supplied to the depots by the stomach in the first place, whether it was produced by the depots, or whether it was presumed to have another origin. At any rate, the author of the ancient commentary quoted from  $Su\ wen\ 7$  above attempted to link the general model of yin and yang qi moving through the vessels with the dualism of stomach qi and "true qi of the depots." It is doubtful whether this is what the author of the commentary had in mind when he wrote:

The [movement in the] vessels may be yin or yang.

If one knows the yang [nature of a movement], one [also] knows the yin [nature of a movement];

if one knows the yin [nature of a movement], one [also] knows the yang [nature of a movement]. 351

Similarly, one may conclude—to quote one final example—that the author of a statement based on the general model in *Su wen* 17 certainly did not think of stomach qi and of the true qi of the depots when he distinguished between the different effects of yang qi and yin qi surplus on the organism:

In the case of rough [movements in the vessels], the yang qi is present in surplus;

in the case of smooth [movements], the yin qi is present in surplus.

When the yang qi is present in surplus, the body will be hot without sweating; when the yin qi is present in surplus, one will sweat a lot and the body will be  ${\rm cold.}^{352}$ 

We have examined general effects of yin and yang qi, originating in heaven and earth, on the organism, and we have discussed some aspects of the movement of yin and yang qi in the organism. We have also examined the supply of the body parts with qi through the stomach, the liver, the spleen, and the vessels (the latter are discussed in more detail below). One additional aspect of qi physiology and pathology should be pointed out here: the association of qi with human emotions.

It may not be seem far-fetched when ancient Chinese naturalists presumed

that the material body parts were nourished through a constant supply of qi. However, it was not at all a matter of course and required a certain degree of imagination when they conceptualized emotions as separate entities produced from qi. If we return to the original meaning of qi identified by Harper as "vapor," we realize now the intellectual dynamics that shaped the view of the human organism in the decades or centuries following the compilation of the Mawangdui manuscripts. A person laughs or weeps, is angry or full of fear; to assume that these emotions are produced by core organs from qi is a remarkable step beyond the notions of breath and vapor:

Man has the five depots; they transform the five qi, thereby generating joy, anger, sadness, anxiety, and fear.<sup>353</sup>

This statement can be read as conveying a notion of emotions being one possible endpoint in the transmission of qi through the organism. Qi is ingested through food and beverages. The stomach separates clear and turbid qi and transmits both to further recipients in the body. The core organs are among these recipients; they transform some of the qi they are supplied with into emotions.

In a different context, in *Su wen* 39, the emotions in turn affect the qi. Once again, a fictitious question-and-answer exchange between Huang Di and Qi Bo serves as a stylistic method employed by the *Su wen* compilers to bridge what they already may have considered different conceptual models.

The question, put into the mouth of Huang Di, starts from the traditional perception of disease as the result of some problem with qi—either that there is too much heat or too much cold, or that the patient may have consumed too much salty or too much acrid food, to name but a few possibilities. However, as appears to have been realized by some observers, the qi itself may be affected by certain emotional states.

Anger, for example, may cause a red face, which can be interpreted as a result of rising qi. Sadness causes tears, a sign, one might conclude, of dissipating qi. Fear, finally, presumably caused involuntary loss of urine or defecation two thousand years ago, as it does in some persons today. Why should this not be interpreted as qi caused to move down? A number of such relationships between emotional states and the status of qi were observed and, as we learn from the dialogue quoted in full below, required an explanation.

#### Huang Di:

I know that the hundred diseases are generated by the qi.

When one is angry, then the qi rises.
When one is happy, then the qi relaxes.
When one is sad, then the qi dissipates.
When one is in fear, then the qi moves down.

In case of cold the qi collects;

in case of heat, the qi flows out.

When one is frightened, then the qi is in disorder.

When one is exhausted, then the qi is wasted.

When one is pensive, then the qi lumps together.

These nine qi are not identical.

Which diseases generate these [states]?

Qi Bo:

When one is angry, then the qi moves contrary [to its regular course]. In severe cases, [patients] spit blood and there is outflow of [undigested]

food.

Hence,

the qi rises.

When one is joyous, then the qi is in harmony and the mind is unimpeded.

The camp [qi] and the protective [qi] pass freely.

Hence,

the gi relaxes.

When one is sad, then the heart connection is tense.

The lobes of the lung spread open and rise, and the upper burner is impassable.

The camp [qi] and the protective [qi] do not disperse.

Heat qi is in the center.

Hence,

the qi dissipates.

When one is in fear, then the essence withdraws.

When it withdraws, then the upper burner becomes closed.

When it is closed, then the gi turns around.

When it turns around, then the lower burner becomes distended.

Hence.

the qi does not move.

When one is cold, then the [skin] structures close, and the qi does not move.

Hence,

the qi collects.

When one is hot, then the [skin] structures open, and the camp [qi] and protective [qi] pass through.

Sweat flows out profusely.

Hence,

qi flows out.

When one is frightened, then

the heart has nothing to lean on,

the spirit has nowhere to return, and

one's considerations are unsettled.

Hence.

the qi is in disorder.

When one is exhausted, then one's breath is panting and sweat leaves [the body].

Both outside and inside, [the limits] are exceeded.

Hence,

the gi is wasted.

When one is pensive, then the heart has a place to be, the spirit has a place to turn to, and the proper qi stays [at one location] and does not move. Hence,

the qi lumps together.354

Qi, this lengthy response shows, is a common term to denote quite a few more or less material body parts. The reactions of qi to the emotions are explained as blood spitting and diarrhea as a result of anger, as unimpeded mind and free passage of camp and protective qi in the case of happiness, as a spread of heat in the chest in the case of sadness, as a stagnating qi and distended abdomen in the case of fear, as unsettled considerations in the case of fright, as sweating in the case of exhaustion, and as a spirit, who knows where to be, in the case of pensiveness. Qi is no longer just a vapor or a breath to be ingested out of the universe and to be distributed in the organism to achieve general well-being if not longevity. Qi continues to be breath or vapor, and at the same time it stands for everything that moves into the body, inside the body, or out of the body.

# 5.3. Camp Qi and Protective Qi

As is the case with the dual metaphor of "depots" and "palaces," the "camp (qi)" and the "protective (qi)" form a pair of conceptual opposites that have been designated with related terms nevertheless. The *Su wen* offers no straightforward explanation for why the military metaphors of *ying* 營 and *wei* 衛 were chosen to denote two types of qi moving in the organism. It is clear, though, that the concepts of camp qi and protective qi were used with different meanings by different authors of the *Su wen* texts, of the *Ling shu*, and of subsequent commentaries.

Because once again it is impossible to trace a historical development, we may as well begin our survey of the usage of the terms *ying* and *wei* in *Su wen* 43, a discourse on the important disease of "block." Blocks can be generated in the organism by various causes; at one point the question is raised whether the camp [qi] and the protective [qi], too, can "let a person have a block"? The response makes it quite clear what the author thought camp qi and protective qi referred to; the labeling itself is not addressed.

The camp [qi], that is the essence qi of water and grain. When it is harmoniously balanced in the five depots, and

when it is dispersed throughout the six palaces, then it can enter the vessels.

Hence,

it follows the vessels upward and downward, penetrates the five depots, and connects the six palaces.

The protective qi, that is the violent qi of water and grain.

This gi is fast and unrestrained and cannot enter the vessels.

Hence

it moves inside the skin and in the partings of the flesh.

It steams against the huang-membrane, and

it spreads in chest and abdomen. . . .

The [camp and the protective qi] do not merge with the qi of wind, cold, and dampness.

Hence,

they do not cause a block.356

A "block," *Su wen* 43 shows, results from a merger of the three qi wind, cold, and dampness. If such a block happens to affect the vessels, it may cause, among numerous other symptoms, a stagnation and coagulation of blood.<sup>357</sup> The camp [qi] and the protective [qi], we learn from *Su wen* 43, are two qi, the former moving inside the vessels, the latter—unable to enter the vessels—moving inside the skin. They are qi extracted from water and grain, that is, from beverages and solid food, but unlike wind, cold, and dampness, they are not in a position to cause a block.

With this information as a backdrop, we turn to *Su wen* 34. Here, Huang Di and Qi Bo entered into the following exchange:

[Huang] Di:

When a person's flesh is numb and remains numb even though one dresses [this person] tightly with padded clothes, which disease is this?

Qi Bo:

The camp qi is depleted;

the protective qi is replete.

When the camp qi is depleted, then [this results in] numbness.

When the protective qi is depleted, then [this results in] a loss of function. When both the camp and the protective [qi] are depleted, then [this results

in] numbness together with a loss of function.<sup>358</sup>

Above, in the passage quoted from Su wen 43, readers were told that the camp qi moves in the vessels and through the depots, while the protective qi moves through the skin. One would have expected that a lack of camp qi resulted in a loss of functions supervised by the depots and that a lack of protective qi resulted in a loss of sensation, a feeling that could be considered to be located in the skin. Su wen 34 has it exactly the other way around.

We can only speculate why. Maybe the contradiction is simply the result of an error in writing, some ancient scribe having unwittingly exchanged the characters *ying* and *wei*. Su wen 42, too, has an explanation for the occurrence of numbness; here, however, it is the protective qi that is responsible, as one would expect after having read Su wen 43:

When the wind qi enters by way of the major yang conduit,

it moves to the transporters of all the vessels and

disperses into the partings of the flesh.

 $[There]\ it\ clashes\ with\ the\ protective\ qi,\ whose\ passage ways\ are\ no\ longer\ free.$  Hence,

it lets the muscles and the flesh develop an obstruction swelling and have ulcers.

The protective qi coagulates at these places and fails to move.

Hence,

the flesh has [locations where it is] numb. 359

Difficult to reconcile with any of the information on camp qi and protective qi is a statement in *Su wen* 39 to the effect that

when one is hot, then the [skin] structures open and the camp [qi] and the protective [qi] pass through.

Sweat flows out profusely.<sup>360</sup>

How, one may ask, does an ancient Chinese observer of human pathology arrive at a conclusion like this? We can follow him as long as he postulates a relationship between heat and sweating, but we do not possess the slightest clue why it is the camp qi, leaving the vessels and the depots, and the protective qi, leaving the skin, that form the sweat. Of course, we do not know where the author of this passage quoted from *Su wen* 39 believed the camp qi normally was. The author of a short statement in *Su wen* 9, for example, did not think that the camp qi passed through the vessels and all the core organs; he said:

The spleen is the basis of grain storage. It is the location of the camp [qi].<sup>361</sup>

A later author supplemented this statement, adding five palaces to the spleen. Hence, in today's textus receptus, the statement reads

The spleen and the stomach, the large intestine, the small intestine, the triple burner, and the urinary bladder are the basis of grain storage.

They are the location of the camp [qi].<sup>362</sup>

Whether the author who inserted the five palaces intended merely to state that each of these, too, is "a basis of storage," or whether he meant to emphasize that all of them are "locations of the camp [qi]," too, can no longer be discerned.

If the protective qi is able to cause external lesions, so is the camp qi. In an explanation of what one is tempted in hindsight to interpret as the pathogenic mechanism of leprosy, the camp qi is responsible for destruction visible in the patient's face:

In case of li[-wind], the camp qi is hot and rots. This qi is not clear. Hence, it lets the nasal column decay and ruins the complexion.

A related statement is seen in Su wen 3:

The skin has ulcers and festers.363

When the camp qi does not follow [its regular course], but proceeds contrary [to its regular course] in the flesh structures [underneath the skin], this then creates *yong*-abscesses and swelling.<sup>364</sup>

The constant movement of camp qi and protective qi along their regular courses is recognized by most *Su wen* authors as closely tied to health. Death results "when the camp [qi] and the protective [qi] no [longer] move and when the five depots are no [longer] passable."<sup>365</sup> Hence it is good for the organism if "the true [qi of the] depots rises high into the lung to stimulate the passage of the camp [qi] and protective [qi], of yin and yang [qi]."<sup>366</sup> However, man, too, can do something to avert major problems when the passage of camp qi and protective qi is not free. It is in this context that we encounter yet another characterization of their whereabouts in the body:

The 365 holes of the meeting points of the tertiary network [vessels], they, too, correspond to a year. . . . They serve as passage[ways] of the camp and the protective [qi]. When the camp and the protective [qi] stagnate, when the protective [qi] disperses and when the camp [qi] overflows, and when the qi is exhausted and the blood is stuck, then externally this causes the development of heat and internally this causes one to be short of qi. Then drain quickly; do not lose any time to free the passage of the camp and protective [qi]. 367

This passage is the first we have quoted that combines references to camp qi and protective qi, on the one hand, and qi and blood, on the other. *Ling shu* 18 and *Ling shu* 71 have statements claiming that blood is a transformation product of camp qi. No such explicit association of the two is mentioned in the *Su wen*. The nearest we come to such an association is in *Su wen* 62:

When cold and dampness strike a person, the skin does not contract,

the muscles and the flesh are firm and tight, the camp [qi] <br/>blood> is impeded, and the protective qi leaves. 368

The sequences of *ying xue* and *wei qi* may also be read as "camp [qi, that is,] blood" and "protective [qi, that is,] qi." Such an equation, though, is nowhere else attested in the *Su wen*. One final and equally enigmatic passage from the same treatise should be quoted in this context:

[Huang] Di:

When yin [qi] and yang [qi] collect, and when, therefore, blood and qi have collected, and when, therefore, the disease has assumed a physical manifestation, to pierce such [a condition], how to proceed?

Qi Bo:

To pierce such [a condition], remove it from the conduit tunnels.

Remove the blood from the camp [region] and remove the qi from the protective [region]. 369

The *Su wen* anthology of schools of thought does not offer insights into a historical stream of conceptualization. Camp qi and protective qi are exemplary; there is no way to know where these concepts and their terms originated, and there is no way to ascertain how the individual conceptual branches just quoted relate to each other.

#### 6. THE VESSELS

Not surprisingly in a society that had been largely dependent for centuries if not millennia on an agrarian economy with a sophisticated irrigation culture, the role of conduits in the functioning of the organism gained prominent attention once the human body was seen as a system of interrelated units. Blood and qi came to be perceived as agents requiring unimpeded passage to reach those locations where they were needed. Unfortunately, not only qi that were identified as "proper" took these routes; a variety of unwelcome intruders, known to be harmful "evil qi," were soon identified to avail themselves of these pathways too.

## 6.1. Vessel Theory in the Mawangdui Manuscripts

At first the alternatives of health and infirmity were associated simply with free flow and blockage in the vessels. One of the Mawangdui manuscripts of 168 B.C. points out, "when blood and qi ought to move yet do not move, this is called the calamity of blockage."<sup>370</sup> The *Su wen* reflects this stage as

well as what appear to be subsequent historical layers in the conceptualization of vessel physiology and pathology and hence of vessel diagnosis and therapy.

Obviously, as Harper has emphasized, the Mawangdui manuscripts represent a stage when vessel theory was widely applied to but did not yet dominate medical reasoning. The When Sima Qian, early in the first century B.C., recorded an alleged statement by Chunyu Yi (216–ca. 150 B.C.) showing disrespect for "ailment names" and indicating an attempt at subsuming all illness under vessel theory, adherence to such earlier "ailment names" had by no means ceased completely. Increased communication among culture centers more or less segregated before the unification of the empire in the late third century B.C. may well have brought with it an encounter with ailment terms that did not mean much to outsiders; hence Chunyu Yi: "Ailment names are mostly alike and are unknowable. Thus the ancient sages created the model of the vessels for them."

Vessel theory was formulated not by the ancients but by natural philosophers of the third and second centuries B.C. because it was helpful and plausible for at least three reasons. First, it transferred into the organism the image of the new economic system of interrelated regional units forming a whole through an exchange of resources. Second, it rationalized the understanding of illness by removing it from earlier notions of metaphysics. Third, it enabled communication among the literati of formerly separate culture centers by replacing regionally specific namings of ailments, or, as Chunyu Yi's statement suggests, regionally specific interpretations of commonly used illness names. The notion of the importance of verbal and literal communication among the hitherto isolated units in the organism paralleled the experience of the need for an exchange of goods and people among the previously separate units in the new empire.

To be sure, the idea of the existence of vessels filled with blood may have been around for quite some time before its documentation in the Mawang-dui manuscripts. The earliest known reference to blood vessels appears in a description of a horse in the fourth century B.C. *Zuo zhuan*  $\not\equiv$   $\not\equiv$  373 By the early third century B.C., the author of a passage in the *Guan zi* compared water in the earth to blood and qi flowing through vessels in the human body. 374

The Mawangdui manuscripts speak of vessels in general, and they name specific vessels. Five of these vessels bear primary or secondary designations linking them to morphological entities: shoulder vessel, tooth vessel, ear vessel, stomach vessel, and hair vessel. However, four of these five vessels correspond to four of eleven vessels identified in terms of the complete sixfold subcategorization of yin-yang dualism: foot and forearm courses of a great yang vessel, yang brilliance vessel, minor yang vessel, great yin vessel, and minor yin vessel, as well as a foot course only of a ceasing yin vessel. Obvi-

ously this nomenclature was still in flux; whereas the Mawangdui manuscripts identified the stomach vessel as major yin vessel, the *Su wen* categorized it as a yang brilliance vessel.<sup>375</sup>

The hair vessel is the only designation that is not mentioned in the formal listing of the eleven vessels in the two Mawangdui manuscripts Zu bi shi yi mai jiu jing 足臂十一脈炎經 and Yin yang shi yi mai jiu jing 陰陽十一脈炎經; it appears only in the Shi wen + 問 in a context that leaves it open whether it refers to the hair, as in the Guo yu 國  $\mathbb{Z}_3^{376}$  or to a vessel penetrating the body. No yin-yang categorization of the hair vessel is given.

Two occurrences of the compound term  $mai\ li\ mathbb{H}$  in the Mawangdui macrobiotic hygiene texts have been interpreted by Harper as denoting the idea of a "network of vessels." Whether this idea of a "network" reflects a notion of an interconnection of the vessels in terms of an exchange of contents, or even of a systematic sequence of vessels passed by a stream of blood or qi, remains unclear. There is no direct reference in the Mawangdui manuscripts to such notions, and the term li may simply refer to crisscrossing vessels visible underneath the skin, whose image was extended to presumed patterns or "structures" (li) of vessels deeper in the body too.  $^{378}$ 

### 6.2. Vessel Morphology in the Su wen

The detailed delineation of the courses of the six yin and five yang vessels in the Mawangdui manuscripts Zu bi shi yi mai jiu jing and Yin yang shi yi mai jiu jing finds a parallel in the Ling shu treatises 10 and 11, not in the Su wen. The Su wen, in treatise 60, introduces only the courses of three vessels that are not part of the central system of six foot and six hand courses of vessels, that is, the officer, the thoroughfare, and the supervisor vessels.

In all instances it is quite apparent that the authors writing these texts must have believed they possessed a detailed understanding of the courses vessels take inside the body, often invisible to the human eye. A potential source of such knowledge is not known. *Ling shu* 12 explicitly states that "autopsies can be performed on the dead." "The hardness and the size of the organs, the amount of grain [they can take in], the length of the vessels, the clear or turbid condition of the blood, and the amount of qi [they hold] (and so on), can all be quantified."<sup>379</sup> However, apart from reports in Chapter 99 of the *Han shu* on an order issued by Wang Mang in the first century A.D. to dissect convicted criminals, which may have stimulated the statement in the *Ling shu* quoted above, <sup>380</sup> no evidence exists that allows us to trace ancient Chinese morphological knowledge in general and the detailed data on the courses of the vessels specifically to systematic efforts to explore the interior of the physical body.

It is equally unknown what may have prompted Chinese natural philosophers to add the term  $jing \not \equiv$  to the term  $mai \not k$ , "vessel." The etymology of

jing is "warp," the central thread running through and holding a woven fabric. By the time of its introduction into physiology, the original meaning had come into use to serve as a metaphor for the designation, for instance, of major streams running through all of China, or of important texts being handed on from generation to generation. In the latter sense, we encounter this term in the title *Nei jing* 內經. In the present context, we have chosen the English term "conduit" in the sense of "a natural tube through which fluid is conveyed."

No anatomical substrata corresponding to the courses of the conduit vessels described in the ancient texts are known today. Hence no claims to morphological reality are raised in modern acupuncture literature about the conduits underlying the holes in the skin where needles are to be inserted. It has become common in popular Western acupuncture texts to distinguish between tangible and therefore morphologically visible blood vessels and deep-lying conduit vessels that are considered mere theoretical constructs. See Such a distinction, however, did not exist in Chinese antiquity. All vessels, conduits, and conduit vessels were considered morphologically present.

The tangible nature of all vessels is attested not only in the more or less detailed descriptions of their courses in anatomical terms but also by a plethora of corresponding evidence. Naturally, the blood vessels exist to allow the passage of blood. Su wen 17 calls the vessels "palaces of the blood." Depending on the quality of their contents, they may show different colors; hence Su wen 57 explains that cold makes the vessels appear virid to black, while warmth and moisture makes them appear yellow to red. Su wen 18 mentions a loss of blood as responsible for the virid color of vessels visible on the surface of the arms.

In addition to blood, the vessels carry qi. Occasionally the movement in a vessel, be it of blood or of qi, is sufficiently vigorous to show on the outside of the body. In the case of the large network vessel of the stomach, the move-

ment may be forceful enough to become visible even in a corresponding movement of the garment covering the region passed by this vessel.<sup>383</sup>

The Su wen identifies several vessels as tied to specific organs. Su wen 10 refers to a link between all vessels and the eyes. Also, Su wen 62 explains that all diseases in the joints must have come there via the conduit vessels, because the twelve conduit vessels encircle all the 365 joints. Su wen 46 names the minor yin vessel as passing through the kidneys and enclosing the lung. Su wen 47 declares that the network vessels of the uterus are tied to the kidneys. If menstruation fails to set in, according to Su wen 33, this is because the uterine vessel is blocked. Su wen 47 explains that pregnancy causes such a blockage.

Most important is the morphological presence of vessels for acupuncture. After all, a tangible needle is to be inserted into the vessels to let blood or to achieve various other therapeutic ends. We shall return to the mechanical aspects of acupuncture treatment later; here, however, we should point out warnings, raised in the *Su wen*, against harm inflicted on the vessels through inappropriate insertion of needles. This applies mainly to vessels on the surface of the body or visible elsewhere with the naked eye, such as the vessels below the tongue, in the popliteal fossa, or on the instep, as outlined in *Su wen* 52. The statement in *Su wen* 76, "the conduit vessels are raptured nearby, and the five depots leak," offers further evidence of the tubular nature and physical reality attributed to all conduits and vessels in the body.

# 6.3. Vessel Pathology

Any evil wind, rain, or cold attempting to enter the body from outside will have to pass through the skin and the body hair first. The sequence of a progressive intrusion is described in similar steps in *Su wen* 27, 62, and 63. Once the barrier of skin and body hair has been overcome, the intruding agent settles in the tertiary vessels, *sun mai* 孫脈. These finest of all vessels meet, as the authors of *Su wen* 58 knew, in 365 holes corresponding to the days in a solar year. The subsequent steps of an intruding evil on its way to the interior of the body are described, in the wording of *Su wen* 63, as follows:

It stays there [for a while] and does not leave.

Then it enters [further] and lodges in the tertiary vessels.

It stays there [for a while] and does not leave.

Then it enters [further] and lodges in the network vessels.

It stays there [for a while] and does not leave.

Then it enters [further] and lodges in the conduit vessels.

It links up with the five depots internally and spreads into the intestines and the stomach.

With both the yin and the yang [regions] being affected, the five depots will be harmed.

That is the sequence whereby an evil enters through the skin and its hair and finally reaches the five depots.<sup>384</sup>

Su wen 31 offers another view of the passage of cold evil through the entire organism. Perhaps this is a more advanced conceptualization, closely tied to a presumed one-way path beginning with the major yang conduit, associated in Ling shu 10 with the small intestine and the bladder, and ending in the ceasing yin conduit associated with the heart enclosure and the liver. At each stage, different symptoms reveal the status of the intrusion. However, the author sees only one major turning point in the advance of the cold, namely, when it moves from the yang, or outer, sphere into the yin, or inner, sphere of the organism. It is only at this point that the cold can be stopped by an application of sudorifics.

[In the case of] harm [caused by] cold,

on the first day, the great yang [conduits] receive it.

Hence, the head and the neck have pain; the lower back and the spine are stiff.

On the second day, the yang brilliance [conduits] receive it.

The yang brilliance rules the flesh;

its vessels line the nose on both sides and enclose the eyes.

Hence, the body is hot, the eyes have pain, and the nose is dry.

One cannot lie down.

On the third day, the minor yang [conduits] receive it.

The minor yang rules the gallbladder;

its vessels follow the flanks and enclose the ears.

Hence, the chest and the flanks have pain, and the ears are deaf.

When all three yang conduits and network [vessels] have received this disease, and before it has entered the depots,

one can [make the patient] sweat and [the disease] ends.

On the fourth day, the major yin [conduits] receive it.

The major yin vessels spread into the stomach and enclose the throat.

Hence, the abdomen is full and the throat is dry.

On the fifth day, the minor yin [conduits] receive it.

The minor yin vessels penetrate the kidneys and enclose the lung.

They are attached to the base of the tongue.

Hence, the mouth is desiccated, the tongue is dry, and one has thirst.

On the sixth day, the ceasing yin [conduits] receive it.

The ceasing yin vessels move along the yin (i.e., sexual) organ and enclose the liver.

Hence, there is vexation and fullness, and the scrotum shrinks.

When the three yin and the three yang [conduits], the five depots and the six palaces have all received the disease, then the camp and the protective [qi] no [longer] move, the five depots are no [longer] passable, and death results. 385

Yet another account of the passage of an evil qi, in this case wind cold, through the organism is given in *Su wen* 19. The vessels are not mentioned in this account, yet one cannot imagine another means by which one depot transmits the evil qi to the next. Whereas in the passage quoted above from *Su wen* 31 transmission follows the quantitative sequence of the sixfold yinyang categorization beginning in the outer and ending in the inner section, *Su wen* 19 delineates a passage of the evil qi of wind cold starting in the skin (where it can be eliminated through sweating) and ending in the heart after passing through all five depots in the sequence of their hierarchy of mutual domination.

Hence wind cold is said to pass from the lung (metal) to the liver (wood), from there to the spleen (soil), which transmits it to the kidneys (water), before it ends up in the heart (fire). Except for the lung stage, at each stop a suitable therapeutic intervention is said to be able to stop further transmission of the disease: pressure and piercing when it is in the liver; pressure, drugs, and bathing when it is in the spleen; pressure and drugs when it is in the kidneys; and cauterization and drugs when it is in the heart. The patient does not necessarily die because the disease has reached the heart; he dies after ten days if the treatment achieves no cure.

We should recall here the biography of Bian Que in the *Shi ji* of 90 B.C., in which Sima Qian recorded various therapies suitable to rescue a patient at the different turning points in the progression of an evil into the innermost realms of an organism. Before the disease of the Marquis of Qi had reached the bones and their marrow, where it turned fatal, it could have been eliminated at three earlier stages—while it was in the skin, while it was in the vessels, and while it was in the depots.

For Sima Qian, a disease was still curable as long as it had not left the depots to advance into the bones. Similarly, in *Su wen* 16, "[the evil qi] invades the bones and their marrow, and the disease cannot be healed."<sup>386</sup> For the author of *Su wen* 31, the end of the road was the ceasing yin vessel. Once the evil qi, in this case cold, had reached this point, all depots were affected, and this meant death. That is, in *Su wen* 31, the bones and their marrow do not constitute the final sanctuary to be aimed at by an intruder to kill the host. In another context, *Su wen* 35 explicitly refers to "cold qi stored in the bone and in the marrow"<sup>387</sup> as one possible state of a disease that does not necessarily have to cause concern.

Basically, Su wen 62 asserts, the diseases of the conduit vessels may constitute a depletion or a repletion. As Su wen 53 observes, when the vessels are replete, the blood is replete, and when the vessels are depleted, the blood is depleted. Similarly, Su wen 46 points out, when the lung qi abounds, the vessels are big. However, apart from these literal understandings of replete as full, repletion is defined as the presence of an agent that does not belong. A repletion in the form of an undue presence of cold is most dangerous, because it may cause the blood to coagulate and block its passage through the vessels. Such a blockage, Su wen 62 states, may result from a mingling of blood and (proper) qi with the evil intruder. It lets the vessels appear hard and big, and it is here that the two notions of repletion meet.

## 6.4. The Contents of the Vessels

With regard to the contents of the vessels, the *Su wen* conveys a certain ambiguity. Repeatedly the text refers to a close association between the heart and the vessels. The standard phrase, as in *Su wen* 23, is "the heart rules the vessels," as in *Su wen* 44, "the heart rules the blood and the vessels." Elsewhere, in *Su wen* 9, the well-being of the heart is said to manifest itself in the status of the blood vessels. *Su wen* 10 identifies the vessels as "correlates" of the heart and refers to the blood as "tied" to the heart.

The physiological functions associated with the blood were discussed earlier;  $^{390}$  here it may suffice to state that the Su wen offers no hint at a notion of blood moving through one part of a three-tiered system of vessels and qi moving through another. The blood passes through the tertiary vessels and through the small network vessels visible underneath the skin (it is here where it should be drained through bloodletting, as Su wen 62 recommends), and it pours, as we learn from Su wen 39, into the large conduit vessels (where bloodletting is not advisable, presumably because it might lead to profuse and uncontrollable internal bleeding).

Qi too passes through all vessels. Several statements hint at a special association between the qi and the lung. *Su wen* 9 states that "the lung is the basis of the qi";<sup>391</sup> *Su wen* 62 holds that "the lung stores the qi."<sup>392</sup> The qi distributed throughout the organism by the lung is provided to the lung by the stomach:

The qi of food enters the stomach.

The turbid qi turns to the heart.

Excessive essence [flows] into the vessels.

The qi in the vessels flows through the conduits.

The qi in the conduits turns to the lung.

The lung is the meeting place of the one hundred vessels.

They transport essence to the skin and the body hair.

The hair vessels unite the essence, and they move qi to the palaces.<sup>393</sup>

Although individual authors may have advocated notions of either blood or qi passing through the system of conduits and vessels, seen as a whole the *Su wen* views these pathways as transmitters of both blood and qi. Hence, as pointed out above, not only blood and proper qi travel through the conduits and vessels; evil qi does so too. Cold qi is one example; malaria qi is another: it "follows the conduits and network vessels." Another potentially pathogenic intruder is wind. It can "enter the stomach by way of the yang brilliance [conduit]; it follows the vessels and rises to the inner canthi of the eyes." 395

### 6.5. Vessel Flow

Some of the references to the passage of blood and qi through the conduits and vessels quoted above could be interpreted as hints at a circulatory system, as suggested by the well-known statement in *Su wen* 39:

The flow in the conduit vessels does not stop. It circulates without break. $^{396}$ 

However, the *Su wen* itself contains no explicit reference to a circulation of blood or qi in a Harveyan sense as a constantly revolving flow in a closed tubular system. The author of *Su wen* 39 may have meant a circular flow associated with the cyclical passage of the seasons in the course of one year, or he may even have referred to larger cycles of six years or sixty years in the context of the doctrine of the five periods and six qi. Also, *Su wen* 39 does not state clearly what is supposed to circulate in the conduit vessels: is it qi, or blood, or both? In view of the various opinions expressed in different *Su wen* treatises, none of these options can be dismissed.

The *Ling shu*, in contrast, is quite explicit on this. It speaks of a circulatory flow in a closed system, but only of qi. It does not mention blood circulation. One locus classicus in *Ling shu* 15 states, first, that the circulatory flow of qi in the human body passes through altogether twenty-eight vessels, the total length of which is 16 *zhang* and 2 *chi*, a measure roughly corresponding to 37 meters. Second, the speed of the flow of qi is given with six *cun* per breathing period, that is, approximately 13.79 centimeters during one inhalation and exhalation. Third, in the course of a total of 13,500 breathing periods in a period of twenty-four hours, the qi completes fifty cycles. 397 *Ling shu* 15 speaks of *ren qi*  $\wedge$   $\wedge$ , "human qi"; its passage through twenty-eight vessels corresponds to the circular movement of twenty-eight constellations in heaven. Rather than of "human qi," *Ling shu* 16 speaks of *ying qi*  $\wedge$   $\wedge$ , which is identical to the *rong qi*  $\wedge$   $\wedge$ , "camp qi," of the *Su wen*. This camp qi begins its flow where the essence metabolized from food reaches

the conduits. Its circulation starts from the hand major yin conduit and continues via all the twelve conduits until it reaches the hand major yin conduit again. In contrast, *Ling shu* 18 speaks of camp qi as circulating inside the conduits and protective qi as circulating outside the conduits. This is similar to the account in the Thirtieth Difficult Issue of the *Nan jing*, a text of the first or second century A.D.; blood is not mentioned here either:

The camp [qi] proceed inside the vessels; the protective [qi] proceed outside the vessels. They circulate without a break. [After] fifty [passages they have] another great meeting.<sup>398</sup> The yin and the yang [conduits] are tied to each other like a ring without end. Hence, one knows that the camp [qi] and the protective [qi] follow each other.<sup>399</sup>

Common to these *Ling shu* and *Nan jing* notions of qi passing through an endless circular sequence of conduits is the idea that two such systems were located in the body, one on the left and one on the right. These two systems are not connected to each other, except for the two one-way paths leaving from the stomach that are supposed to feed qi into the conduits on the left and on the right. Neither is there any evidence that the heart was considered a central pump or bellows to propel the blood through these two circulatory systems, or that the lungs were considered responsible for keeping the qi in circulation.

Where the *Su wen* is explicit, it informs of sectional passages from X to Y or within a specific conduit. A portrayal of the six conduits as separate streams feeding into the stomach and the intestines is given in *Su wen* 5:

The six conduits are streams; the intestines and the stomach are the sea.  $^{400}$ 

A large number of statements suggest that an older notion of individual vessels continued to dominate pathophysiological reasoning in the *Su wen*. Many references to physiological and pathological parameters make sense only if they are read either in regard to entirely distinct vessels or with a notion of vessels forming an interrelated system of pathways while retaining specific characteristics. That is, rather than form a system of tubes whose contents are largely identical, the contents of each tubular section have their own characteristics.

Su wen 24 lists interior-exterior pairs of conduits. That is, each yang conduit is linked to one yin conduit. As these conduits, in turn, are linked to a depot (interior section) or a palace (exterior section), each such pair refers to a close association between one depot and one palace:

Foot major yang [conduits, (i.e., bladder)] and [foot] minor yin [conduits, i.e., kidneys] constitute exterior and interior.

[Foot] minor yang [conduits; i.e., gallbladder] and [foot] ceasing yin [conduits, i.e., liver] constitute exterior and interior.

[Foot] yang brilliance [conduits; i.e., stomach] and [foot] major yin [conduits; i.e., spleen] constitute exterior and interior.

These are the yin and yang [conduits] of the feet.

Hand major yang [conduits; i.e., small intestine] and [hand] minor yin [conduits; i.e., heart] constitute exterior and interior.

[Hand] minor yang [conduits; i.e., triple burner] and [hand] heart ruler constitute exterior and interior.

[Hand] yang brilliance [conduits; i.e., large intestine] and [hand] major yin [conduits; i.e., lung] constitute exterior and interior.

These are the yin and yang [conduits] of the hands.

Now, when one knows that from which the yin and yang [conduits] of hands and feet suffer,

whenever one treats the disease, one must first remove their blood. 401

To remove blood from a particular conduit is not a removal of blood from a large circulatory system in which it would not really matter where the tube is opened. Rather, specific diagnostic parameters suggest where an evil is located and require its removal from its present location. Even though various statements emphasize that an evil not only passes through the conduits and vessels, but may settle at specific locations and hence cause ailments that are characteristic of a settling at these locations, the *Su wen* authors did not feel it was necessary to go into any detail as to how one should imagine the actual process of settling in a tube coursed by blood and qi.

Also in Su wen 24, one is informed about different proportions of blood and qi present in the six conduits:

The major yang [conduits] regularly [contain] much blood, little qi. The minor yang [conduits] regularly [contain] little blood, much qi. The yang brilliance [conduits] regularly [contain] much qi, much blood. The minor yin [conduits] regularly [contain] little blood, much qi. The ceasing yin [conduits] regularly [contain] much blood, little qi. The major yin [conduits] regularly [contain] much qi, little blood.

Certainly such differences in contents among the individual conduits are difficult to reconcile with a notion of conduits acting merely as neutral sections in an all-encompassing tubular circulation system.

The notion of special characteristics inherent in the individual conduits or conduit sections is also expounded in *Su wen* 7. One or two specific conduits or conduit sections may develop specific diseases causing characteristic ailments.

Diseases in the second yang break out in the heart and in the spleen.

[As a result] one cannot [use] the hidden bend;<sup>403</sup>

females do not have their monthly [period]....

When the third yang has a disease, it breaks out as cold and heat.

Below this causes yong-abscesses and swelling.

It also causes limpness, receding [yang qi], as well as soreness in the calves. . . .

When the first yang develops a disease, one is short of qi and has a tendency to cough.

[There is also] a tendency to outflow. . . .

When the second yang and the first yin develop a disease,

it is responsible for shock and back pain.

[Patients] tend to belch; [patients] tend to yawn....

When the second yin and the first yang develop a disease,

[patients] tend to experience distension;

the heart has [a feeling of] fullness; [patients] tend to [pull in] qi. . . .

When the third yang and the third yin develop a disease,

this causes unilateral withering, limpness, and slackening.

The four extremities [can] not be lifted. 404

Hence specific diagnostic parameters exist to inform a physician in which conduit or conduit section a disease is located at present:

When [the movement in the vessels] at Man's Prognosis is once [over normal] fullness.

the disease is in the minor yang.

When it is twice [over normal] fullness,

the disease is in the major yang.

When it is three times [over normal] fullness, the disease is in the yang brilliance....

When [the movement in the vessels] at the Inch Opening is once [over normal] fullness,

the disease is in the ceasing yin;

twice [over normal] fullness,

the disease is in the minor yin;

three times [over normal] fullness

the disease is in the major yin. 405

Even though commentators, beginning with Wang Bing in the eighth century, have read these references to major yin, ceasing yin, and so on, as referring to conduits, one might of course read them as references to depots or palaces, that is, to the organs, where a disease may be located. However, *Su wen* 60 explicitly refers to the supervisor vessel, officer vessel, and thoroughfare vessel, which may have specific diseases entailing specific ailments. <sup>406</sup> One could argue that these three vessels are not part of the circu-

lar system of twelve yin and yang conduits and hence should have sectional characteristics of their own. However, *Su wen* 41 names altogether fourteen vessels that can "let a person's lower back ache" in fifteen different ways. Because the dominant treatment recommended was bloodletting, one may presume that each of these vessels may contain specific pathological agents causing specific pain and that it was believed possible to eliminate these agents together with the blood.<sup>407</sup> It is noteworthy that five of these fourteen vessels are sections of the circular system of twelve yin and yang conduits, while the remaining nine vessels are not.

It may well be that in a passage quoted earlier, the author of *Su wen* 6 attempted to reconcile what he perceived as contradicting notions of sectional characteristics, on the one hand, and an alleged circulatory system, on the other. Hence he spoke of *li he*, "unity [despite] division":

In the division and unity of the three yang [vessels], the major yang is the opening; the yang brilliance is the door leaf; the minor yang is the pivot.

[These] three [yang] conduits cannot lose each other.

If they throb, but not at the surface, they are called "one yang."...

In the division and unity of the three yin, the major yin is the opening; the ceasing yin is the door leaf; the minor yin is the pivot.

These three [yin] conduits cannot lose each other.

If they throb, but not in the depth, they are called "one yin."

Yin and yang move endlessly.

Repeated transmission constitutes one cycle. 408

We may not be able to determine why the unknown author chose the image of a door to describe the three yin and three yang conduits as separate entities that form one unit when an overall function is concerned. Nevertheless, an opening, a door leaf, and a pivot are three elements that form a door only when assembled; each element fulfills its own functions, but it is their collective functioning as one whole that serves the higher purpose of blocking or allowing entrance to a building. The vessels, like the three parts constituting a door, may lose their individual distinction under certain circumstances. In this case, one should not speak of major yang, yang brilliance, and minor yang but simply of "one yang." The same applies to the yin vessels. Repeated transmission through yin and yang conduits forms a cycle.

Forward transmission may be the ideal, but other scenarios are possible too. Various pathological circumstances may cause the qi to stagnate at one place in the conduit vessels, or to recede ( $jue \mathbb{R}$ ), or to move contrary to its regular course ( $ni \not \equiv fan \mathcal{L}$ ). The mechanical details of such pathological movements

are not spelled out clearly. One may wonder whether a movement contrary to its regular course was thought, at least in some instances, to affect an entire circulatory system, in which case the flow of qi and blood should move backward everywhere in the body, or whether it is only qi that moves backward in a particular section, in which case it would have to move against the continuing proper flow of blood. One possible situation was described in *Su wen* 44:

When the heart qi is hot, then the [movement in the] lower vessels recedes and turns upward. When it turns upward, then the vessels below are depleted. When they are depleted, then [this] generates vessel limpness.<sup>409</sup>

Again, such a statement is difficult to reconcile with a notion of continuous circulation; rather, the equation of recession with depletion hints at the continuing notion of separate vessels. The notion of circulation documented in the *Su wen* is incommensurable with the notion of a closed tubular system developed by Harvey. The circulation the authors of the *Su wen* had in mind was the circulation of goods and people in a complex and multicentered national economy. It is only here, not in a system of interconnected pipes, that it is plausible to consider movements following a proper direction and others aiming at the opposite direction. One and the same path may see some goods passing by while others settle and rest for a time. Passageways may even be blocked, and this may cut off smaller or larger sections of the entire system from the flow of goods. Given also that the heart was nowhere identified in the *Su wen* or in the *Ling shu* as a pump or bellows, to state that the ancient Chinese preceded Harvey's recognition of blood circulation by sixteen hundred years is to compare apples with oranges.<sup>410</sup>

#### 7. PATHOGENIC AGENTS

#### 7.1 From Bugs and Demons to Natural Environmental Factors

In the course of the discussion of the vessels, we have encountered various pathogenic intruders that can enter the body and cause disease. The intellectual achievement associated with such causality should not be underestimated. To regard natural environmental factors such as wind, cold, or dampness as possible causes of disease may have been a truism at least since the time when Zhang Ji (142–220?) wrote a text specifically on "harm caused by cold." However, during the Han era, such an etiological understanding could not be based on a very long tradition. In fact, the Mawangdui manuscripts explicitly refer neither to wind nor to cold or dampness as pathogenic agents. They emphasize "bugs as natural and demonic agents of destruction," a concept that can be traced to Shang inscriptions.<sup>411</sup>

The conceptual jump from the etiology outlined in the unearthed manuscripts to the notions of pathogenesis in the *Su wen* is astonishing. The *Wu* 

shi er bing fang 五十二病方, the largest known early-second-century-B.C. list of "prescriptions against 52 ailments," recorded mostly external ailments, many of them wounds, bites, or burns. In general, a demonological origin is presumed to call for apotropaic remedies, be they gestural, verbal, or pharmaceutical. The bugs, as Harper has pointed out, include natural and demonic creatures; a clear-cut line between these two categories certainly did not exist in Chinese antiquity.

Another of the Mawangdui manuscripts, the *Yin yang shi yi mai jiu jing* 陰 陽 +- 脈 灸 經, has a list of all the vessels known and their respective ailments. The only causal factor mentioned is that the vessel "is moved" (dong 動). How it is moved, or by what agent it is moved, the reader is not told. Similarly, the Zu bi shi yi mai jiu jing  $\mathbb{E}$  臂 +- 脈 灸 經, after providing detailed information on the morphological courses taken by the eleven vessels in the body, simply lists the ailments associated with each vessel and the treatment as the cauterization of the respective vessel. Disregarding the destruction caused by bugs, dogs, leeches, lizards, burns, and so on, the only pathogenic statement in one of the Mawangdui texts that names a causal factor responsible for a disease affecting the vessels appears in the Shi wen + 閏, where Teacher Gui informs Yu that "when blood and vapor ought to move yet do not move, this is called the calamity of blockage."

The Su wen provides a very different picture. Bugs, either natural or demonic, play no role whatsoever; a few isolated occurrences of the terms chong  $\underline{a}$  and  $\underline{gu}$   $\underline{a}$  in the Su wen as well as in the Ling shu cannot claim any pathogenic significance. The only passage in the Su wen that may be read as a distant echo of a parasitic etiology is a later insert in a long list of dreams caused by various abounding qi, as well as overeating and hunger:

When there are many short worms, then one dreams of crowds assembling. When there are many long worms, then one dreams of fights and mutual harming. 413

The concept of gu B, with its pictographic representation of bugs contained in a vessel, is perhaps the most obvious example of a link between knowledge of the destructive powers of natural bugs, on the one hand, and magicodemonological considerations, on the other. It has a history that can be traced to the Shang oracle bones. All No one reading the Su wen will be able to catch even a glimpse of its former significance (which continued in other writings for many centuries to come); the term gu is mentioned in the Su wen merely as "another name" of a

disease called "elevation conglomeration ill." The lower abdomen feels pressed, is hot and has pain. One's discharge is white. 415 Natural environmental agents such as wind, cold, and dampness, yin and yang qi, as well as food and "evil qi" in general, are frequently named as causes of disease. The vessels are the theater where it all happens: they are still associated with specific diseases and they may "develop diseases," but for the most part the *Su wen* authors left no doubt as to their ontic perception of diseases as entities that are brought into the organism, that may move through the vessels, have to be localized, and should be eliminated. As shall be shown later on, the overlapping of bloodletting and qi manipulation in many parts of the *Su wen* adds to its heterogeneity and makes it impossible to attribute to the *Su wen* one single pathogenic model.

It should be noted, however, that with the disappearance of bug etiology in the transition from the state of knowledge outlined in the Mawangdui manuscripts to the notions emphasized in the *Su wen* a protoparasitology was abandoned in favor of a purely speculative system of environmental agents entering and causing disease in the organism. If we assume that bug etiology had not been a product of mere fantasy but was stimulated by the actual presence, first of all, of worms in human orifices, in wounds, or in decaying corpses, one may wonder what closed the eyes of early Han naturalists to these facts and suggested disregarding these creatures as pathogenic agents altogether.

Maybe the reason is that bugs (like demons) were considered uncontrollable. The new pathology coming along with vessel theory and with the morale of the mean required causal agents that had their proper place in man's environment, that entered the organism in case of a depletion in the latter only, and that passed inside the body through well-defined passageways. The first of these requirements could have been met by bugs easily. The second, however, would have been hard to conceptualize. What could prevent a bug from entering an organism? Bugs may have been thought to care as little about human behavior as did demons when they had identified a potential victim. In contrast, wind, heat, cold, and so on, were seen as controllable. Specific behavioral norms grounded in the morale of normality versus excess were conceptualized that could prevent an intrusion by these agents. The third requirement, passage in the body through well-defined passageways, may have been too difficult to meet conceptually. If bug etiology had had its origin in the appearance of worms and other such creatures in orifices, corpses, and so on, it may have been impossible to see them moving together with blood and qi through the vessels.

More decisively, even, neither bloodletting nor qi manipulation may have promised any results in attempts to conquer bugs in the body. In contrast, once the presence of agents such as heat, cold, or wind had been identified, they could be countered by heat or cold or other means, and when countered successfully, they were eliminated without leaving any traces such as morphological lesions. Wind, heat, cold, and so on, fitted vessel theory and

the morale of the mean; the bugs did not. The logical consequences derived from vessel theory, one may hypothesize, were stronger than continuing evidence. Bug etiology was ruled out by the *Su wen* authors only; it survived in the pharmaceutical *ben cao* tradition wherein drugs were known to kill, a function not provided for in the context of vessel theory.

### 7.2. Wind Etiology and Pathology

The Su wen emphasized wind as the most general etiological agent four times:

The wind is the origin of the one hundred diseases. 416

The wind is the master of the one hundred diseases.<sup>417</sup>

The wind is the chief [cause] of the one hundred diseases.<sup>418</sup>

The wind is the origin of the one hundred diseases.<sup>419</sup>

There is only one statement to the contrary:

I know that the hundred diseases are generated by the qi. 420

Although this four-to-one proportion more than reverses the proportional significance of wind and qi etiology in the *Su wen*, in contrast to the reminiscences on bug etiology, the four statements on wind as the origin of all diseases were neither isolated nor obsolete. As we shall see, one entire treatise, *Su wen* 42, was devoted to a discussion of wind. Wind etiology may have been a precursor to or parallel development of qi etiology. However, qi etiology, though eventually gaining the upper hand, was unable to completely eliminate notions of wind etiology. Both have existed side by side until the present.

Spread through Yang Shangshan's *Tai su, the Ling shu,* and the *Su wen,* various discourses have been preserved that enable a reconstruction of some of the early phases in the development of wind etiology. They are closely tied to the development of wind and rain oracles beginning at the latest at the end of the third century B.C. Wind had already long been seen as a demon. Now this ancient notion was slowly pushed into oblivion by a new naturalistic perspective. Accordingly, wind came to be seen for some time as a natural phenomenon that is activated as a reaction of heaven to the movements of Tai yi  $\pm$  ; its observation allows the prediction of certain events. In the *Shi ji* biography of Emperor Wu di (r. 140–186), Tai yi was named the highest being in the hierarchy of demons and spirits.

Wind prognostication was built on knowledge of the existence of eight palaces, one in each of the four cardinal and four secondary points. Tai yi was supposed to move from one to the next in a fixed sequence and at fixed dates, that is, the so-called  $ba\ zheng \land \mathbb{E}$ , the "eight regulars." These are the beginnings of the four seasons, the two equinoxes, and the two solstices. In

some instances, New Year's Day and some other dates were considered noteworthy. When the wind on these days originates in the cardinal direction where Tai yi is known to be, this was considered a "repletion" wind, an auspicious omen. When it came from the opposite direction, this was a bad omen. It may not be far-fetched to associate these thoughts with the experiences of an agrarian society and with the significance of winds coming from specific cardinal directions for a bountiful harvest. A good harvest meant "repletion" in the granaries, which ultimately guaranteed well-being and health. Wind prognosticians not only knew about success or failure in forthcoming campaigns, they even ventured to predict the dominance of emotions or the future of the various social strata. 422

At the beginning of this development toward wind etiology, Ba zheng feng hou shows, an outbreak of disease was considered inevitable for all those struck by a "depletion wind." However, such a mechanical perspective was soon questioned and toned down in other texts, as we learn from the treatises Xie chuan 邪傳,"Transmission of evil," Jiu gong ba feng 九宮八風,"Eight winds nine palaces," and San xu san shi 三虚三實,"Three [states of] depletion and three [states of] repletion," all three of which appear in the Taisu and in the Lingshu. Persons struck by a depletion wind, the authors of these texts noted, may develop light or serious diseases, or they may not fall ill at all even though others have to suffer.

Wind, it is said, can be avoided, and its impact on the individual organism depends on the cumulative presence of three factors contributing to repletion or depletion. The first is the so-called decline of years. No explanation of this concept dating from the Han era exists. As Yang Shangshan surmised in the eighth century, such a decline, entailing depletion in the organism, occurred at every transition from one nine-year phase in an individual's life to the next, beginning with one's seventh year of life. That is, the sixteenth, the twenty-fifth, the thirty-fourth, and so on, years of life are years of decline. If struck by wind during these critical times of individual depletion, a person is more likely to succumb than is someone of a different age. Yang Shangshan's explanation may not reflect exactly what the original authors had in mind; nevertheless, a notion of critical years may have been involved here.

The second factor contributing to depletion, the waxing and waning of

the moon, does not affect individuals but all of humankind. A full moon goes along with repletion in the organism; the new moon is the time of greatest susceptibility to harm.

The third factor affects individuals and, in contrast to the two mentioned so far, permits countermeasures. The texts simply state "to lose accord with the time results in depletion." Not to lose accord with the time, that is, with the seasons, is of course part of medical prevention.

If all three factors are negative, that is, if a person in the decline of his years, at new moon, and having lost accord with the time, is struck by a depletion wind, that is, a wind coming from the direction opposite to where it should have originated, then a dangerous situation arises. The risk of falling ill is diminished if one, two, or all three of the factors named are positive.

Additional texts demonstrate the development toward an ever-increasing integration of wind etiology into the doctrines of natural laws and systematic correspondence and rejection of the demonological vestiges still present in the notion of the cyclical movements of the supreme being Tai yi. To select the right time for an insertion of needles to regulate blood and qi, the Tian ji 天急, "Natural [phenomena] that are to be avoided," a text appearing in the *Tai su* and as the "Discourse on the Eight Cardinal [Turning Points] and on Spirit Brilliance" in *Su wen* 26, emphasizes correspondences between man's physiological rhythms and the phases of the moon, the light of the sun, the stars, and certain climatic phenomena. Zhu feng za lun 諸風雜論, a "Discourse on Various Issues Concerning All Winds" in the *Tai su* and in the *Ling shu*, is an attempt to dissolve doubts about whether wind is indeed the origin of all illness and explicitly rejects the notion that demons might have been involved in one or another case of disease.

Finally, the two consecutive texts Zhu feng shu lei 諸 風數 類 and Zhu feng zhuang lun 諸 風狀論 in the *Tai su*, which appear as parts one and two in the "Discourse on Wind" in *Su wen* 42, document attempts to fully integrate wind etiology into the teachings of systematic correspondence. Also, wind is no longer merely an etiological category; it is the disease per se. Depending on where the wind had struck, the result may be a brain wind, a stomach wind, or a liver wind, to name but a few.

The *Su wen*, deliberately or not, and in contrast to the *Ling shu* and the *Tai su*, accepted only the very end of this discourse. In at least thirty-five of its chapters, wind etiology is mentioned in greater or lesser detail. Occasionally the old notions of winds arising in eight cardinal directions reappear, although the original link to changing residences of Tai yi is mentioned nowhere in the *Su wen*. An example is a statement in *Su wen* 17, where Huang Di asks Qi Bo for the causes of "*yong*-abscesses, swelling, sinew cramps, and bone pain." Qi Bo responds:

These are swellings [caused] by cold qi; changes of the eight winds are [responsible].<sup>424</sup>

A short dialogue between Huang Di and Qi Bo throws light on what the author of the following passage may have felt was a conceptual break, requiring an explanation, between five winds associated with the five seasons and the five depots, on the one side, and a continuing awareness of a concept of eight winds originating in the eight cardinal directions on the other:

Huang Di asked:

Heaven has eight winds. The conduits have five winds.

What does that mean?

Qi Bo responded:

The eight winds bring forth evil [qi].

They become the [five] winds in the conduits.

They affect the five depots.

The evil qi brings forth diseases. 425

This general statement is followed by a systematic account, which was written by another author. Rather than mention eight winds, it lists only four winds originating in the East, South, West, and North. The final paragraph speaks of the center and may have been included simply to match the number five in the preceding dialogue. Because there is no notion of a wind originating in the center, it was impossible to scale down a notion of eight winds originating in eight cardinal directions to a notion of five winds originating in five cardinal directions. That is, the explanations given by Qi Bo do not answer all the questions that might be raised in this context; they do, however, document a difficult transition:

The east wind is generated in spring; [it causes] a disease in the liver. . . .

The south wind is generated in summer; [it causes] a disease in the heart. . . .

The west wind is generated in autumn; [it causes] a disease in the lung. . . .

The north wind is generated in winter; [it causes] a disease in the kidneys. . . .

The center is the soil.

The diseases are in the spleen. 426

One of the sources quoted above naming the wind as the "origin of the one hundred diseases" is *Su wen* 3. The passage continues to emphasize, however, that not everybody needs to fear being struck by wind. Persons conducting their life "in clarity and purity" will be unaffected; their "flesh and skin structures are firmly closed up and resist" the impact of wind. "Even

though there is strong wind or a violent poison, it will be unable to harm that [person]."427

However, immunity against wind is weakened not only by ways of behavior that may be considered immoral, if that is what was meant by lacking "purity." Physical exercise leading to sweating opens the skin structures and allows wind to enter. Hence there are diseases that are acquired "if after quickly moving the four limbs, so that sweat leaves [the body], one meets wind."

Wind, Su wen 27 points out, does not necessarily have to enter the organism to cause major problems. The contents of the vessels may be influenced in their flow by the mere presence of gusts outside the body:

When a sudden wind rises violently, then the conduit waters gush up in breakers and rise [like] ridges [in the fields]. 429

Once wind has entered the body, it may cause a broad range of health problems. The Su wen does not present a coherent system of wind pathology. Rather, it appears, the authors whose writings found entrance into the Su wen held wind acting alone or in conjunction with other agents responsible for all kinds of more or less specific consequences. Not infrequently, wind is held to be "evil" or "bad," and it is often called a "robber." In general, however, it is merely "wind" that is the agent causing harm to the sinews,  $^{430}$  a swollen face,  $^{431}$  fits of cold and heat,  $^{432}$  blurred vision and snivel,  $^{433}$  and other problems.

In several *Su wen* discourses, the targets struck by wind and the path taken in the organism find an explanation in the application of the five-agents doctrine. For example, wind, being associated with the agent wood, may immediately move toward the liver, the organ associated with the agent wood, and cause harm there. This, however, sets the stage for further problems. Once the liver has been harmed by wind, subsequent overeating, excessive drinking, or exertion may cause additional ailments:

When wind settles [in the body] and encroaches upon the [proper] qi, then the essence vanishes, and the evil harms the liver.

Subsequent overeating [causes] sinews and vessels to relax.
The intestines are flushed, and this leads to piles.

Subsequent excessive drinking [causes] the qi to move contrary [to its regular course].

Subsequent exertion causes harm to the qi of the kidneys and lets the high bones be spoiled.<sup>434</sup>

A comprehensive review of wind pathology is given in *Su wen* 42, the "Discourse on Wind." In the opening lines the author sketches the heterogeneity of wind etiology:

When wind harms a person, it may cause cold and heat; or it may cause a heated center; or it may cause a cold center; or it may cause *li*-wind; or it may cause unilateral withering; or it may cause wind.

These diseases are all different. Their names are not identical.

In some cases [the wind] internally reaches the five depots and six palaces.

I do not know any explanation of this; I should like to hear an explanation of this. $^{435}$ 

The subsequent explanation given by Qi Bo is a noteworthy example of an encounter of the yin-yang and five-agents doctrines with notions of etiology and pathology that may have been popular before the formulation of the laws of systematic correspondence. The integration of wind etiology and pathology into the former remained imperfect and demonstrates a substantial tenacity of convention vis-à-vis more recent theoretical constructs. Because the editors of the *Su wen* brought together in *Su wen* 42 the two texts Zhu feng shu lei and Zhu feng zhuang lun, which were presumably written by different authors (and hence were given two titles or were quoted under their original titles in the *Tai su*), <sup>436</sup> the resulting "Discourse on Wind" not only shows different conceptual levels of conventional and yin-yang/five-agents wind etiology and pathology, but it is also marked by outright conceptual discrepancies.

For example, a passage in the first half (corresponding to the Zhu feng shu lei) of *Su wen* 42 provides a typical list of correspondences between the winds of the five seasons and the organs harmed by these winds:

If one was harmed by wind in spring, at *jia* and *yi*, this causes liver wind. If one was harmed by wind in summer, at *bing* and *ding*, this causes heart wind. If one was harmed by evil in late summer, at *wu* and *ji*, this causes spleen wind. If one was harmed by evil in autumn, at *geng* and *xin*, this causes lung wind. If one was harmed by evil in winter, at *ren* and *gui*, this causes kidney wind.<sup>437</sup>

Further on, in the second half of *Su wen* 42 (corresponding to the Zhu feng zhuang lun), Huang Di does not appear content with the simple correlation given above. He asks in what way the physical appearances of wind affecting the five depots differ from each other, and he wants to know how

to diagnose these different states. In his response, however, Qi Bo provides the requested information not only on lung wind, heart wind, liver wind, spleen wind, and kidney wind; he continues and speaks of "the appearance of stomach wind," of "head wind," of "dripping wind," and of "outflow wind."<sup>438</sup> That is, the latter four break the pentic pattern requested by Huang Di. They reflect some but not all of the conventional notions of wind etiology and pathology recorded in the first half of *Su wen* 42. This first half, in addition to head wind, dripping wind, and outflow wind, named "unilateral wind," "brain wind, "eye wind," "internal wind," as well as "intestinal wind"—all equally unrelated to the yin-yang and five-agents doctrines.

Dripping wind, to take a closer look at only one example, is a conventional concept of a disease resulting from being struck by wind after having consumed wine. This is the information given in the first half of *Su wen* 42. The description of the "appearance of dripping wind" in the second half of *Su wen* 42 is equally straightforward and free from any theoretical underpinning:

The appearance of dripping wind [is such]:

it may entail profuse sweating.

[Patients] regularly cannot [wear] even thin clothes.

When they eat, then the sweat leaves [the body].

In severe cases the body sweats. [The patients'] breathing is a panting.

They have an aversion to wind, and their clothes are permanently soggy.

Their mouth is dry, and they tend to be thirsty.

They cannot perform any strenuous tasks. 439

# 7.3. Wind Etiology and Leprosy

Wind, one learns from Su wen 42 and other Su wen treatises, may cause diseases identified simply as the presence of wind. It may well be that a tradition originating in demonology and bug etiology continued here under the label of a different pathogenic agent. As several entries in the recipe manual Wu shi er bing fang among the Mawangdui manuscripts demonstrate, it was believed that when scorpions and lizards had bitten a person, they were present in the wound and had to be exorcised. Wind etiology, however, was also applied to explain diseases carrying a conventional label of their own. Examples are the diseases li  $find and <math>n\ddot{u}e$  find all find a find <math>find all find a find <math>find all find a find <math>find all find a find a find <math>find a find a find a find <math>find a find a find a find a find <math>find a find a find a find a find <math>find a find a find a find a find <math>find a find a find a find a find a find <math>find a find a find a find a find a find <math>find a find a find a find a find a find a find <math>find a find a fi

Li, Su wen 17 states, is caused by "fully developed wind in the vessels." In Su wen 42, as we have seen, Huang Di stated that wind harming a person may cause li-wind. In the answer ascribed to Qi Bo, a more detailed description is given of the symptoms associated with the disease li-wind:

In case of  $\mathit{li}[\text{-wind}]$ , the camp qi is hot and rots. This qi is not clear.

Hence, it lets the nasal column decay and ruins the complexion.

The skin has ulcers and festers. 442

In particular, the "decay of the nasal column" has led Chinese commentators to identify li with leprosy.  $^{443}$ 

We may return here to our earlier observation that the Mawangdui manuscripts demonstrate the significant popularity of bug etiology, while wind etiology is present only marginally. In contrast, the *Su wen* recorded only distant echoes of bug etiology but is widely marked by wind and qi etiology. The case of leprosy is an obvious example of a transition from the former to the latter that may have taken place between the writing of the Mawangdui manuscripts and the conceptualization of the *Su wen* contents.

The *Wu shi er bing fang* of the Mawangdui manuscripts lists a description of and a prescription against a disease caused by and named after the *ming* bug. As Harper has pointed out, the *ming* bug is one of the pests believed responsible for the destruction of crops in antiquity.<sup>445</sup> The description of the destruction the *ming* bug generates in the body has been identified as a reference to leprosy:<sup>446</sup>

*Ming* is a bug. The places where it chews [] holes. It does not emerge at a regular spot. Sometimes it is located at the nose, sometimes at the side of the mouth, sometimes at the teeth and gums, sometimes at the hands and fingers. It causes a person's nose to be gouged out and his fingers to break off.<sup>447</sup>

The  $L\ddot{u}$  shi chun qiu links the destruction caused by the ming bug with the term li:

If in midwinter the orders of spring are carried out, then the ming bugs cause destruction. The water wells dry up. People often suffer from li.<sup>448</sup>

The *Su wen* offers no hint at a link between bugs and *li. Li* is caused by wind; in fact, it is the presence of wind. Hence a later insertion in *Su wen* 42 emphasized:

If wind and cold settle in the vessels and do not leave, this is called "*li*-wind." It is also called "cold [and] heat." <sup>449</sup>

Li withstood its subsumption under the theoretical edifice of systematic correspondence not only at the time the Su wen treatises were written; attempts in the fourteenth century to explain a wide variety of li or lai  $diseases also had no lasting consequences. <math>^{450}$  Throughout the centuries, leprosy remained closely associated with wind etiology. Hence the standard term for leprosy in use to the present is da ma feng theoretical than <math>theoretical than <math>theoretical than <math>theoretical than <math>theoretical than <math>theoretical than that <math>theoretical than than that <math>theoretical than that the than that <math>theoretical than that the than that <math>theoretical than that the than that the theoretical than that <math>theoretical than that the theoretical that the theoretical than that the theoretical than that the theoretical than that the theoretical than the theoretical than that the than that the theoretical than the theoretical than

*Li-feng* is *da feng*, "major wind." Another name is *lai*-wind. The most commonly used name is *da ma feng*, "wind [causing] major numbness." <sup>451</sup>

# 7.4. Wind Etiology and Malaria

The second disease carrying a conventional label of its own at the time when wind etiology and pathology were introduced into medicine was nüe 瘧. Nüe is generally translated as "malaria"; the term is also used in this sense in the context of modern medicine. One might object against the use of the European term "malaria" in the translation of nüe because the former carries an etiological message implying that the disease it signifies was caused by mala aria, "bad air." To speak of malaria today to denote a disease that is now known to be caused by a parasite carried by anopheles mosquitoes rather than "bad air" laden with toxic agents is, however, at least as misleading as to equate the ancient Chinese term  $n\ddot{u}e$  with malaria. The equation of  $n\ddot{u}e$ , as recorded in ancient literature, with malaria and the labeling of the disease known to be transmitted by anopheles with malaria are both justified from the description of the natural course of the disease. Also, "bad wind," "evil wind," and "bad air" are concepts not too far apart; hence there is some justification for rendering nüe as "malaria," as long as one keeps in mind that the Chinese concept of malaria as a disease being caused by "wind" at no time included the European notion of "air" being infected with a noxious agent able to cause this particular disease. 452

Authors writing on malaria in ancient China ventured to propose etiological models and in addition felt compelled to explain the phenomenon of alternating fits of heat and cold, the occasional absence of cold or simple domination of warmth, and variations in the time spans between outbreaks of the disease.

The introductory line of a "Discourse on Malaria," that is, of *Su wen* 35, affirms: "All [cases of] malaria are generated by wind."<sup>453</sup> Later in the same treatise, readers are informed that the change between fits of extreme heat and those of cold may result from the patient being harmed by wind, which is a yang qi and therefore associated with heat, and by cold, which is a yin qi. As the text states: "Malaria is an irregular [presence] of the qi of wind and cold," presumably in the body.<sup>454</sup> This is confirmed on a more abstract level a little further on in the text: "Malaria is an alternating domination of yin and yang [qi]." Other etiological models were thought of too, which explains the many different courses malaria was observed to take. For example:

When in summer someone is harmed by massive summer heat, and when his sweat leaves [the body] profusely, [then] the skin structures have opened to effuse [the sweat]. If subsequently he encounters a summer qi and also the chilliness of a water cold, [both] are stored in the skin structures, in the skin. When in autumn he is harmed by wind, then the disease reaches completion.<sup>455</sup>

Another example is the so-called solitary [heat] malaria. It is not accompanied by alternating fits of heat and cold; rather, the patient feels hot all the time. The explanation is rather complex. However, it too involves wind etiology:

In case of solitary [heat] malaria the lung is habitually hot.

The qi abounds in the body.

When it comes to recession with countermovement, with [the qi] rushing upward, the central qi is replete and does not flow away toward the outside.

If subsequently [the patient] exerts himself,

the skin structures open.

Wind and cold lodging inside the skin, within the partings of the flesh, effuse. When they effuse, then the yang qi abounds.

When the yang qi abounds and does not weaken, then [the patient] has developed a disease.

The qi fails to reach the yin [section]; hence, [the patient] is hot only, but not cold. . . .  $\,$ 

Hence, [this disease] is called solitary [heat] malaria. 456

The changes from fits of heat to fits of cold and back to fits of heat again suggested an application of the yin-yang doctrine. The movements of the yang qi and yin qi responsible for the periodic outbreaks of the disease occur mainly along the spine, starting from the head or the neck. An opening called wind palace at the top of the spine was believed to be of particular importance. As *Su wen* 35 writes, the evil qi, wind, enters the body through the wind palace and begins its descent into the spine from there. <sup>457</sup> Apparently the evil qi was assumed to move one vertebral joint deeper day after day; the exact path it takes on its way down is not clearly defined. On the twenty-fifth day, the evil qi reaches the lower end of the spine, that is, the sacrum. On the twenty-sixth day, it enters "the vessel hidden in the spine," rises higher every day, and leaves through the Broken Bowl, an opening in the center of the supraclavicular fossa. The wind palace is also a location where the protective qi passes at least twice a day. Whenever the protective qi and the intruding qi, the wind, meet at the wind palace, the disease "is active."

The text is not sufficiently explicit on how and where the evil qi meets the protective qi while it descends through the spine. The author of this passage may have assumed that the evil qi, even though moving farther down by one vertebral joint day by day, nevertheless returned to the wind palace each day. This would explain why the outbreaks occur "a little later every day" as long as the evil qi descends and why the disease "is active a little earlier every day" when it ascends again. <sup>458</sup> A few lines further on in the text, however, Huang Di expresses his uncertainty about where exactly the evil qi and the protective qi meet; obviously the author of the paragraph phrased as Huang Di's question assumed that the protective qi descended one vertebral joint each

day, perhaps—we may speculate—in pursuit of the evil qi. The first and major part of the answer given by Qi Bo is possibly a later insertion in the text. In a conceptual twist, the author of this insert emphasized that the evil qi may strike at various locations and that the "disease is active" wherever the protective qi encounters the evil qi, which may be at the head, the neck, or the spine, or even at the hands and the feet. <sup>459</sup> It is not important where protective qi and evil qi meet; it is decisive that they meet, to trigger an outbreak of the disease:

When the location of the protective qi falls together with the [location of the] evil qi, then the disease is active.  $^{460}$ 

Finally, one is tempted to conclude, the yin-yang doctrine was applied to the issue of what happens in the organism in the case of an affliction with malaria. The resulting etiological model proceeded beyond the simple military metaphor of guard fighting intruder; retaining the notion of a "struggle," it spoke only of yin qi and yang qi.

[Huang] Di:

Which qi causes this to be so;

I should like to hear its Way.

Qi Bo:

Yin and yang [qi] rise and descend, interacting in struggle.

Depletion and repletion occur alternately.

The yin [qi] and the yang [qi] move into each other's [section].

When the yang [qi] accumulates in the yin [section],

then the yin [section] has a repletion, while the yang [section] is depleted.

When the yang brilliance is depleted,

then one shivers from cold and the jaws chatter.

When the great yang is depleted,

then the lower back and the spine, as well as the head and the neck, have pain.

When all three yang are depleted,

then the yin qi dominates.

When the yin qi dominates, then the bones are cold and ache.

The cold is generated inside.

Hence, the center and the outside are all cold.

When the yang abounds, then the outside is hot.

When the yin is depleted, then the inside is hot.

When outside and inside are both hot, then [the patient] pants and is thirsty.

Hence, he yearns for something cold to drink.<sup>461</sup>

The rationality of the association of alternating fits of heat and cold, of thirst and other conditions, with the yin-yang paradigm is obvious. One can also imagine various possibilities of linking at least some of the symptoms generated by malaria to pathological states of one or another of the body's core organs. Further down (pp. 207–209), we shall discuss a different explanatory model of malaria that focused on some of the depots and palaces and disregarded wind etiology almost entirely.

### 7.5. Dampness, Cold, Heat, and Dryness

Holding certain natural environmental agents responsible for the outbreak of various diseases has been a ubiquitous and perhaps timeless attitude ever since people's eyes were opened to believe in such causation. Just as the ancient Chinese came to fear wind as a pathogenic factor, many people today consider a draft in a room a threat to their health. Similarly, the notion that "cold" may cause harm existed millennia before the rise of modern science, and people continue to speak of "catching a cold," despite widespread knowledge of germ theory.

Wind, dampness, cold, heat, and dryness continue to mean something in terms of disease causation to many contemporary urbanites; they may have meant much more to a population living in closer touch with their natural environment than their twenty-first-century descendants. Hence it is hardly surprising that the dawn of natural environmental etiology found its expression in numerous statements in the *Su wen*. At the same time, the *Su wen* documents the attempts at subsuming these causal factors under the theories of systematic correspondence emerging at roughly the same time.

The longest list of natural environmental agents that might have an impact on human health appears in the "seven comprehensive discourses," *Su wen* 66 through 74 (not counting the two apocryphal treatises *Su wen* 72 and 73). Rain, water, frost, hail, snow, cold, coolness, summer heat, wind, dryness, dampness, and dew are associated with the presence of specific qi and with well-defined states of illness. Occasionally related phenomena are grouped together because their presumed effects on the organism were considered identical. *Su wen* 70, for example, describes a situation in which rain, water, frost, hail, and extreme cold enter the body as evil qi and harm the heart. Because the heart is associated with fire and heat, all these factors can be seen as a threat to the well-being of this organ. <sup>462</sup>

In addition to an open list of natural environmental factors, some sections of the "seven comprehensive discourses" work with a closed list scaled down to mainly five: wind, (summer) heat, dampness, cold, and dryness. When a context requires only four "evil qi," dryness, which is equivalent to coolness, is omitted. Interestingly, the remaining seventy-two *Su wen* treatises that refer to a causation of disease by natural environmental factors rely on closed lists only and nowhere mention an open list.

Su wen 5 combines closed lists of six, five, and four qi. In the first, it cor-

relates the qi of heaven with the lung, the qi of earth with the throat, the qi of wind with the liver, the qi of thunder with the heart, the qi of grain with the spleen, and the qi of rain with the kidneys. He as separate model it identifies the five qi cold, summer heat, dryness, dampness, and wind as products of the five agents of heaven. He attributes the remaining four to the four seasons:

If [a person] is harmed in winter by cold, he will [suffer from] warmth disease in spring. If he is harmed in the spring by wind, he will develop outflow of [undigested] food in summer. If he is harmed in summer by summer heat, he will suffer from *jie* and *malaria* in autumn. If he is harmed in autumn by dampness, he will develop a cough in winter. 465

Su wen 3 outlines a similarly systematic association between the qi characteristic of a season, on the one hand, and specific illnesses, on the other.

If one exposes [oneself and is affected by] wind,

this generates cold and heat.

Hence,

if one was harmed in spring by wind, then this causes a pipe flush.

If one was harmed in summer by summer heat, in autumn this causes *jie* and *malaria*.

If one was harmed in autumn by dampness,

<[the qi] moves upward contrary [to its regular course] and one coughs>466 this develops to limpness and receding [qi].

If one was harmed in winter by cold,

in spring one will develop a warmth disease.

The qi of the four seasons alternately harm the five depots.<sup>467</sup>

That is, winter is the season of cold, spring is the season of wind, summer is the season of heat, and autumn is the season of dampness. 468 Presumably, the human organism was considered vulnerable to the excessive impact of a seasonal qi, and man was forced to prevent this impact through appropriate measures.

Su wen 74 provided a tabular account of the illnesses following harm caused to the organism by any excessive or, as the text states, "massive" arrival of the five qi. The underlying principle explaining the nature of the diseases is the mutual domination sequence among the five agents:

When cool qi arrives massively, that is a domination of dryness [qi]. Wind and wood receive evil [qi]. Liver diseases emerge from this: When heat qi arrives massively, that is a domination of fire [qi]. Metal and dryness receive evil [qi]. Lung diseases emerge from this.

When cold qi arrives massively, that is a domination of water [qi]. Fire and heat receive evil [qi]. Heart diseases emerge from this.

When dampness qi arrives massively, that is a domination of soil [qi]. Cold and water receive evil [qi]. Kidney diseases emerge from this.

When wind qi arrives massively, that is a domination of wood [qi]. Soil and dampness receive evil [qi].

Spleen illnesses emerge from this.469

Dryness qi is associated with autumn and metal; metal is able to dominate wood. Hence the arrival of massive coolness qi jeopardizes the well-being of the liver, that is, of the organ associated with wood. Fire melts metal; hence excessive heat causes lung problems. Water extinguishes fire; hence excessive cold, a manifestation of water qi, causes harm to the heart. Soil blocks water; hence excessive dampness, a manifestation of soil qi, harms the kidneys. Finally, wood penetrates soil; hence a "massive arrival" of wind, a manifestation of wood qi, causes illnesses associated with the spleen.

These correlations are logical and straightforward, but they are contradicted by an association outlined in *Su wen* 23. Here it is stated that

the heart dislikes heat; the lung dislikes cold; the liver dislikes wind; the spleen dislikes dampness; the kidneys dislike dryness.<sup>470</sup>

Heat is the qi associated with the heart, wind is the qi associated with the liver, and dampness is the qi associated with the spleen. However, cold, the qi of winter and water, is commonly associated with the kidneys; and dryness, the qi of coolness and autumn, is commonly associated with the lung. Even if the reversal of the latter two associations were nothing but a writing error, the harm to the heart caused by heat or to the liver by wind cannot be explained in terms of the mutual domination sequence among the five agents. Hence Wang Bing, the eighth-century commentator, resorted to an empirical rationale: "Heat causes the [movement in the] vessels to rush and become turbid. Cold causes the qi to stagnate and obstruct [the vessels].

Wind makes the sinews dry and tight. Dampness makes the flesh weak and lets it swell. Dryness causes the essence to dry up."471

As in so many other instances, different levels of conceptualization of natural environmental qi etiology coexist in the *Su wen*. Many of the statements on harm caused by one of the five qi are transferrals into the organism of causal relationships observed in man's environment. For example, as *Su wen* 23 emphasized, "the heart dislikes heat," because, as Wang Bing speculates centuries later, "heat causes the [movement in the] vessels to rush and become turbid." *Su wen* 5, however, states that "if one is affected by the dampness qi of the earth, then this harms the skin, the flesh, the sinews, and the vessels."

Because the vessels are associated with and ruled by the heart, one might conclude that earth/soil is able to dominate fire. This metaphor, however, does not apply here for two reasons. First, the season associated with the agent soil is also associated with dampness. In this case, then, it is dampness, not soil, that dominates fire. Second, the context of the statement quoted from *Su wen* 5 emphasizes a threefold origin of pathogenic qi: the qi of heaven, the qi of grains, and the qi of the earth. The first harms the five depots, the second harms the six palaces, and the third harms four body parts—skin, flesh, sinews, and vessels. Even though each of these was associated with a specific depot and hence with a specific agent, this association may have been entirely irrelevant in the present context.

Also, while the tabular accounts of the seasonal associations of one particular qi suggest that during each season, the human organism has to beware of the potentially harmful impact of one specific qi, elsewhere it is frequently noted that certain diseases result from when a person is affected by two or even three natural environmental factors at the same time. For example:

When the three qi wind, cold, and dampness arrive together, they merge and cause a block.

In case the wind qi dominates, this causes "moving block."

In case the cold qi dominates, this causes "painful block."

In case the dampness qi dominates, this causes "attached block." 473

One may wonder how this triple effect and subsequent merger can be reconciled with a statement in Su wen 29 that wind enters the yang conduits while dampness enters the yin conduits.<sup>474</sup> Another model is presented by the author of Su wen 62. He confirms that wind, rain, cold, and summer heat cause evil to emerge in the yang sections of the organism, while beverages or food, characteristics of one's place of residence, sexual intercourse, and certain emotions affect the yin sections. Yet a further model is hinted at in Su wen 62:

[Huang] Di:

How is it that wind and rain harm a person?

Qi Bo:

When wind and rain harm a person, they first settle in the skin, from where they are transmitted into the tertiary vessels. When the tertiary vessels are full, then [the evil] is transmitted into the network vessels. When the network vessels are full, then [the evil] is transported into the large conduit vessels.

Rain is a tangible liquid wetting the earth. Dampness as a seasonal qi includes rain and other such tangible liquids, but the term "dampness" often refers to a more abstract level of the qi associated with the agent soil. An exception is found in *Su wen* 44. Here illnesses are described that may have been observed in people who live or have to work in a place that is very wet:

When someone is submerged in dampness [because] his work has to do with water, and if some [dampness] stays [in the body], or when someone's place of living is damp, and his muscles and the flesh are soggy, a block [develops together with] numbness. This develops into flesh limpness. <sup>476</sup>

We return here to the outset of this discourse on pathological agents in the *Su wen*. Wind, dampness, and so on, may enter the organism and cause a broad range of diseases and illnesses. Occasionally the mere presence of these natural environmental factors in the body is the disease. In other cases this presence was believed to lead to diseases bearing conventional labels, such as leprosy or malaria. In yet other cases the presence of natural environmental factors in the body led to pathological changes, which then constituted the disease. An example is the diseases conceptualized as blocks or obtusion. Regardless of whether the origin of the natural environmental factors and their impact on the human organism were subsumed under the doctrine of systematic correspondence, none of the three causal models just outlined could be called enigmatic, even from a distance of almost two millennia.

#### 8. DISEASES

### 8.1. Lifestyle and Prevention

"(If certain conditions are met,) where could a disease come from?" This rhetorical question was asked by an author whose lines found entrance into  $Su\ wen\ 1$ . Earlier, the same treatise points out why people in the distant past had been able to live through the entire time span allotted to them by heaven and earth. The reasons given make as much sense today as they did then,

if one disregards quite a few additional risk factors that have come to threaten human life in the meantime. Basically, readers were advised that a lifestyle in accordance with the rhythms of the seasons, as well as moderation in action, thought, and feeling, including eating, drinking, and sexuality, guaranteed strength until an inevitable end. The text does not explicitly state, however, whether a person can or occasionally is bound to fall ill despite perfecting his or her lifestyle.

The sages, a passage in Su wen 2 informs us, follow the Way. Hence their vital gi does not exhaust itself and their bodies never develop abnormal diseases. 479 Should this wording be taken literally? That is, if they did not develop "abnormal diseases," maybe they developed ordinary diseases, and if so, which diseases were considered ordinary? Two discourses, Su wen 47 and 48, discuss the nature of "abnormal diseases" and "very abnormal diseases." Cough and urine retention, to name only two examples of illnesses recorded elsewhere in the Su wen, were not listed here; should they be regarded as ordinary experiences? It is a moot point to speculate whether the reference to "abnormal diseases" in Su wen 2 had anything to do with the enumeration of "abnormal" and "very abnormal" diseases later on; nevertheless, it appears to have been the opinion at least of one of the authors of Su wen 2 that an appropriate lifestyle was able to prevent an outbreak of serious diseases, a statement that implies that the outbreak of certain light diseases remained unaffected by one's attempts to live in harmony with yin and yang and the four seasons:

Yin [qi], yang [qi], and the four seasons, they constitute the end and the beginning of the myriad beings, they are the basis of death and life.

Opposing them results in catastrophe and harms life.

If one follows them, severe<sup>480</sup> diseases will not emerge.

This is called "to achieve the Way."

Obviously, like today, in the Chinese past not everyone was capable of grasping the true meaning of leading a preventive lifestyle. "The sages," the text continues, "practice the Way, the stupid wear it [for decoration only]." And this, even though the rules can be worded quite simply:

If one follows yin and yang, then life results; if one counteracts them, then death results. If one follows them, then order results; if one opposes them, then disorder results.<sup>482</sup>

Perhaps this neatly arranged parallel of the consequences of following the laws of yin and yang on human health and social order offers a further clue for understanding the avoidability or unavoidability of disease. A peaceful society may have been an ideal aimed at by all ancient Chinese worldviews.

Social and political experience left no doubt, however, that conflicts were bound to arise now and then. Containment, then, may have been a realistic goal, both in terms of personal conduct and, as we shall see, in terms of treatment. Hence, for the time being, those responsible for the well-being of the state and those responsible for the health of the individual organism were confronted with disorder and disease. In government it was essential to find out the nature of disorder and to determine appropriate policies to prevent it or to turn it back to order. In medicine it was necessary to understand the nature of disease and to define meaningful ways of prevention or treatment. The *Su wen*, for the most part, serves this purpose.

# 8.2 Ontological and Functional Views

The medical manuscripts unearthed at Mawangdui, Zhang jiashan, Shuanggudui, and Shuihudi since the early 1970s, 483 as well as the records on illness and disease in the biographies of Chunyu Yi and Bian Que in the *Shi ji* of 90 B.C., throw light on the conceptual dynamics transforming the views on disease held by Chinese naturalists of the third through first centuries B.C. The Zhou era, in particular the Warring States period, had made plausible and acceptable an ontological explanation of illness on the basis of demon intrusion. Ontic reasoning also came to include, as we have seen above, notions of bugs and, eventually, of wind, dampness, and other natural environmental agents that were believed not only to cause diseases but also to constitute, through their presence in the body, the disease per se.

Subsequent to the unification of the empire, ontic etiology and pathology were augmented by functional views. The new perception of the human organism as a system, modeled after the structure of the newly established state whose previously separate parts contributed to the well-being of the whole, entailed notions of the constant possibility of a partial breakdown of its constituents. In the human organism, it was believed, the conduits, the blood, the liver, the large intestine, and all the other organs and body parts may be hampered in their proper functioning, with disease as a result.

Vessel physiology and pathology were the most visible manifestations of the functional view of human health and disease. They were propagated openly as an alternative to the ontic perspective;<sup>484</sup> they reflected, however, a presumably unavoidable medical parallel to the sociopolitical transition from the final era of the Warring States period to the normality of a united empire. During the former period, external enemies and intruders had been known for centuries to be the most dangerous threats to the well-being of political and human organisms. Now no real enemies posed any threat from the outside; maintenance of the system itself gained highest priority. Any

danger to the well-being of the system was seen as originating from within, in that either not every part of it played its proper role or communication between the parts was blocked.

The plausibility of the new views of the health and illness of the human organism was derived from the changed socioeconomic environment and hence proved very powerful. Nevertheless, functional physiology and pathology were unable to entirely supplant the ontic pathology. As Harper has phrased it, a "dual view of illness [emerged] with earlier ontological explanations overlaid by physiological explanations." That is, during the third to first century B.C., functional vessel theories were blended perfectly with ontic theories assuming the presence of real, tangible evil either simply as a causal factor itself leaving no further traces in the body or, more often, as an intruder that finds its way into the organism, where it causes all kinds of problems.

The Su wen reflects the ontic-functional continuum in its entire breadth, from purely ontic notions to purely functional notions with various intermediary stages. In addition, it documents diseases carrying conventional labels of their own, for example li  $fintilde{n}$  and  $n\ddot{u}e$   $fintilde{n}$ , leprosy and malaria, which, however, were explained now in ontic or functional terms, or both.

# 8.3. Disease Terminology

The conceptual heterogeneity of the *Su wen* is reflected in its disease terminology. For the most part, disease and illness are described in terms of conditions associated with vessel pathology. That is, a set of abnormal conditions, such as pain, abdominal distension, an unusual taste in one's mouth, or dizziness, is traced back to a reverse movement or blockage of qi in a specific conduit, to underlying states interpreted as depletion or repletion, and so on.

The mixed functional-ontic view manifests itself in identifying the functional problems of the system as caused by intruders such as wind, cold, and dampness. Often, however, the intruder is given the abstract designation xie  $\Re$ . Xie is the opposite of zheng  $\mathbb{E}$ , "proper," "orthodox." The term was used in ancient literature, such as the Shi jing # and the Shu jing # both dating from the Zhou era, to denote something improper or persons behaving improperly. In medical contexts, it came to be employed to designate any qi that left its proper position to intrude where it did not belong. This notion pertained to wind or dampness, heat or cold entering the organism in undue quantities as well as to any other qi moving in the body in the wrong direction or into the wrong place. The opposition of zheng, "proper," and xie, "improper," in the human organism reflects the opposition of zheng and xie in morality, as well as in all echelons of society. Every

aspect of social reality had facets that were defined as proper, while the opposite was improper. The improper, or unorthodox, is the evil that must be countered; it is either to be brought back to normality or to be eliminated.

There has been a tendency in Western literature on Chinese medicine to shy away from translating the moral metaphor inherent in the Chinese term *xie* literally; for example, it is sometimes rendered with the neologism heteropathy, that is, "suffering caused by that which does not belong." While this is quite plausible from an apologetic point of view and parallels other attempts to lend a modern face to ancient Chinese concepts, for example, by translating qi as "energy," from a historical point of view a term like "heteropathy" simply serves to obfuscate one of the central social messages on which ancient Chinese etiology and pathology was built.

There is nothing wrong, of course, with a search for clinically applicable elements in an ancient text like the *Su wen*. It should remain one of the prime tasks of historical hermeneutics, however, to uncover and in translation to retain the metaphors that contributed to the acceptance of the knowledge outlined in the *Su wen* two millennia ago.

As an aside, European medicine made use of a term similarly loaded with moral connotations when it referred to pathogenic or pathological agents in the organism. In fact, the term *materia peccans*, literally, "matter committing an error" or "sin," could be considered a very close Latin rendering of the ancient Chinese concept of certain qi, be it heat or cold, and so on, that enters the body and behaves there improperly. No one editing ancient Latin texts today would consider it necessary to eliminate the moral undertones of this term and render it as "heteropathy."

In addition to the language mirroring the functional and functional-ontic interpretations of disease and illness, the Su wen contains numerous terms that are conventional labels of ailments that have been observed to occur in identical or similar courses in different individuals. Some of these, through their context, make immediate sense today and would still be considered symptoms of a deeper, underlying disease. Examples are long 癃 for anuria or urine retention<sup>487</sup> and ke 咳 for cough. Others are labels attached to diseases whose symptoms, as common knowledge, are not necessarily described (though they occasionally are). An example is dian 癲, madness or peak disease, an ailment known to go along with severe changes in a person's behavior. Certain labels refer to what we would consider common dermatological ailments, such as yong 癰 for abscesses or yang 瘍 for ulcers. The translations "abscess" and "ulcer" are, of course, only approximations; an unambiguous diagnosis of what the ancient author may have seen is almost always impossible. The same applies to terms such as tui 癲, literally, "breakdown ill," most likely referring to hernia or inguinal swelling, 488 or li 癘, for "a disease affecting myriads," as the graph seems meant to depict. As pointed out earlier, the description of the symptoms of li 搞strongly suggests that this label was attached to cases of leprosy, among others. Here is no doubt about the interpretation of the term  $n\ddot{u}e$   $\approx$  a reference to malaria. Here

Some labels reflect constructs that find no equivalent in today's terminology. Of these, terms such as jia  $\bar{n}$  or shan  $\bar{n}$  appear in a context indicating the notion of a "conglomeration ill" or "elevation ill" respectively. At least in the latter case, the graph may have been designed as a pictogram reflecting the notion of something bulging like a hill. Hence it combined the graph for hill, shan  $\bar{n}$ , with the radical indicating "disease," "illness," or "ailment." The term bi  $\bar{n}$  belongs to the same category. Its context in the su wen suggests the meaning "block." As such, it might be a technical term designed as a homophone to the vernacular term bi  $\bar{n}$  attested as "blockage" in a medical context in both the Mawangdui and Zhang jiashan manuscripts.  $^{491}$ 

The labels discussed so far permit a more or less exact interpretation of their meaning, but it should be no surprise that some of the disease terms employed by the Su wen authors two thousand years ago are quite enigmatic. For example, all we can do with the term dan paralle is to transliterate it. It appears in various contexts in both the Su wen and the Ling Shu, none of which provides any clues that could lend plausibility to a specific interpretation.  $^{492}$ 

As a second possibility of a transformation of non-Chinese disease terms into Chinese characters, one could think of attempts to reflect the sound and the meaning of an entire foreign term in Chinese writing. The *Su wen* offers *huo luan* 霍亂 as an example for such speculation. *Huo luan* is an ancient term for violent diarrhea that has remained in use until the present. It is used five times in the *Su wen*, once in *Su wen* 28<sup>494</sup> and four times in the

so-called seven comprehensive discourses Wang Bing added to the main text in the eighth century  ${\rm A.D.}^{495}$ 

The compound *huo luan* does not correspond to the graphic structure of the vast majority of ancient Chinese disease terms. Why, one might ask, should a binomial compound have been designed to designate diarrhea if single-character terms were available to signify diarrhea or dysentery? One might speculate that the compound *huo luan*, with its reconstructed early Zhou pronunciation \**hwak* \**luan*, was formed to reflect in ancient Chinese the sound of the term *cholera* used along the travel routes from regions where the Greek term was in use to the Far East to designate a particularly violent type of diarrhea. The literal meaning of *huo luan* is "swift and uncontrolled," a rather adequate description of the sudden diarrhea characteristic of cholera. Still, it may well be that the phonetic proximity of *huo luan* and *cholera* is purely coincidental.

Another example of this type of transmission could be the term *fei xiao*. As with *huo luan*, the compound structure may provide a first hint at a foreign origin. This hypothesis could be supported by an assumption that *fei xiao* is a calque in that the Chinese term, with a reconstructed early Zhou pronunciation \*phjats \*sjaw, might be read not only as a reflection of a foreign sound but also as a literal translation of a foreign meaning. *Fei xiao* 肺消, literally, "lung wasting," could be a rendering into Chinese of the ancient Greek term *phtisis* or lung *phtisis*, which has exactly the same meaning. We see no possibility to move such speculation to firm grounds. Nevertheless, to pore over such a possibility is not entirely meaningless given that there is no evidence in the *Su wen* or any other text of the received ancient literature indicating that ancient Chinese naturalists took pathological changes of the morphology of the core organs into consideration when they conceptualized health and disease.

A fourth and final possible result of non-Chinese influences on terms found in the *Su wen* could be thought of as a description of foreign notions with Chinese words. The term *xiao ke*, literally, "wasting/melting and thirst," a label used to this day for diabetes, is a compound ideally suited to signify two obvious symptoms of this disease. An identical meaning was expressed in European antiquity by Aretaios of Cappadochia. Aretaios described diabetes as a disease accompanied by thirst, with the beverages consumed unable to offset the constant loss of liquid. Hence the body seems to "melt" away. We have no evidence whatsoever to verify the transmission of a European notion as voiced by Aretaios and its transformation into the term *xiao ke*. Because thirst and "melting" are so obviously associated with diabetes, parallel observations in the East and the West leading to similar terms and descriptions of the same disease are much more likely.

Whether any of the examples given here or possible candidates found else-

where in the *Su wen* could survive closer scrutiny remains to be seen. Nevertheless, the methodology pointed out might be useful in addressing this issue.

The term most often used for "disease," "illness," or "ailment" in general is  $bing \not \pi$ . Less frequently, the term  $ji \not \kappa$  is used. No clear-cut conceptual and terminological separation can be discerned in the Su wen between diseases as theoretical constructs defining a specific pathological state, on the one hand, and illness in the sense of pathological conditions that result from a disease and can be perceived as symptoms by the patient himself or any third person, on the other.  $Bing \not \pi$  and  $ji \not \kappa$  often refer to theoretical constructs, in which case we prefer to translate these terms as "disease"; they also denote "suffering" from states that can be interpreted as pathological conditions resulting from disease.

The *Su wen* employs several terms and sentence structures to express a concept comparable to that of sign or symptom in modern medicine. An example is the phrase "the appearance of disease X is the visible/perceivable condition Y," as in the following passage in *Su wen* 38.

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心咳之狀,咳則心痛.喉中介介如梗狀.甚則咽腫喉痺.
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The appearance of heart cough:

When [patients] cough, then their heart aches.

They have an obstructing sensation in the throat, as if there was a stick.

In severe cases the gullet is swollen and the throat is blocked. 499

Heart cough, we may conclude, is the theoretical disease construct. Pain in the area of the heart, an obstructing sensation in the throat, and so on, are the manifestations of this disease that can be perceived by the patient or the physician and lead the way to diagnosing the underlying problem.

Similar to zhuang  $\Re$ , in some instances, the term hou  $\Re$  can be read in the sense of diagnostic "manifestation" or "sign." An example is Su wen 46 where it is said,

#### Qi Bo:

... The disease is called "yang recession."

[Huang] Di:

How does one know [it is] this [disease]?

Oi Bo:

The yang brilliance [qi] is in permanent movement.

The great yang [qi] and the minor yang [qi] do not move.

While [usually] they do not move, [in the present case] they move with great speed.

This is the manifestation of that [disease] (此其候).500

The primary meaning of *hou* is "to observe." That which is observable in the case of a disease are its "signs."

Another structure documenting a similar notion is found in Su wen 17. Here the term zheng \$, literally, "to verify," is employed in the following sentence structure:

徵其脈不奪其色奪者,此久病也

If it is verified that the [movement in the] vessels is not lost and that the complexion is lost, it is a chronic disease.  $^{501}$ 

This, of course, is the origin of the use of the various characters *zheng* 証, 證, 症, 徵, as nouns in the sense of "sign," "symptom," or "evidence" today.

A relationship between a primary and a secondary level of disease is occasionally expressed through the terms *ben* 本, "root," and *biao* 標, "tip."<sup>502</sup>

# 8.4. Malaria

I begin the discussion of diseases in the Su wen with malaria because, from a hermeneutic perspective, it is a rather unproblematic disease. Malaria is not a theoretical construct; it has been observed in different cultures for millennia, and its symptoms have been described in similar terms, regardless of time or place. The differences in the names used to label this disease do not matter. The etymology of the ancient Chinese term nüe is unknown. The etiological basis of the term "malaria" was discussed earlier. The traditional term used in German, Wechselfieber, "alternating states of fever [and cold]," views the issue phenomenologically. We can be sure, though, that all the terms nüe, malaria, and Wechselfieber, as well as others in other languages, referred to a disease that was and still is transmitted by anopheles mosquitoes. Without any doubt, the Chinese term nüe included in addition to malaria cases of illness that might not be diagnosed as malaria today. Nevertheless, malaria was at the center of illness episodes labeled nüe. Malaria is a transcultural and diachronic fact, which enables one to conduct transcultural and diachronic comparisons much better than do theoretical constructs such as "obtusion" or "depletion," which are limited in terms of time and place.

The narration of malaria in *Su wen* treatises 35 and 36 mirrors ancient Chinese attempts at interpreting both the causation of the disease and the reasons for the different courses it may take. Obviously, the contents of *Su* 

wen 35 are based on data gathered from a multitude of patients, possibly over extended periods and by more than one observer. These data are as clearly organized as one could hope for. Although the explanatory models applied to interpret them are obsolete in every respect now, they are rational within a specific paradigmatic context and do not reveal their age.

Su wen 35, like so many other treatises in the Su wen, quotes the contents of several originally separate texts on malaria on which a question-and-answer dialogue between Huang Di and Qi Bo was superimposed by ancient editors. This editing may account for some inconsistencies between the guestions asked and the original texts reshuffled and reassembled to answer them; nevertheless, the entire dialogue is structured quite systematically. The questions pertaining to the typical appearances of the disease are answered within the conceptual framework of wind and gi etiology as well as wind and yinyang-qi pathology. What distinguishes malaria from any other disease is its periodicity of activity and dormancy. Hence the initial question addresses this very issue of periodicity. After elucidating that symptoms such as strong headache, trembling with cold, fits of heat, and yearning for cold beverages are caused by specific movements and partial abundance of yin and yang qi, Qi Bo's answer explains the daily activity of the disease as a manifestation of daily clashes between the protective qi moving through the organism as a guardian against intruders, on the one hand, and wind or water qi that has been able to enter the body, on the other. The former is able to intrude through the open pores when a person sweats; the latter is able to enter when a person with open pores takes a bath.

The dialogue next takes up the issues of extended periods of dormancy between the outbreaks of the disease. Why does it skip one day, sometimes two days, or even several days, before it is active again? Why does its activity occur progressively later every day for some time; that is, why do the intervals between outbreaks increase for some time before this process is reversed and the periods of inactivity are shortened a bit from day to day? Why do some patients experience cold first and heat afterward, why do others experience heat first and cold afterward, and why do still others experience only heat, in which case the disease is called solitary heat malaria? The ontic perspective in the mixed ontic-functional explanatory model requires data on the location of the disease in the body. In *Su wen* 35, the core depots are not mentioned as possible locations of the disease. The evil qi moves along or inside the spine, or it passes through conduits and vessels affecting yin or yang sections of the organism in general.

In contrast to a certain conceptual heterogeneity in *Su wen* 35, *Su wen* 36 is a rather homogeneous discourse. In the first part, it systematically assigns malaria episodes to six conduits, those associated with the bladder, the gall, the stomach, the spleen, the kidneys, and the liver, and to six core organs, lung, heart, liver, spleen, kidneys, and stomach. A final reference to wind

malaria does not fit well into the structure of the discourse and may have been added later. The dominant treatment advocated is "piercing." Whether such piercing was meant to let blood or stimulate qi is not clear; bloodletting is advocated explicitly in only a few instances. *Su wen* 36 was not structured as a dialogue, possibly because this text was added to the *Su wen* only after the dialogue had been superimposed on some other treatises.

Two examples illustrate how malaria was incorporated into the framework of the conduits and core organs. The treatment appears to have been based on a rather simple, mechanistic rationale. If the disease was diagnosed as located in a specific conduit, the healer was advised to open this conduit and remove its blood.

Malaria of the foot major yang [conduit]:

it lets a person have lower back pain and a heavy head.

Cold rises from the back.

[Patients] are cold first and afterward hot.

The heat is intense [as in] harm caused by summer heat.

When the heat stops, sweat leaves [the body].

[This disease] is difficult to bring to an end.

Pierce [the foot major yang conduit] into the cleft to let blood.<sup>503</sup>

Lung malaria:

it lets a person's heart be cold.

When it is very cold [it changes to] heat.

While it is hot, [patients] tend to be frightened as if they had seen something [frightening].

Pierce the hand major yin and yang brilliance [conduits].<sup>504</sup>

In the second part, *Su wen* 36 discusses therapy strategies in terms of a wide range of appearances of the disease. Bloodletting, cauterization, and pharmaceutical treatments are advocated. In contrast to the first part of *Su wen* 36, mere piercing is recommended only a few times.

Su wen 35 and Su wen 36 reflect quite different understandings of malaria as a disease. In Su wen 35, the human organism is seen as being affected as a whole, whereas it is interpreted in Su wen 36 as an assembly of various units each of which may be affected individually. That is, although both Su wen 35 and 36 apply vessel theory and the doctrines of systematic correspondences to the phenomenon of malaria and although both offer a mix of ontic and functional views, even within this common ground two quite different perspectives were possible whose ideological backgrounds may require further thought.

I leave the malaria discourse here. The data and interpretations presented on this disease in the *Su wen* are obsolete and lack any clinical significance today. Nevertheless, the point to be emphasized is that what is described as

 $n\ddot{u}e$  in the Su wen is neither enigmatic nor mystical. The description of  $n\ddot{u}e$  in the Su wen is one example of a rational treatment of a specific disease in ancient China.

# 8.5. Cough

Whereas nüe, malaria, is a label denoting the entirety of a disease phenomenon, including causation by wind or other evil qi, the notion of clashes between the protective qi and the intruder, and the periodicity of the disease's outbreaks and the various symptoms these outbreaks entail, cough denotes first of all a bodily reaction to a deeper pathological condition. When the initial question in the "Discourse on Cough" in Su wen 38 asks, "When the lung lets a person cough, how is that?" one would not expect, if one read this question isolated from its Su wen context, that it originated in a system of medical ideas conceptualized two thousand years ago in a culture allegedly very different from our own. The lung was known as the main organ linked to such activities as inhaling and exhaling and, in abnormal situations, to coughing. The response by Qi Bo, however, corrects Huang Di's simple equation of cough with the lung by immediately pointing out that "the five depots and six palaces, they all [may] let a person cough, not only the lung."505 This is nothing else than an introduction to a discourse integrating a simple phenomenon like cough into the five-agents and depot-palaces doctrine.

Once Huang Di has declared his interest in hearing what Qi Bo has to say on the many types of cough, the latter opens his account by pointing out the etiology of lung cough, possibly still the primordial cough. The lung, he declares, is the location where two streams of cold may meet. One has entered the lung through the skin and the body hair, both of which are associates of the lung. The other has entered the stomach through cold food and beverages, the cold of which is transmitted via a specific vessel from the stomach to the lung. The two evils meet and settle in the lung and cause it to cough.

The text continues to delineate that the relationship between autumn and lung, spring and liver, summer and heart, late summer (the period of extreme yin) and spleen, and winter and the kidneys lets each of these core organs receive the disease directly from the outside during the corresponding season. That is to say,

If [the evil] avails itself of [a weakness in] autumn, then the lung is the first to receive the evil.

If [the evil] avails itself of [a weakness in] spring, then the liver is the first to receive it.

If [the evil] avails itself of [a weakness in] summer, then the heart is the first to receive it.

If [the evil] avails itself of [a weakness in] the [period of] extreme yin, then the spleen is the first to receive it.

If [the evil] avails itself of [a weakness in] winter, then the kidneys are the first to receive it  $^{506}$ 

To construe one example, if a cough originates from the heart in summer, then this is the season of the heart, and the cold evil must have directly availed itself of a weakness in the heart to enter this organ. The text does not state whether the twofold arrival of cold in the lung causing the lung to emit a cough is paralleled by a twofold arrival of cold in the heart as a necessary condition of a "heart cough." If this were so, one would conclude that the two paths taken are through the vessels, the associates of the heart, on the one hand, and via the stomach, on the other. The text does not give these and other details one might wish to know-for instance, whether a heart cough is emitted via the lung anyway. They are, of course, much less important than the parameters required to distinguish between the various types of cough; after all, the treatment should vary in each case. Hence, in a perfectly systematic structure, the text answers Huang Di's question about how to distinguish all the different possible situations. <sup>507</sup> The first two sets of data are quoted here. Lung cough and heart cough are identified by straightforward criteria:

The appearance of lung cough:

[Patients] cough and their breath is panting with noises.

In severe cases they spit blood.

The appearance of heart cough:

When [patients] cough, then their heart aches.

They have an obstructing sensation in the throat, as if there was a stick.

In severe cases the throat is swollen and closed.<sup>508</sup>

This enumeration includes, in addition to lung and heart, liver, spleen, and kidney cough. The editors of this dialogue added a light dosage of suspense, in that Qi Bo at first had been made to state that the five depots and the six palaces could let a person cough, but the latter were not included in the initial list of coughs. Hence Huang Di had to ask again whence the six palaces might receive the disease. As Huang Di probably knew, the palaces were not as directly linked to the skin and its hair or to the vessels as were the lung and the heart. Qi Bo solved the riddle by another enumeration, this time informing Huang Di of the transmission of the cough disease, in case it was not cured, from the depots to the associated palaces. That is,

When spleen cough does not come to an end, then the stomach receives it.

The appearance of stomach cough:

[Patients] cough and vomit. . . .

When liver cough does not come to an end, then the gallbladder receives it.

The appearance of gallbladder cough:
[Patients] cough and they vomit gall.<sup>509</sup>

And so forth. At the conclusion of this list of depot-palace transmissions, one of the details we had looked for at the beginning is added, almost like an afterthought or as a response to an unspoken question: "In all these cases [cold] assembles in the stomach, and ties exist to the lung." <sup>510</sup> This, then, is the explanation of why cough leaves via the lung, even though it originated in the heart, the spleen, the liver, or the kidneys. Curing all these conditions must be very simple; in just a few words Huang Di is told to "treat the respective transporters" if the depots are concerned and to "treat the respective confluences" if the palaces are affected. <sup>511</sup>

Cough, like malaria, is a phenomenon of cross-culturally and diachronically accepted reality. In ancient China, it was considered important enough to be subsumed under the five-agents doctrine and to be associated with all the five depots and six palaces. The discourse devoted to it in *Su wen* 38 is one of the most systematic of the entire text corpus.

#### 8.6. Lower Back Pain

Given the ubiquity of lower back pain in current industrialized societies and in view of the causal significance attributed to only recently evolved patterns of human work and movement, one may wonder about the prevalence of this health problem during the Han dynasty. Was it sufficiently widespread to warrant a lengthy discourse in the *Su wen?* That *Su wen 41* is entirely devoted to disseminating information on how "to pierce lower back pain" may be a noteworthy clue. However, given the absence of any supporting evidence, all we may conclude from the contents of *Su wen 41* is that lower back pain was experienced in ancient China in many varieties, suggesting to ancient observers that it can have equally as many origins.

Su wen 41 offers a nondialogical enumeration of fifteen types of lower back pain. As the two examples below demonstrate, each type is interpreted as being caused by one of altogether fourteen different vessels. Of these fourteen vessels, the separator vessel is listed as responsible for two types of lower back pain. This may be a writing error. The structure of the fifteen entries is roughly identical throughout; occasionally later inserts can be discerned. Bloodletting is recommended explicitly as preferred therapy in half of the cases, mere "piercing" in the remaining cases.

When the foot major yang vessel lets a person's lower back ache, [with this pain] pulling on the neck, the spine, the sacrum, and the back as if there was a heavy [weight],

pierce the major yang [vessel] in the [popliteal] fossa right into the conduit to let blood.

In spring, avoid the appearance of blood.

When the minor yang [vessel] lets a person's lower back ache, as if someone had pierced with a needle into this [person's] skin, and [if the patient is] continuously unable to bend down and up and cannot look back;

pierce the minor yang [vessel] at the tip of the support bone to let blood. {The 'support bone' is the bone rising alone at the outer edge of the knee.} In summer, avoid the appearance of blood. $^{512}$ 

Why or how a specific vessel can "let a person's lower back ache" is not specified. Various possibilities could be imagined, but such speculations lead us nowhere. But we may hypothesize that as in the case of malaria or other diseases where bloodletting was recommended, it was thought that with blood the pathologically causal agent was removed from the organism.<sup>513</sup> Another possible explanation for bloodletting might be the beneficial effect of removal of a simple surplus of blood, an intervention leading to a slackening of the vessels and hence to a decrease of lower back pain. The only evidence of such a rationale could be a commentary insertion stating that "[the locations to be pierced] are situated on a transverse line above the walker, five inches below the fossa, where it is visible abounding [in blood]."514 However, when the text states at one time that the bleeding should be stopped as soon as the initial black color of the blood spurting out of the artificial wound changes to red<sup>515</sup> and a later insert states that the transverse network vessel is to be opened, because "it is ruptured, and [all] the bad blood turns there," then these are hints at a qualitative rather than quantitative rationale for bloodletting. It may well be that both existed side by side.

Lower back pain may be considered a symptom similar to cough. In contrast to the latter, however, where the *Su wen* specifies the underlying problem, that is, a twofold intrusion of cold, lower back pain is described as an ailment whose many variations are caused by different vessels. No evil qi is mentioned; no specific intruder is identified. The vessels themselves are named as causal agents. Maybe readers of the tabular discourse on lower back pain in *Su wen* 41 had in mind a statement in *Su wen* 36 to the effect that "*malaria* of the foot major yang [conduit]: it lets a person have lower back pain," <sup>516</sup> and maybe there was no need to emphasize why a particular vessel caused lower back pain, because everybody was assumed to know this.

# 8.7. Limpness

With the discussion of lower back pain, this survey of examples from the broad range of diseases named in the *Su wen* leaves those diseases and ill-

nesses that are easily identifiable because of their transcultural and diachronic reality. Limpness is different in that at first glance it does not make much sense in a modern medical context. Limpness is not a label for a disease, nor is it a standard symptom. Limpness means a lack of strength or firmness; it means drooping and exhaustion. While these are descriptions of states that can be observed in man, in animals, and in plants, they do not signify any specific underlying disease. Limpness may simply be a sign of being tired or of getting old.

The Chinese term that I have chosen to translate as "limpness" is wei 痿. We do not know whether, by the time the word wei was chosen to denote a certain condition, its character was written with the radical categorizing it as a name of a disease or illness, or with any other radical, or even without any radical at all. In the latter case, the character wei 奏 would offer many meanings, including that of "weak" and "decline." With this meaning it is attested in the Zhou li, where it is equated with another term for dilapidation and decline, tui 頺. 517 The character wei 奏 may, however, also have been designed to raise the meaning of wei 萋 to a more abstract level.

The original meaning of wei 菱, attested in the Shi jing, denotes the wilting of trees.  $^{518}$  By replacing the radical "grass" with the radical "disease/illness," the creators of the term 逶 may have intended to move from the notion of wilting of trees to the notion of limpness of the human organism not in toto but in some of its parts. The Shi ji has 如痿人不忘起,盲者不忘视,"this is like a person with [the disease] wei, who cannot forget how [once he was able] to get up, and it is like a person who is blind and cannot forget how [once he was able] to see." Obviously wei refers here to a lameness of the feet; hence a "person with wei" is unable to get up. Similarly, the dynastic history of the Han states: 疾痿,行步不便,"he developed the disease wei, [and hence] was unable to walk easily."  $^{520}$ 

Su wen 44, the "Discourse on Limpness," in dialogue form, opens with Qi Bo's reminder of the associations between the five depots and their correlates:

The lung rules the body's skin and body hair. The heart rules the body's blood and vessels. The liver rules the body's sinews and membranes. The spleen rules the body's muscles and flesh. The kidneys rule the body's bones and marrow.<sup>521</sup>

Subsequently, in a tabular listing, Huang Di was told that excessive heat in one of the depots causes its correlates to deteriorate. To quote the paragraph on liver heat as an example,

When the liver qi is hot, then the gall flows away.

The mouth has a bitter [taste]; sinews and membranes turn dry.

When sinews and membranes are dry, then the sinews become tense and cramped.

This develops into sinew limpness.<sup>522</sup>

A comparison of the pathology of limpness with that of cough reveals some interesting differences. In the case of cough, once the twofold intrusion of cold had entered a depot, it caused a specific type of cough. If the disease was not cured in time, it was transmitted further to the respective palace associated with the depot first affected. The correlates of the depots, that is, skin and body hair, blood and vessels, and so on, were not mentioned in this context; obviously they were not affected by a twofold intrusion of cold. In contrast, extreme heat, for example, in the liver directly affects the gall-bladder, that is, the palace associated with the liver, and in addition manifests itself in the respective correlates, that is, the sinews and the membranes.

The tabular listing in Su wen 44 of the effects of excessive heat in the five depots is not entirely consistent. Only in the cases of liver and spleen are the palaces named as being affected too. Also, given that heat in the heart results in vessel limpness, in the liver results in sinew limpness, in the spleen results in flesh limpness, and in the kidneys results in bone limpness, one might expect that heat in the lung results in skin or body hair limpness. The text, however, says something different: "When the lung is hot and when the lobes burn, . . . [this] causes wei bi  $\mathcal{B}$   $\mathbb{R}$ ."  $\mathbb{R}$ 

Giving credence to their individual meanings, one may read these two characters as "limpness with an inability to walk." However, "limpness," wei 痿, and "inability to walk," bi 躄, may have referred to the same thing, lameness, in Han China. At one point, the  $L\ddot{u}$  shi chun qiu states: "If much yin is present, then this causes jue 蹶; if much yang is present, then this causes wei 痿." 524 Yang is heat. Apparently the  $L\ddot{u}$  shi chun qiu statement conveyed at least the same etiological understanding of wei as the Su wen. The Handynasty commentator Gao You 高 (fl. A.D. 200) commented on the  $L\ddot{u}$  shi chun qiu passage as follows: "Wei [is] bi, is: inability to walk." That is, Gao You added bi to wei to elucidate the latter's meaning of "lameness." The term jue, which according to the  $L\ddot{u}$  shi chun qiu stood for a disease caused by too much yin, is discussed below, but it may be pointed out here already that its original meaning of "to fall" 526 would parallel as a yin ailment the meaning of wei, "lameness," as a yang disease.

The use of the term *wei* in the *Su wen* suggests that the concept of *wei*, originally "lameness," has undergone a development similar to that of the concept of cough. The latter originally referred to a phenomenon clearly and solely tied to the lung. In a secondary development, it was subsumed under the five-agents doctrine, and henceforth cough was tied not only to the lung but also to all the remaining depots and even palaces. The meaning of *wei* may originally have been restricted to denote an inability to walk.

In a subsequent development, the term appears to have been subsumed under the five-agents doctrine too, and its meaning of lameness was extended to a more general meaning of a limpness that could affect all the depots and their correlates.

In a second part of *Su wen* 44, another, possibly even older explanatory model of the various types of *wei* is quoted to answer Huang Di's question of how the various forms of limpness are contracted. This section is not as systematic as the first part. Its conceptual basis mostly fails to parallel the clear-cut heat-limpness causality mentioned before. In the case of the lung, a relationship between a hot lung and burning lobes, on the one hand, and an inability to walk, on the other, is traced to psychological causes. The reader learns two reasons why a lung can turn hot: being upset over a loss or over the fact that one longs for something but does not get it. Why the heat caused by these emotions in the lung makes a person unable to walk is left unanswered.

Vessel limpness, sinew limpness, and flesh limpness is explained in this second section of *Su wen* 44 without reference to a hot heart, liver, or spleen; in the spleen, dampness rather than heat causes the problem:

When someone is submerged in dampness, [because] his work has to do with water, and if some [dampness] stays [in the body], or when someone's place of living is damp, and his muscles and the flesh are soggy, a block [develops together with] numbness. This develops into flesh limpness. <sup>527</sup>

The only version of limpness that is explained entirely within the causal framework introduced in the first part of *Su wen* 44 is bone limpness. Interestingly, bone limpness has the same consequences as a hot lung: patients are unable to continue to walk

It happens that someone walks a long distance, and is exhausted to fatigue.

He encounters massive heat, and becomes thirsty.

When he is thirsty, then the yang qi attacks internally.

When it attacks internally, then the heat lodges in the kidneys.

The kidneys are the depot of water.

Here now, the water does not dominate the fire.

As a result the bones dry up, and the marrow is depleted.

Hence, the feet cannot support the body.

This develops into bone limpness.<sup>528</sup>

Basically, the conceptualization of bone limpness is an attempt to establish a theoretical link between a long-distance walk and severe exhaustion. The actual consequences of muscle limpness, sinew limpness, and flesh limp-

ness are not specified in the text; one may assume they too lead to an inability to walk. This, at least, is suggested by a statement quoted in the second section of *Su wen* 44:

Hence, when it is said: "Because the lung is hot and the lobes burn, the five depots develop limpness with an inability to walk," then this is explained [by what was said above].  $^{529}$ 

In the first section of *Su wen* 44, the causal chain is different. The heated lung first affects skin and body hair, and only if the heat stays does it cause "limpness with an inability to walk." In the second section, the statement just quoted informs us, the heated lung causes limpness with an inability to walk in all the depots. Hence the actual consequences of sinew limpness, muscle limpness, and flesh limpness need not be spoken of again; they include—as is the case with bone limpness—an inability to walk. Vessel limpness is not mentioned explicitly in this second section of *Su wen* 44.

Hence it may not be too far-fetched to seek the origin of the concept of *wei* as limpness in an original notion of lameness that was broadened to cover the five depots.

The third section of *Su wen* 44 is rather short and follows a systematic structure again. Huang Di asks "how to distinguish these [states],"<sup>530</sup> and there is no doubt that the text continues the clear-cut heat-limpness causality mentioned above, in that it simply enumerates those signs that permit a diagnosis of lung heat, heart heat, and so on.

The fourth and final section addresses the issue of treatment. It is disorganized and unspecific. The only coherent message that can be read from it is, first, that the disease is to be removed from the yang brilliance conduit and, second, that "when the yang brilliance [conduit] is depleted, then the basic sinews slacken, and the belt vessel fails to pull [tight]. Hence, the feet suffer from limpness, and do not function." Once again it is lameness of the feet that is at the center, leaving the impression that the additional variations of limpness were not as carefully and comprehensively conceptualized as the original condition denoted by the character *wei*.

Looking back at the four diseases—malaria, cough, lower back pain, and limpness—discussed so far, one notices that the first three represented situations in which the question appears to have been, If such ailments exist, how can they be explained? With limpness, we have encountered an example where a nosological phenomenon, lameness, was reinterpreted to affect not only a person's feet or limbs but his entire organism as well. The original term for "lameness" was left in exchange for a more abstract term denoting a construct of "limpness." Hence lameness/limpness is situated somewhere in the middle of a list of ailments/diseases reflecting a transition from the undis-

puted existence of nosological phenomena requiring a theoretical underpinning to an undisputed plausibility of conceptual constructs requiring substantiation by specific clinical conditions. The following two diseases, block and recession, are examples of such conceptual constructs. They appear increasingly to respond to questions such as, If health depends on the free flow of qi and blood in the vessels, and so on, what health problems do occur if the free flow is impeded?

That is, in the case of malaria, at one end of the continuum, theory serves to explain specific symptoms. In the case of recession, at the other end of the continuum, specific symptoms serve to substantiate theory.

## 8.8. Block

In the discourse on  $wei \not g$ , the concept of the ailment of lameness was extended from an inability to walk to a more general limpness of the flesh, the sinews, the vessels, and so on. The term wei was retained in this process; only its meaning was broadened. The disease "block" is an example of a similar development from a rather mechanical problem, the closure of the urethra, to an abstract concept. In contrast to lameness/limpness, whose original Chinese name wei was clearly meant to signify an observable phenomenon, an inability to walk, the term  $bi \not \exists j$ , used for blockage, is a conceptual construct already in that it serves not only to signify but also to explain an observable phenomenon, the failure to pass urine. To denote the development from a concept of a concrete tubular blockage to a more abstract understanding, the original term  $bi \not \exists j$  ("blockage") was left with the original meaning, and a new term, the homophone  $bi \not\equiv j$  ("block"), was created to denote the abstract concept.

Both the *Yin yang shi yi mai jiu jing*, excavated at Mawangdui, and the *Mai shu*, excavated at Zhang jiashan, list an ailment named bi, "blockage." The *Mai shu* also provides a definition: "When one is unable to urinate, it is blockage." The Mawangdui manuscript identifies "blockage" merely as one of the ailments produced by the great yin vessel, which is also named stomach vessel in that context. In both cases, what one might call the vernacular term for closure, blocking, shutting in, that is, bi 閉, was used. The *Su wen* employs the term bi 閉 in the same sense:

In the case of a spleen disease, . . . [the path of] urination is closed. In the case of a kidney disease, . . . [the path of] urination is closed. In the case of a stomach disease, . . . the path of] urination is closed. In the case of bladder disease, [the path of] urination is closed. <sup>533</sup>

In numerous instances, the Su wen uses the vernacular term bi 閉, sometimes together with sai 塞, to denote not only an inability to urinate but also various other health problems where it was believed that a passage, which should be free, was blocked. Examples read as follows:

the five depots are closed (bi 閉), [because] they are cut off [from circulation], the passageways in the vessels are impassable, and the qi fails to come and go.  $^{534}$ The abdomen distends and is closed (bi 閉).
When above and below are no longer passable, then the end has come.  $^{535}$ The skin structures are obstructed (bi sai 閉塞). . . .
[As a result] the protective qi cannot flow out.  $^{536}$ 

In various contexts, the same meaning of "blocked opening" or "blocked passageway" was also expressed by the character bi  $\not\equiv$ . This term appears in the received version of the Shi ji of 90 B.C., where Bian Que is said to have acted as a physician specializing in the "blockage of ears and eyes," er mu bi qi  $\not\equiv$   $\not\equiv$   $\not\equiv$  , when he arrived in the state of Zhou. Being an itinerant physician, he immediately realized that this was the best thing to do in a society where the elderly were held in high esteem.  $^{537}$  In the Su wen, a blockage of the throat as a passageway of food is repeatedly termed bi  $\not\equiv$ , as for instance in the following statement:

In severe cases the gullet is swollen and the throat is blocked (bi 痺).<sup>538</sup>

More often, however, the Su wen authors employed the term bi  $\not{p}$  to signify instances of blockage that are purely theoretical constructs. For example, the skin was known to have holes. Under certain conditions, sweat should pass through these holes. As we saw in the quote from Su wen 62 above, sweat was occasionally conceptualized as protective qi. When the pores, or skin structures (cou i  $\not{k}$   $\not{p}$ ), as the ancient Chinese naturalists named the pores, were closed, then the protective qi was unable to leave the body and this could have various unwelcome consequences. However, the skin was also conceptualized as one of the passageways of blood. In this case, the blood was not thought to move through the skin from inside out; rather, it was assumed to course within the skin. The ancient Chinese authors believed the hypothetical passageways of the blood inside the skin could be blocked as much as the passage of protective qi or sweat through the skin from inside out. Hence one statement points out:

when the blood congeals in the skin, this is block (bi 痺).<sup>539</sup>

Because of this blockage, the context informs us, the blood coursing in the skin cannot return to its point of departure. This is a serious disease. It is called block. At this level of conceptualization, block is both a causal factor in the development of the disease (the blockage itself is generated by a more basic causal factor, wind) and the label given to the disease. Ailments such as pain or local distension were assumed to be manifestations of qi accumulations. These accumulations, in turn, were thought to occur because

the passage of the respective qi through a certain region was blocked, mostly by external agents such as cold, dampness, or wind. Two perfect examples of such reasoning are given by the following statements on the etiology and health consequences of liver and kidney block.

If in case of a green-blue [complexion the movement in the] vessels arrives extended, rebounding left and right,

accumulated qi exist below the heart, with propping [fullness in the] upper flanks.

This is called liver block.

One gets it from cold and dampness.<sup>541</sup>

If in case of a black [complexion the movement in the] vessels arrives firm and big above,

accumulated qi exist in the lower abdomen and in the yin region.

This is called kidney block.

One gets it from washing oneself with cool water and then going to lie down.  $^{542}$ 

These statements do not yet represent the highest level of conceptualization reached in this development. Cold and dampness were identified as causes of liver block; cool water, that is, dampness, was named as the external agent that enters the body and causes kidney block. Hence the image is still retained of a foreign agent that settles in some passageway, which is blocked henceforth.

A statement immediately preceding the paragraph on liver block refers to lung block. Here the concept of lung block is dissociated from the original meaning, closure. Lung block, like liver block or kidney block, is a disease label conferred on certain states of ill health. These states manifest themselves in syndromes, which are composed of specific movements in the vessels, a specific complexion, a specific emotion, and feelings that are interpreted as qi accumulations. In contrast to liver block and kidney block, however, one is told neither which outside agent may have entered the organism nor where it may have blocked a passageway. The only cause named is having sexual intercourse while one is drunk:

If in case of a white [complexion the movement in the] vessels arrives gasping and at the surface,

this is depletion above and repletion below.

One is frightened, and there is accumulated qi in the chest.

If it is gasping and hollow,

this is called lung block as well as cold and heat.

One gets it when one is drunk and then has intercourse.<sup>543</sup>

Su wen 43 is a "Discourse on Blocks." In several distinct sections, Su wen 43 offers examples of various stages reached in the ongoing conceptualiza-

tion of blockage. The opening question by Huang Di seeks information on how a block emerges. In a perfectly ontic manner, Qi Bo tells Huang Di:

When the three qi wind, cold, and dampness arrive together, they merge and cause a block.

In case the wind qi dominates, this causes "moving block."

In case the cold qi dominates, this causes "painful block."

In case the dampness qi dominates, this causes "attached block." 544

Although the theoretical construct in this statement that first comes to one's attention is a straightforward ontology, it includes a secondary construct too. The metaphorical value of wind as something that moves all the time and does not exist if it fails to move was employed to explain a moving block. The experience of biting cold was transferred to an explanation of a painful block. Dampness can cling to anything; this may have been the image employed in the concept of an attached block. It is hard to imagine that the original meaning of an opening or a passageway being blocked is retained here. Moving block, painful block, and attached block may, of course, evoke a notion of a plug, but to think that this plug moves through the original metaphor too far.

In a second question, Huang Di requires to know why there are five types of block. In his response, Qi Be subsumes the concept of blockage under the five-agents doctrine. Accordingly, wind, cold, and dampness are the qi that can cause a block:

If one encounters these [qi] in winter, this leads to bone block.

If one encounters these [qi] in spring, this leads to sinew block.

If one encounters these [qi] in summer, this leads to vessel block.

If one encounters these [qi] in [the period of] extreme yin, this leads to muscle block.

If one encounters these [qi] in autumn, this leads to skin block.<sup>545</sup>

The qi, and with them the blocks, do not have to stay in the bones, the sinews, the vessels, the muscles, or the skin for good. If not treated successfully, the disease may move deeper into the organism:

Each of the five depots has a [specific] correlate; when the disease [in the bones, sinews, and so on] lasts for a long time, and does not go away, it [proceeds to the] interior, and lodges in the [depot that is] the correlate [of the bones, sinews, and so on] respectively.

Hence

when a bone block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the kidneys.

When a sinew block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the liver.

When a vessel block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the heart.

When a muscle block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the spleen.

When a skin block has not ended yet, and one is affected by evil [qi] again, [the evil qi proceeds to the] interior and lodges in the lung. 546

It is difficult to know which morphological image of the five depots the author of these lines had in mind. Apparently there was some underlying notion of a tubular structure that could be blocked by the qi of wind, cold, or dampness on their course into the body's interior. In the immediately following section, the pathological consequences resulting from blocks in the five depots, in the intestines, and in the bladder are listed. For example,

In the case of a uterus block, if one presses the lower abdomen and the urinary bladder, this causes internal pain as if hot water had been poured over [the lower abdomen].

Urination is rough.

Above, it causes clear snivel.547

Physicians need to know criteria, how to locate the current location of a block. The following list helps.

When the excessive qi [causes] panting breath, a block has collected in the lung.

When the excessive qi [causes] anxiety and pensiveness, a block has collected in the heart.

When the excessive qi [causes] an [involuntary] loss of urine, a block has collected in the kidneys.

When the excessive qi [causes] fatigue and exhaustion, a block has collected in the liver.

When the excessive qi [causes] muscle rupture, a block has collected in the spleen.  $^{548}$ 

A "block," these symptoms indicate, is simply a presence of wind, cold, and/or dampness but no longer a concrete closure of a tubular passageway or of an opening. Later in the text, five blocks are enumerated that do not cause pain. These are blocks affecting the bones, the vessels, the sinews, the flesh, and the skin. Only in the case of vessel block is the original meaning of blockage or closure retained. A block in the vessels causes blood to congeal and stops its flow.<sup>549</sup>

Based on mixed ontic-functional reasoning, Qi Bo at one point informs Huang Di that the presence of the excessive qi and hence the blockage is easy to cure as long as it is restricted to the skin. Once it has moved to one of the external associates of the depots, that is, to the vessels, the sinews, and so on, it may cause long-lasting pain. Finally, if it was able to move into the

depth of the organism, identified in this context as the depots, the patient is bound to die.

The final result of this development is reflected in the definition of bi, written now  $\mathcal{P}$ , in a modern dictionary of Chinese medical terminology:

*Bi*, disease name. (1) refers to numerous diseases caused by evil qi blocking the limbs, the conduits and network vessels, and the depots and palaces. Depending on which qi dominates and where the pathological changes take place, as well as on the characteristics of the symptoms, one distinguishes wind block, cold block, dampness block, heat block, joint running [wind or pain], painful wind, encircling block, blood block, qi depletion block, blood depletion block, heart block, liver block, spleen block, lung block, kidney block, intestinal block, and bladder block. (2) refers to pain and/or numbness of the joints, and to an inability to freely bend and stretch them, caused by an intrusion of wind, cold, and dampness evil. (3) a term in pathology. It means blocked, not passable. 553

# 8.9. Recession

Jue  $\mathbb{K}$  is the last disease discussed here in our move through a continuum that begins with diseases of the highest cross-cultural and diachronic factuality and ends with diseases that constitute purely theoretical constructs. Malaria, the disease we started with, is a nosological unit accepted as a fact and described in its periodicity wherever and whenever anopheles mosquitoes have spread it. In contrast, *jue* is a disease whose recognition and conceptualization is restricted to vessel theory and the doctrines of systematic correspondence in Chinese classical medicine. Except for a few symptoms, such as cold hands and feet, in its etiology and pathology *jue* has little to offer for cross-cultural comparisons.  $^{554}$ 

In ancient China, *jue* was as accepted a disease entity as malaria or cough. The term *jue*  $\mathbb{R}$ , as employed, for example, in *Su wen*  $5^{555}$  and *Su wen* 45, see must have been in common usage by the time these treatises were written.

It appears with varying radicals in a medical context in the  $\it Yin yang shi yi mai jiu jing 陰陽 十一脈灸經 of the Mawangdui texts of the early second century B.C., in the Zhang jiashan texts <math>\it Mai shu$  脈書 and  $\it Yin shu$  引書 of the midsecond century B.C., and in the Bian Que biography in Sima Qian's 司馬遷  $\it Shi ji$  史記 of the early first century B.C. Its pathological connotations were specified in the etymological dictionaries  $\it Shuo wen jie zi$  説文解字 of circa 100 B.C. and Liu Xi's 劉熙  $\it Shi ming$  釋名 of A.D. 200.  $\it S57$ 

The first question to be addressed to clarify the meaning of jue pertains to its vernacular usage. Is there any nonmedical appearance of the term that would allow us to trace a medical derivation, such as wei 痿 from wei 萎 and bi 準 from bi 閉? Or is there any evidence suggesting that the term jue has been subject to an increasing abstraction, in the same way as the two terms just mentioned, from a more mechanical illness terminology to a theoretical construct?

Mencius has jue 鳜, read by James Legge as "to fall." The Shi ji has gu bao jue er si 故暴蹶而死,  $^{559}$  which could be read as "hence [that person] suddenly falls and dies" accordingly. In fact, most of the meanings associated with jue 蹶 include notions such as "to move quickly," "suddenness," "to excite." Maybe, then, jue was chosen to denote a rapid breakdown as is suggested by the usage of the term in the Shi ji.

There is, however, a second layer of meanings associated with defeat, <sup>560</sup> exhaustion, <sup>561</sup> and abandonment. <sup>562</sup> This meaning of "ceasing" apparently was also at the basis of naming a conduit *jue yin*, thereby associating it with the lowest yin category in the sixfold yin-yang categorization. *Jue yin* qi, then, is a yin qi that is almost extinct or a yin activity that has almost come to an end. <sup>563</sup>

It may well have been that both these layers were brought together when the term  $jue\ mathbb{m}$  eventually was chosen to denote, in keeping with vessel theory, a pathological construct that was to express two things: first, a movement of yin or yang qi out of a section of the body where it should be present but ceases to be present; and second, a violent reaction resulting in a sudden fall and immediate death (with this "death" being either unconsciousness or real death). Hence the interpretation of the vernacular term  $jue\ mathbb{m}$  in the  $Shuo\ wen\ jie\ zi$  is  $jiang\ mathbb{m}$ , "to perish," "to die,"  $fiant\ mathbb{m}$  while the interpretation of  $fiant\ m$ , that is, of the term designed to denote a disease, is  $fiant\ m$  is a purely theoretical construct. No evidence whatsoever could be observed that indicates, first, what might be considered a flow of qi in a normal direction and, second, a flow contrary to a normal direction.

We are able now to trace the use of the term *jue*. First, there may have been a label for an illness of "sudden fall"; this was *jue*  $\Re$ . The statement quoted above from the  $L\ddot{u}$  shi chun qiu offers a good example. <sup>565</sup> Once ves-

sel theory was applied to explain the diseases of the human organism, the terms  $jue \not \equiv m$  and  $jue \not \equiv m$  came to be used to designate conditions thought to be caused by reversely moving qi.

Su wen 45 was devoted to a "Discourse on Jue" in the same way as other Su wen discourses concentrated on lower back pain, limpness, and so on. Two issues are dealt with in this context; first, why and in which variants the disease emerges and, second, how it manifests itself.

Though it is focused on *jue*, *Su wen* 45 does not offer a precise definition. A statement closest to such a definition is found in *Su wen* 5:

*Jue* qi moves upward; it fills the vessels and leaves the physical appearance.<sup>566</sup>

The reason, then, why ancient Chinese writers chose to apply the term jue 厥 in a medical context is clear. Jue yin, ceasing yin, as pointed out above, denotes a yin quality, that is, the lowest yin quality. In contrast, the term jue 厥, as employed in the context of Su wen 45 and as defined in the statement quoted above from Su wen 5, denotes a movement of yin or yang qi out of a section of the body where it should be present but ceases to be present. Hence in this context of pathological dynamics, I have chosen to translate jue 厥 as "recession." Recession includes notions of withdrawal, of ceding back, that is, of leaving a terrain once occupied by oneself to someone else. In this sense, the medical term jue 厥 could be related to the term jue % used in the sense of "to fall," "to suffer a setback," in the Dao de jing version unearthed among the Mawangdui manuscripts; the printed version of the Dao de jing that was transmitted through the centuries has jue % instead of jue %.

In *Su wen* 45, the "Discourse on Recession" begins with a question from Huang Di on the nature or causation of two variants of recession, cold recession and heat recession. Qi Bo explains that a weakening of the yang qi "below," that is, in the feet, causes cold recession, while a weakening of the yin qi "below" causes heat recession. That is, recession has been abstracted in this context beyond its immediate literal significance. Cold recession or heat recession is not to say that cold withdraws, in the first case, or heat withdraws, in the second. Cold recession is to say that certain body parts, in this case the feet, turn cold, because the yang qi that has warmed them has weakened. That is, the yang qi has left the feet.

The explanation Qi Bo gives later in the text for the etiology of cold recession and heat recession is based entirely on the yin-yang doctrine. Both cold recession and heat recession are consequences of an uneven presence of yin and yang qi. This uneven presence, in turn, is seen as a result of "violent" actions, of "fighting" among yin and yang qi in the organism. An unbecoming behavior of the patient is identified as the primordial causal factor, because overtaxing oneself in autumn and winter, when yang qi is weak anyway, weakens yang qi in its function of pouring into the four extremi-

ties and keeping them warm. Yin qi is present instead and causes cold. Similarly, to have sexual intercourse while one is drunk or after one has dined to repletion causes the kidney qi to weaken and accumulates yang qi in the stomach. The kidney qi can no longer "provide the four limbs with supplies," "the yang qi dominates alone," and "it is therefore that the hands and the feet are hot." <sup>567</sup>

A withdrawal of yin qi below causes a "depletion" of yin qi there; at the same time, the yin qi may abound above. This, Huang Di is informed by Qi Bo, may lead to abdominal fullness. On the other hand, when yang qi is depleted below and abounds above, too much heat confuses the head and this "lets a person suddenly be unable to recognize people," a condition from which a patient may recover after half a day or even after a full day. Recession, we realize here, combines symptoms and ailments that would be attributed to very different etiologies and pathologies in modern Western medicine.

To be sure, the label malaria may have been applied to ailments that were not caused by an anopheles bite and would not be diagnosed as malaria today. However, if this was the case, it was a diagnostic error in the same way that physicians today repeatedly mistake a case of malaria for the common cold. Such diagnostic errors do not negate the fact that the term  $n\ddot{u}e$  in ancient China and the term "malaria" in Europe were meant to describe one and the same disease, two millennia ago and now. The Chinese nosological construct of recession does not mistakenly include symptoms and ailments that would be considered unrelated today. The construct purposely encloses these symptoms and ailments, because it interprets all of them alike as being caused by specific outcomes of violent encounters between the two antagonistic forces vin and yang qi in the organism. This is the difference between the identification of malaria as a nosological entity of cross-cultural and diachronic validity, on the one hand, and the identification of recession as a nosological construct restricted to the rationality of classical Chinese medicine, on the other. In contrast to malaria whose periodicity is obvious, to cough, whose emanation from the lung is obvious, and to blockage or block, whose origin in the failure to pass urine is equally obvious, neither the etiology nor the symptomatology of "recession" has anything to offer that requires a conceptualization as recession.

The discourse in *Su wen* 45 continues in an organized manner but does so only after a conceptual switch. Recession, Huang Di is told, occurs in each conduit. Hence there are six different sets of signs informing a knowledgeable practitioner whether recession has occurred in the great yang, the yang brilliance, the minor yang, the major yin, the minor yin, or the ceasing yin conduits. The mechanical links between a supposed recession, for example, in the major yin conduit and a lack of appetite are not explained. To quote the full text of this paragraph:

Recession in the major yin [conduit] results in [the following:] abdominal fullness and bloating. The behind is not freely passable. [Patients] do not wish to eat, and if they eat, they vomit. They cannot lie down.<sup>569</sup>

As was the case with blockage or block, the notion of recession appears to have been dissociated from its original mechanical background. Numerous ailments were traced to a presumed recession in one or another of the conduits, but what this really meant in terms of the actual mechanics of the flow of qi was not discussed in detail. An example is the following short dialogue between Huang Di and Qi Bo in *Su wen* 40.

[Huang] Di:

[Someone] has the [following] disease:

the breast is swollen; the neck aches, the chest is full, and the abdomen is distended.

Which disease is that?

How is it acquired?

Oi Bo:

It is called recession with countermovement.<sup>570</sup>

The discourse of *Su wen* 45 ends with a list of manifestations of such "recession with countermovement," a term applied, perhaps, to diseases considered extreme cases of recession. The enumeration includes the signs of recession with countermovement affecting the three yin and three yang conduits. It continues with a remark regarding the fatal outcome of recession with countermovement affecting all three yin conduits at the same time. Finally, it lists those symptoms resulting from recession with countermovement in the hand major yin, the heart ruler, the hand minor yin, the hand major yang, and the hand yang brilliance and hand minor yang conduits.

The difference between recession with countermovement affecting the foot major yin conduit and recession with countermovement affecting the hand major yin conduit is rather pronounced; it remains unclear, however, why such a difference exists. It may well be that the two paragraphs originated in different texts that were combined in *Su wen* 45 only by editorial decision:

Recession with countermovement in the major yin [conduit results in the following]:

the shins are tense {cramped}.

Heartache pulls on the abdomen.

Treat the [conduit] ruling the disease.<sup>571</sup>

Recession with countermovement in the hand major yin [conduit results in the following]:

depletion, [a feeling of] fullness, and cough. [Patients] tend to vomit foam.

Treat the [conduit] ruling the disease.<sup>572</sup>

Some of these instances of recession with countermovement cannot be treated; they are fatal and do not respond to any therapeutic approach. For most of the curable cases the text merely advises to treat the conduit in which the recession with countermovement occurs. How this is to be done, whether by bloodletting or by qi manipulation, is not specified.

Recession with countermovement represents the peak of the development toward the generation of nosological constructs in ancient Chinese medicine. A concept such as recession with countermovement makes sense only on an abstract level. I find it difficult to believe that the ancient Chinese authors who wrote about recession with countermovement had in mind both the original mechanism of a qi moving back from a territory and the actual mode of passage of qi through the conduits implied by the term "countermovement." Ancient Chinese medical authors, like many of their contemporaries writing in other fields, must have possessed more than enough technical expertise to realize all the mechanical problems resulting from taking a notion of recession with countermovement too literally.

# 8.10. Somatopsychic Diseases

The concept of psychosomatics implies the dual existence of psyche, that is, soul-mind-sentiments, and soma, that is, body or physical appearance. It equally implies that these elements are closely tied to each other, influence each other, and cannot be separated from each other—except in death. The *Su wen* authors recorded two theoretical models closely paralleling the basic Western understanding of an interaction among emotions, affects, sentiments, and the mind, on the one hand, and the physiology and pathology of the human body, on the other.

Nevertheless, in the following, I refrain from using the term "psychosomatics" and use a term introduced by Arthur Kleinman following his studies in the 1970s of mental disease constructs in traditional Chinese culture. Kleinman noticed that his informants often expressed psychic problems by referring to somatic complaints as organic ills. Hence he introduced the term "somatopsychics" to reflect this emphasis on somatic expressions of psychic problems. <sup>573</sup> In the *Su wen*, now, we find a different reason to take up Kleinman's suggestion again, the expression  $xing zhi \, \% \, \sharp$ , a literal equivalent of "somatopsychics."

Su wen 24 speaks of wu xing zhi 五形志, literally, the "five somatopsychic [states]." The commentary by Du Yu 杜預 (d. A.D. 284) on the Zuo zhuan, twenty-fifth year of Duke Zhao, 左傳, 昭公二十五年, is the earliest known

interpretation of six emotional or psychic states as zhi 志: "Rites are performed to control the six emotions love, hate, joy, anger, sadness, and happiness, and to see to it that they are never expressed excessively." In the expression wu xing zhi 五形志, the numerative five is used to designate various xing -zhi states in the sense of different combinations of somatic and mental conditions. I return to this expression below in a discussion of relevant therapies. 574

Body and mind, although conceptualized as separate facets of human existence, depend on each other. In ancient times, *Su wen* 1 points out, people were able to live through the entire time span of one hundred years allotted to man, because

they were able to keep physical appearance and spirit together. 575

People in recent times, the text continues, pursued different ends. They die at the age of fifty. As  $Su\ wen\ 34$  concludes,

when a person's body and mind have no mutual [relationship], this is to say: death.<sup>576</sup>

Hence it is a matter of course that a healthy body should go along with what is considered a healthy mind. At the same time, a healthy mind depends on a healthy body. Similarly, affects considered abnormal were identified as causes of bodily ills in the same way as pathological processes in the organism were known to cause emotional changes.

Su wen 5 contains a very precise statement on the interrelatedness of emotions and qi. The emotions are generated through qi transformation in the depots, and they themselves, in turn, are able to affect the qi in the same way as such natural environmental factors as cold and heat:

Heaven has the four seasons and the five agents.

It is through [the former that heaven causes] birth, growth, gathering, and storage.

It is through [the latter that it] generates cold, summer heat, dryness, dampness, and wind.

Man has the five depots;

they transform the five qi,

thereby generating joy, anger, sadness, anxiety, and fear.

The fact is,

joy and anger harm the qi;

cold and summer heat harm the physical appearance.

Violent anger harms the yin;

violent joy harms the yang....

If joy and anger are unrestrained,

if cold and summer heat exceed the norms,

life no longer exists on a solid [foundation].577

Su wen 46 explains in detail what happens when a pathological movement of qi is able to generate pathological emotions and abnormal ways of behavior.

[Huang] Di:

Someone suffers from anger and craziness;

how does this disease emerge?

Oi Bo:

It emerges from the yang.

[Huang] Di:

The yang? How can it let a person become crazy?

Qi Bo:

As for the yang qi, because [its flow] was suddenly cut off and because [this blockage] is difficult to open, one tends to be angry.

The disease is called "yang recession."

[Huang] Di:

How does one know this?

Qi Bo:

The yang brilliance [qi] is in permanent movement.

The great yang [qi] and the minor yang [qi] do not move.

While [usually] they do not move, [in the present case] they move with great speed.

This is the manifestation of that [disease].<sup>578</sup>

Anger as an affect and craziness as an abnormal behavior are explained here as consequences of yang qi moving out of its own territory. This short exchange of questions and answers does not tell us why the yang qi was pressed to recede in the first place. It is in *Su wen* 3 that we are informed that anger is not only the consequence but also the cause of qi recession.

As for the yang qi, in case of great anger, the qi of the physical appearance is cut short and the blood is densily compacted above.

It lets that person experience a beating recession. 579

The various *Su wen* authors by no means agreed on whether it was yin qi or yang qi that was pressed to rise by anger. The reddening of an angered face suggested that either receding yang qi pushed blood, which was categorized as yin, upward or yin qi itself was stimulated to rise, thereby causing yang qi not to move upward but to occupy the territory left empty by the yin qi. Hence *Su wen* 62 states:

[Huang] Di:

How is it that yin [qi] generates a repletion?

Qi Bo:

If joy or anger is unrestrained, then the yin qi rises contrary [to its regular course].  $^{580}$ 

When it rises contrary [to its regular course],

then a depletion results below.

When a depletion exists below,

then yang qi moves there.

Hence, this is called "repletion." 581

The yin qi option of anger is more often recorded in the *Su wen* than the yang qi option. *Su wen* 62 provides a more general explanation.

When evil emerges,

it either emerges in the yin or

it emerges in the yang.

When it emerges in the yang,

it was acquired through wind, rain, cold, or summer heat.

When it emerges in the yin,

it was acquired through beverages or food,

the place where one lives, [sexual union of] yin and yang, or through [emotions such as] joy or anger.  $^{582}$ 

As the following list of altogether six emotions and their effects on somatic processes shows, *Su wen* 39 leaves open which qi is caused by anger to move contrary to its regular course, thereby causing an undesirable upward rush of blood.<sup>583</sup> However, with this list *Su wen* 39 presents a complete model of psychosomatic diseases based on an integration of the six emotions into the yin-yang doctrine of systematic correspondences and into vessel theory. As a look at the original text shows, in addition to the six emotions quoted here, the full list includes natural environmental factors such as heat and cold. That is to say, in the same way as in the general statement just quoted from *Su wen* 62, the author of *Su wen* 39 considered the effects of the six emotions on the qi moving in the organism as tangible as those of heat and cold.

When one is angry, then the qi moves contrary [to its regular course]. In severe cases, [patients] spit blood and there is outflow of undigested food. Hence, the qi rises.  $^{584}$ 

When one is joyous, then the qi is in harmony and the mind is unimpeded. The camp [qi] and the protective [qi] pass freely. Hence, the qi relaxes.

When one is sad, then the heart connection is tense.

The lobes of the lung spread open and rise, and the upper burner is impassable.

The camp [qi] and the protective [qi] do not disperse.

Heat qi is in the center.

Hence, the qi dissipates.

When one is in fear, then the essence withdraws.
When it withdraws, then the upper burner becomes closed.
When it is closed, then the qi turns around.
When it turns around, then the lower burner becomes distended.
Hence, the qi does not move. . . .

When one is frightened, then the heart has nothing to lean on, the spirit has nowhere to return, and one's deliberations have nowhere to settle. Hence, the qi is in disorder.

When one is pensive, then the heart has a place to be, the spirit has a place to turn to, and the proper qi stays [at one location] and does not move. Hence, the qi lumps together.<sup>585</sup>

The yin-yang model of somatopsychics permits an explanation of the effects of the six emotions on the organism and suggests appropriate therapeutic measures. As the first quote from *Su wen* 46 demonstrated, if certain irregular movements of qi cause unwanted emotions in a patient, a treatment suitable to regulate these irregular movements must be initiated. The *Su wen* discourses, however, provide very little information on how a physician should treat a disease caused by an emotion. One may wonder whether he is required to focus on the emotion, find the cause of its pathogenic severity, and remove this cause to eliminate the emotion, or whether he is to disregard the emotion and focus instead on the harm it has caused to the movement of qi and to other processes in the organism and address these to achieve a cure. *Su wen* 5, for example, chooses a third approach. It recommends a strategy to arouse an emotion that, on the basis of the five-agents doctrine, is able to subdue the emotion causing the harm. The reason why a specific extreme emotion may have arisen in the first place is not discussed.

In the paradigm of the yin-yang model, the *Su wen* provides no clue to answer these questions. However, the text tells us that the two alternatives of treating the organic consequences of extreme emotions and of eliminating the emotions in the first place were both conceptualized, albeit on the basis of paradigms other than the yin-yang model.

In an addition to *Su wen* 24, an unknown author spoke of *wu xing zhi* (see above) to point out that five different somatopsychic combinations are possible. To a list of originally four such combinations recommending specific therapeutic approaches for each of them, he added a fifth. Obviously, it was well known that there are situations when both mind and body suffer or are in good condition. But it was also observed that a body in good health could nevertheless be accompanied by a suffering mind, and vice versa. The original four combinations are the following:

When the physical appearance is joyful while the mind suffers, the disease emerges in the vessels.

Treat it with cauterization and piercing.

When the physical appearance is joyful and the mind is joyful [too], the disease emerges in the flesh.

Treat it with needles and [pointed] stones.

When the physical appearance suffers while the mind is joyful, the disease emerges in the sinews.

Treat it with poultices and stretching [exercises].

When the physical appearance suffers and the mind suffers [too], the disease emerges in the gullet and in the throat.

Treat it with the one hundred drugs.<sup>588</sup>

It may not be evident on first sight whether the sufferings of physical appearance and mind in this statement are the cause or the result of the diseases in the body. However, the author of the later addition to the text left no doubt that the diseases in the vessels, in the flesh, in the sinews, and in the throat should be thought of as consequences of the bodily and mental states described:

When the physical appearance is frequently affected by fright and fear, the conduit [vessels] and the network [vessels] become impassable. The disease emerges from [sections that are] numb.

Treat it with massage and medicinal wines. 589

In no case is treatment directed at the mental state. We may be surprised to read that even a situation one might consider perfect harmony, that is, when both body and mind are full of joy, may lead to disease. However, it is to be kept in mind that all the emotions mentioned are considered pathogenic only in the case of extreme expressions. Hence even a situation in which body and mind express extreme joy may lead to disease, in this case to a disease of the flesh. That is, the physician need not be concerned with the causes of changed physical or mental states; he simply treats the somatic problem he is confronted with.

This, however, is not the only solution possible. In several discourses, the *Su wen* advocates a five-agents model of emotions and somatopsychics, and it is on the basis of this model that a treatment can be focused on the psychic rather than on the somatic component of a health problem.

To fit the five-agents doctrine, the existence of five emotions had to be acknowledged, one less than in the yin-yang model. The latter consisted of anger, joy, sadness, fear, fright, and pensiveness. In *Su wen* 5 and *Su wen* 67, the author excluded fright to match the number five; sadness is written once with the character *bei* 悲, once with the character *you* 憂; the latter is com-

monly translated as "grief." In *Su wen* 19, fright and pensiveness were omitted; sadness, *bei* 悲, was introduced as the fifth emotion instead.

Su wen 5 and Su wen 67 offer a clear idea of the integration of the five emotions in the five-agents doctrine. Accordingly, anger and the liver correspond to the agent wood; joy and the heart correspond to the agent fire; pensiveness and the spleen correspond to the agent soil; sadness/grief and the lung correspond to the agent metal; fear and the kidneys correspond to the agent water. Excessive expression of one of the five emotions causes harm in the depot associated with the same agent. That is, excessive anger harms the liver, excessive joy harms the heart, and so forth. To counteract such harm, the treatment recommended in both Su wen 5 and Su wen 67 is directed at the emotions, not at the harm done to the depots. Following the sequence of mutual domination among the five agents, sadness, that is, the emotion associated with metal, is to be generated to control excessive anger, because metal dominates wood.  $^{590}$  Similarly, if excessive joy harms the heart, the emotion associated with the agent water, that is, fear, is to be stimulated to control the joy, because water dominates fire. For the same reason, anger is to be aroused to control extreme pensiveness; joy is to be generated to control extreme sadness; and pensiveness is to be stimulated to overcome fear. All these pairings make perfect sense even without the five-agents doctrine; the latter, however, provided them with a legitimating theoretical basis.

The author of *Su wen* 19 followed the same rationale when he pointed out that the qi of the kidneys takes advantage of a depletion caused by excessive joy, that the qi of the spleen takes advantage of a depletion caused by excessive fear, and that the qi of the heart takes advantage of a depletion caused by grief. Because excessive joy wastes the qi of the heart, which is associated with the agent fire, such a depletion stimulates the enemy of fire, that is, water, to send in its troops, that is, the qi of the kidneys. The same applies to the other two instances named above. However, the listing in *Su wen* 19 appears to be corrupt in view of the remaining two emotions; here the characters for pensiveness and anger appear to have been erroneously replaced by the characters for anger and sadness, respectively.<sup>591</sup>

Not all Su wen accounts of the interactions between emotions and the body can be explained as nicely as the ones discussed so far. For example, in Su wen 21, Qi Bo responds to a question by Huang Di, who wonders whether differences between "the places where people live, whether they are active or quiet, and whether they are brave or timid" cause differences in these people's movements in the vessels.  $^{592}$  The answer given by Qi Bo affirms this, but his examples do not really fit into any of the models outlined above.

Whenever a person is frightened, fearful, angry, or overworked, whether one is active or quiet, all this causes changes.

Hence.

when one walks at night,

then the [resulting] panting originates from the kidneys. . . .

When something makes one stumble, [causing] fear [that one may fall],

the [resulting] panting originates from the liver. . . .

When something makes one feel frightened, [causing] fear,

the [resulting] panting originates from the lung. . . .

When one crosses through water, and when one stumbles and falls to the ground,

the [resulting] panting originates from the kidneys and from the bones.

In such situations, in those who are brave the qi [continues to] flow, and [the painting] ends by itself.

In those who are timid, the [qi] is stuck and this causes disease. <sup>593</sup>

# 8.11. Beyond Conceptualization

The heterogeneity of the contents of the *Su wen* should be a truism by now; it extends, of course, to its presentation of diseases. All of the diseases mentioned in the survey above, be it malaria as a cross-culturally valid nosological fact, recession as a culture-specific nosological construct, or disease caused by excessive emotional pressure, were subsumed under the theories of systematic correspondence—either the five-agents doctrine or the yinyang doctrine or both.

However, the *Su wen* lists and discusses quite a few ailments without at the same time theorizing about them in terms of systematic correspondences. Examples may be found in the "Discourse on Abdomen and Center" in *Su wen* 40. To quote the initial dialogue between Huang Di and Qi Bo:

Huang Di asked:

[Someone] has the [following] disease:

heart and abdomen are full [to the extent that] if one has had breakfast, then one cannot eat in the evening.

Which disease is that?

Qi Bo responded:

The name is Drum[like] Distension.

[Huang] Di:

To treat it, how to proceed?

Oi Bo

Treat it with wine made from chicken droppings.

One dosis [effects the disease] noticeably; a second dosis [lets the disease] end.

[Huang] Di:

When occasionally it manifests itself again, why is that?

Qi Bo

In this case, beverages and food [have been consumed] without restraint.

Hence, occasionally one has [this] disease [again].

Nevertheless, even if the disease has ended for the moment, occasionally [the patient] must suffer as before. [This is because] qi has collected in the abdomen. $^{594}$ 

The name of this disease is descriptive. "Heart" should not be read here as a reference to the organ; rather, it refers to the center. Center and abdomen are full and distended like a drum, hence the label drum[like] distension. The paragraph says nothing about any of the theoretical parameters we have encountered earlier and neither the organs nor the vessels are invoked. When it speaks of qi accumulation in the abdomen, this may as well be read as a reference to what one might term meteorism today. Treatment is to be carried out not by means of bloodletting or qi manipulation but by means of a drug of animal origin.

Some descriptions of these diseases reveal an astute observer:

## [Huang] Di:

[Someone] has a disease where in his chest and flanks he feels propping fullness. His intake of food is impeded.

When the disease sets in, then a fishy and fetid odor is smelled first and clear liquid leaves [the body].

In the beginning, [patients] spit blood and their four limbs are cool.

Their eyes are dizzy.

They often pass blood in front and behind.

What is the name of [this] disease;

how is it acquired?

#### Qi Bo:

The disease is named Blood Decay.

It is acquired in younger years either [because of] a massive loss of blood or [because] one has entered the bedroom in a state of drunkenness [with the result that]

the qi is exhausted and the liver is harmed.

Hence, the monthly affair is weak and diminished and fails to arrive. 595

In the first example of a disease quoted above from *Su wen* 40, the name "drum[like] distension" was as down to earth as one could imagine. In the second example, the label "blood decay" is similarly down to earth, but it does not fit the conceptual framework of ancient Chinese medicine. Blood may be harmed, but it does not "decay." Also, while *Su wen* 62 and the corresponding text in *Ling shu* 8 attribute the function of storing the blood to the liver, they nowhere else trace blood decay to a harmed liver.

Seen from this perspective, the notion of a disease of blood decay, which is associated with a harmed liver, may be a foreign import that has found its way into ancient China and into the *Su wen*. Although no historical data are available that could hint at such an origin, one is reminded in this context

of the role played by the liver in the generation of blood in ancient European medicine.

The description of the appearance, the etiology, the naming, and the treatment of the following disease in *Su wen* 40 is even more suggestive of a foreign origin, not of the entire text, but of some basic elements.

## [Huang] Di:

A disease is [as follows]:

The lower abdomen [gives the patient a feeling of] abundance.

Above, below, to the left and to the right, everywhere are roots.

Which disease is that?

Can it be treated, or not?

## Qi Bo:

The name of the disease is Hidden Beams.

## [Huang] Di:

Hidden Beams, through which cause is this [disease] acquired?

#### Oi Bo:

[The lower abdomen] holds massive pus and blood, located outside of the intestines and the stomach.

This must not be treated.

If one treats it, each time one presses [the lower abdomen] this brings [the patient] closer to death.

## [Huang] Di:

How is that?

#### Oi Bo:

When this is moved downward, then it is by way of yin [passageways].

It is inevitable that what moves downward is pus and blood.

When this is moved upward, then it presses against the stomach duct, where it generates *ge-jia*.

{[That is:] *yong*-abscesses inside the stomach duct.}

This is a chronic disease; it is difficult to cure.

When it resides above the navel, this is opposition;

when it resides below the navel, this is compliance.

Do not move [it]; quickly remove [it].<sup>596</sup>

The expression "everywhere are roots" may refer to a foreign body somewhat harder than its surrounding. The label "Hidden Beams" may be interpreted as denoting accumulations that can be palpated in the abdomen, but the Chinese had enough accepted terms to express such a meaning and there was no reason to resort to a cryptic image of "hidden beams." Maybe "hidden beams" is a literal translation, or the characters were meant to repeat the pronunciation of a foreign term.

Further, to speak of "massive pus and blood located outside of the in-

testines and the stomach" is not supported by any context in ancient Chinese medicine. When pus and blood accumulate in the stomach duct, this generates ge-jia. Such a statement, too, makes no sense in the ancient Chinese discourse. The term for [stomach] duct,  $wei\ wan\ \mathbb{F}\ \mathbb{R}$ , is most likely a reminder of anatomical knowledge available in ancient China that was irrelevant in later centuries. No later commentator was able to offer a convincing interpretation of this term.  $^{597}$  The label ge- $jia\ \mathbb{F}\ \mathbb{R}$ , which could also be read as li-jia or e-jia, may have been formed to convey the meaning of something "lining" or "pressing" ( $\mathfrak{K}=jia\ \mathfrak{K}$ ) the diaphragm or, literally, "cauldron" ( $ge\ \mathbb{F}$ ). However, this interpretation is purely speculative. For the time being, I suggest reading ge-jia as a transliteration of a non-Chinese term, whose original pronunciation and meaning are no longer accessible.

At the beginning of its "Discourse on Disease Potentials," *Su wen* 46, too, has a short dialogue on several ailments that are noteworthy for at least two reasons. First, they contain no references to the theoretical framework of either the yin-yang or the five-agents doctrine. Second, they include notions of morphological pathology that are not commonly associated with Chinese medicine in general and ancient Chinese medicine in particular. It may well be that a tradition existed in ancient China in which such notions of morphological pathology played a role and were developed for some time. Nevertheless, for reasons unknown today, this tradition appears to have lost its attractiveness by the end of the Han era and was not developed further. All that remains are isolated statements on, for example, specific abscesses in the stomach duct, on heat collecting at the stomach opening, and on harmed organs embedded in notions of vessel physiology. To quote the exchange between Huang Di and Qi Bo at the beginning of *Su wen* 46:

Huang Di asked:

When someone suffers from stomach duct *yong*-abscess,

how is this to be diagnosed?

Qi Bo responded:

To diagnose this [disease] one must examine the [movement in the] stomach vessel.

[The movement in] this vessel should be in the depth and fine.

When it is in the depth and fine, the qi moves contrary [to its normal course]. When it moves contrary [to its normal course], the [movement in the vessel at] Man's Prognosis is extremely abundant.

When it is extremely abundant, then there is heat. . . .

Once there is a movement contrary [to its normal course] and abundance, then heat collects at the stomach opening and does not move.

Hence, the stomach duct develops a yong-abscess.

[Huang] Di:

Good!

Someone lies down to sleep and there is something which does not let him rest.

What is it?

Qi Bo:

The depots have been harmed and

the essence has a place it moves to.

[When the patient] lies down, then he finds rest. . . .

[Huang] Di:

When someone is unable to lie on his back, why is that?

Qi Bo:

The lung is the canopy covering the depots.

When the lung qi abounds, then the vessels are big.

When the vessels are big, then one cannot lie on one's back.<sup>598</sup>

The *Su wen* has two discourses whose titles indicate discussions of unusual, extraordinary states of illness. The first is *Su wen* 47, the "Discourse on Abnormal Diseases"; the second is *Su wen* 48, the "Discourse on Very Abnormal [Diseases]." The latter is an enumeration of more than thirty states of ill health causing characteristic movements in the vessels. Most of the entries start with a description of these movements in the vessels, which is followed either by a list of symptoms accompanying such movements in the vessels or by an identification of the underlying disease, or both. In a number of instances, a statement on the treatability or prognosis is given. For example:

When the kidney vessel is small and throbs in the depth, this is intestinal flush with blood being passed down. Those whose blood is warm and whose body is hot, they will die. When in case of a heart and liver flush, blood is passed down, too, both depots have a disease alike. This is curable.<sup>599</sup>

It is difficult to decide why these and all the other diseases listed in *Su wen* 48 were termed "very abnormal' or, as one might also render it, "very unusual." The treatment advice is mostly rather cryptic; perhaps it was accompanied by oral instruction. Most of the disease descriptions were not tied explicitly to either the yin-yang or the five-agents doctrine. Statements such as the "blood is warm" lack a conceptual context in ancient Chinese medicine. The temperature of the blood is nowhere specified as a diagnostic parameter. Maybe when the theories of systematic correspondence were introduced into medicine there were people who refused to accept the new approach, in the same way some physicians refused to acknowledge the value of theo-

rization in European antiquity. The latter opposed too elaborate a conceptualization and preferred to base their interpretations of illness and disease on nothing but what they saw with their own eyes or what the patients told them of their condition. If such a school existed in ancient China, their approach may have been labeled "abnormal" when it was decided to include it in the *Su wen* anthology.

The "Discourse on Abnormal Diseases" in Su wen 47 starts with a guestion regarding the case of a woman losing her ability to speak during her pregnancy. The answer given is based on a mechanical understanding of the underlying pathology. Obviously, the author assumed, the uterus is tied to a network vessel, which in turn is tied to the kidneys. From the kidneys a vessel leads to the base of the tongue. Even though this is all the text says, it appears as if there was a notion of an exchange among the uterus, the kidneys, and the base of the tongue via the vessels named. If this exchange was blocked during pregnancy, the tongue lost its function and the woman turned mute. A treatment during pregnancy was not considered necessary or possible; maybe it was believed that the growing body of the fetus pressed against the network vessel of the uterus, thereby blocking a passage through it. The problem was said to end with the natural termination of the pregnancy. 600 Neither the yin-yang nor the five-agents doctrine played a role in this explanation. The existence of vessels was taken for granted. This applies to all the "abnormal diseases" discussed in Su wen 47. One final example to be quoted here is spleen dan.

The term *dan* 癉 is attested in the *Shi jing* 詩經, whose contents date from the Zhou era. However, the wording "all the people [suffer from] dan" 601 does not help to identify its meaning. The Shan hai jing 山海經, partially of the same era, speaks of an "animal, whose appearance resembles a wild cat. If eaten, it heals dan."602 Again, the text itself does not reveal the disease that was labeled dan. Guo Pu (276-324) interpreted dan in his commentary to the Shan hai jing as "the disease yellow dan." The term yellow dan is used to denote jaundice to this day, and it may well be that this is what Guo Pu had in mind. We cannot be sure, however, whether this is also what the author of the Shan hai jing had in mind. The same is true of another ancient reference to the disease dan. The bibliographic section of the dynastic history of the Han listed a book with the title Wu zang liu fu dan shi er bing fang 五 藏 六 府癉十二病方, "Prescriptions on twelve diseases of dan affecting the five depots and six palaces." Yan Shigu 顏師古 (581-645) commented: 癉, 黃病也, "dan is jaundice."603 The Zuo zhuan 左傳, nineteenth year of Duke Xiang, records an illness of Xun Yan 荀偃, who suffered from "dan ju 癉疽 and developed ulcers on his head." Dan ju may be one or two ailments. Du Yu 杜 預 (d. 284) interpreted the two characters as a compound in the sense of "bad sores." 604 Presumably, at one time in the late Zhou to early Han era, the label dan was understood by all authors. Hence one of the Mawangdui manuscripts could speak of dan with no further explanation offered.  $^{605}$  Later the meaning of the term was lost. The Shuo wen jie zi 說文解字 of ca. A.D. 100 defined dan as lao 券, "exhaustion"; the term survived only in the context of yellow dan, jaundice.

In the following paragraph, quoted from the "Discourse on Abnormal Diseases" in *Su wen* 47, the term "spleen *dan*" appears; it remains unclear what it may have referred to.

[Huang] Di:

Someone suffers from sweet [taste] in his mouth.

What is the name of that disease?

How did he get it?

Qi Bo:

This is an overflow of the five qi. The name [of the disease] is Spleen Dan.

Now, the five flavors enter the mouth, and

they are stored in the stomach.

The spleen moves the essence qi on behalf of the [stomach].

The body liquids are located in the spleen.

Hence, they let that person have a sweet [taste] in his mouth.

This is an effusion of fat and delicious [food].

This person must have frequently consumed sweet and delicious [food] and [his diet] was mostly fat.

A fat [diet] lets man [experience] internal heat;

sweet [food] lets man have central fullness.

Hence, this qi rises and overflows; it turns around and causes wasting-and-thirst.

Treat this with orchids. Eliminate the old qi.606

With this I conclude this survey of concepts of disease in the Su wen. The conceptual heterogeneity of the entire text prohibits painting a picture of the Su wen concept of disease. Instead, I have quoted from various discourses to mirror the broad range of styles of thought pursued in ancient China and taken into account by the compilers of the Su wen corpus. When the contents of the Su wen were written and the current anthology was edited during the first century B.C. and the first through third centuries A.D., the continuum ranged from empirical descriptions of one or several pathological conditions labeled with a common name avoiding theorization, on the one hand, to purely nosological constructs, on the other. These nosological constructs themselves were neither homogeneous nor did they follow one specific style of thought. As shown above, the Su wen includes discourses of diseases that are entirely based on the five-agents doctrine and others that are grounded only in yin-yang reasoning. Some may be said to be more ontic, others primarily functional. Several diseases listed in the Su wen can be identified as corresponding to nosological units recognized by modern cosmopolitan medicine; others are nosological constructs whose

plausibility is restricted to ancient Chinese medicine. Viewed altogether, the *Su wen* offers fascinating documentation of what must have been a most diverse and highly dynamic medical intelligence in ancient China.

#### 9. EXAMINATION

### 9.1 General Principles

A medical examination as understood today may have several objectives. First, it helps to distinguish between those who are defined as healthy and not in need of medical intervention and those in a state considered ill health and requiring medical attention. In the latter case, examination should help to determine the nature of the affliction and the current status of a patient, that is, whether the ailment should be treated or left alone, either because it is too insignificant or will heal by itself or because it is far too advanced to respond to a therapy or has a fatal prognosis regardless of an early or later stage in its progression. If treatment is considered meaningful, an examination should help to determine an appropriate therapeutic approach, either because it serves to identify a pathogenic agent, which is to be eliminated from the organism, or because it reveals the specific location of a lesion, or because it permits prediction of the future course of the disease in the body. The results of an examination may suggest a localized treatment or a therapy directed at the organism as a system.

To conduct such an examination, numerous parameters have to be taken into account. The manifestations of a disease may be visible from the outside, for example in the case of dermatological problems. The disease may have resulted in pathological conditions noticed or felt by the patient himself or identifiable as such only by a medical expert. It maybe that the manifestations of a disease can be assessed solely through invasive diagnostics, for instance by X-rays in the case of an internal ulcer or tumor; it may also be that they are noticable only by testing certain fluids or functions.

In addition to a physical examination of the patient's body, a physician may have to take environmental factors into account, such as a hazardous workplace, and he may have to think of factors that could have stimulated a patient emotionally. The *Su wen* contains several statements on diseases resulting from emotional stress. Psychosomatic concepts were quite familiar to the authors of the *Su wen*. Finally, a disease may have emerged within the organism itself, as is the case in the failure of the autoimmune system; a situation that, at least on the basis of current knowledge, offers no clues as to its prime causation.

Despite a lapse of time of more than one and a half millennia between the compilation of the *Su wen* and the modern understanding of the objectives and basic principles of a medical examination surveyed above, most of what I have said about the latter also applies to the former. Invasive as well as chemical diagnostic procedures could, of course, be part neither of ancient Chinese medicine nor of ancient European medicine.

Before we take a closer look at the diagnostic procedures recommended and the parameters taken into consideration in the Su wen, several statements on the basic principles to be observed in an examination, quoted from different parts of the Su wen and hence written by different authors in ancient China, will set the stage for the discussion.

The laws of diagnosis [are as follows]. As a rule, it is at dawn,

before the yin qi has begun its movement,

before the yang qi is dispersed,

before beverages and food have been consumed,

before the conduit vessels are filled to abundance,

when the [contents of the] network vessels are balanced,

before the qi and the blood move in disorder,

that, hence, one can diagnose an abnormal [movement in the] vessels.

Squeeze the vessels, whether [their movement] is excited or quiet, and observe the essence-brilliance.

Investigate the five complexions.

#### Observe

whether the five depots have a surplus or an insufficiency, whether the six palaces are strong or weak, and whether the physical appearance is marked by abundance or decays.

All this is brought together to reach a conclusion [enabling one] to differentate between [the patient's] death and survival.<sup>607</sup>

Whenever one diagnoses [a disease], it is essential to know its end and beginning, and one must also know the remaining clues. Squeeze the vessels, inquire about the name [of the diseases], and

match [your findings] with the male or female [gender of the patient].

Separation and interruption, dense compactness and knotting, anxiety, fear, joy, and anger,

[whether they let] the five depots be empty and depleted and [whether they let] blood and gi lose their guardian [function].

If the practitioner fails to know this, what art is there to speak of?608

To treat diseases, one must search for the basis. 609

Those who know well how to diagnose,

they inspect the color and press the vessels.

First they distinguish yin and yang.

They investigate what is clear and turbid and know the section.

They observe [the patient's] panting and breathing, they listen to the tones and voices, and they know what one is suffering from.

They observe the weight and the beam, the circle and the square, and they know which [qi] rule the disease.<sup>610</sup>

They press at the foot-long section and at the inch,

they observe [whether the movement in the vessels] is at the surface or in the depth, smooth or rough, and

they know the location, where the disease has emerged.

So that in their treatment they commit no mistakes and in their diagnosis they do not miss [the point].<sup>611</sup>

For all treatments of diseases, one investigates the [patient's] physical appearance, his qi, and whether his complexion is glossy,

whether the [movement in the] vessels abounds or is weak,

whether the disease is new or old, and

then, in treating it, one does not act too late.

When physical appearance and qi agree,

this is called "curable."

When the complexion is glossy and [when the movement in the vessels] is at the surface,

this is called "easily brought to an end."

When the [movement in the] vessels conforms with the four seasons, this is called "curable."

When the [movement in the] vessels is weak and smooth,

then it has stomach qi.

This is called "easy to cure." . . .

When physical appearance and qi do not agree,

this is called "difficult to cure."

When the complexion has faded away and is not glossy,

this is called "difficult to bring to an end."

When the vessels are replete and firm,

this is called "increasingly serious."

When the [movement in the] vessels opposes the four seasons,

[the disease] cannot be cured.

One must investigate [whether any of] these four difficulties [is present] and clearly announce them [to the patient] $^{612}$ 

[Huang] Di:

To conduct an examination,

how to proceed?

Oi Bo:

One must first assess the physical appearance's fat or lean [condition] to regulate depletion or repletion of the [patient's] qi.<sup>613</sup>

Whenever one wishes to diagnose a disease,

it is essential to inquire about the [patient's] drinking and eating [habits] and his place of living.

Whether he has experienced violent joy or violent suffering, or whether he has experienced an initial joy that was followed by suffering. All this harms the essence qi. . . .

If an ignorant physician treats this, and knows neither whether to supplement or to drain, nor what the nature of the diseases is like, then the [patient's] bloom of essence is lost day by day, and evil qi collects. . . .

Those who are experts in the [movement in the] vessels, for them it is essential to rely on [such methods as] comparing the likes, [comparing] the abnormal and the normal, and the natural approach and thereby to acquire the respective knowledge.

To be a practitioner and not to know the Way, this results in a diagnosis of lower value. . . .

In diagnosis there are three rules [to be observed].
[The patient] must be asked
whether he is of noble or low rank;
whether he was a feudal lord who has been destroyed or harmed; and
whether he aspires to be prince or king.<sup>614</sup>

If in diagnosing [a disease a practitioner] does not know the structures of yin and yang, and of [movements] contrary to or following [their regular course], this is the first [reason of] therapeutic failure. . . .

If one does not take into account whether [a patient's] circumstances are those of poverty or wealth, of noble or low rank,

whether his seat is thin or thick, and

whether his physical appearance is cold or warm;

[further,] if one fails to examine whether his drinking and eating [habits] are appropriate,

if one does not distinguish whether a person is brave or timid, if one does not know [the method of] comparing the likes, . . . this is the third [reason of] therapeutic failure.

When [a practitioner] diagnoses a disease without asking for its beginning, whether anxiety or suffering, drinking and eating have been immoderate, and whether [the patient's] rising and resting have exceeded the norm, or whether he was harmed by poison, and

when [the practitioner] fails to speak about all these [conditions] first, but hastily grasps the Inch Opening [to examine the movement in the vessels], which disease could he hit? . . .

This is the fourth [reason of] therapeutic failure....

When [a practitioner] only feels the Inch Opening, in his diagnosis fails to [correctly] identify the five [movements in the] vessels, [and does not find out] where the one hundred diseases emerge, [such practitioners] at first draw a grudge at themselves, [then] they put the blame on [their] teacher. 615

These rather general statements do not reflect all the *Su wen* has to say on examination and diagnosis; nevertheless, they hint at most of the basic principles that were recommended for application. Also, it is obvious that numerous techniques and approaches were employed in examining a patient. Without touching the patient, merely by judging his physical appearance, by noticing his complexion, by listening to his voice as well as to his breathing, an expert was expected to be able to determine what disease the patient might have and where it might be located or at least to gain first clues.

Interestingly, while today four diagnostic approaches, observing, listening/smelling, asking, and pulse feeling, are regarded as basic in Chinese medicine, the *Su wen* documents a state of development in which different schools appear to have emphasized only one or two of these approaches. For example, the technique of asking a patient (*wen* 胃) is discussed explicitly only in the course of the exchanges between Huang Di and Lei Gong, that is, in the textual layer evident in *Su wen* 75 through 81. Only here it is emphasized that by talking to the patient a good physician is required to gather information on his social status and on emotional traumata, such as loss of a higher social position or frustrated aspirations to upward social mobility. In addition, the patient was asked about his age, his eating and drinking habits, his patterns of rest and activity, his lifestyle in general and his sexual life in particular, whether he lived in economically comfortable or difficult circumstances, whether he inadvertently consumed something poisonous, and when and where the ailment began.

Most important, the physician should resort to pulse diagnosis, that is, to an assessment of the many possible forms the movement in the vessels was known to assume, and, at least according to the opinion voiced by some authors, he should be able to evaluate all these parameters in terms of their yin-yang significance. To pull together all the data collected and to arrive at a diagnosis, techniques such as "comparing the likes" and "[comparing] the normal with the abnormal" were advocated, but these were not specified in detail and hence we do not know what they may have meant.

A diagnosis, as we read in one of the statements quoted above, should determine the "source" of the disease. This request could be interpreted in at least two ways. First, the author may have thought of basic causal factors that

should be revealed. Wind, for example, is such a causal factor. Under certain conditions it enters the organism and causes a disease. For example, the initial lines of *Su wen* 42 point out that

when wind harms a person, it may cause cold and heat; or it may cause a heated center; or it may cause a cold center; or it may cause *li*-wind; or it may cause unilateral withering; or it may cause wind. 618

No one-to-one relationship between disease and symptom was conceptualized in this context. As a rule, a disease like the presence of wind or of any other pathogenic factor had several possible manifestations. Seen from the outcome, different pathological conditions or illness signs were not necessarily indicators of different diseases. Hence to trace an illness to its source could be complicated and required great expertise; it was, of course, most important in view of devising an appropriate therapy.

Wind could be identified through an examination as the "source" of a disease; its presence requires a therapeutic strategy different from the presence of cold or dampness. One might, however, go one step further and ask what had allowed the wind to enter the organism in the first place. After all, a healthy person can stand wind; as long as no state of depletion weakens a "normal person," natural environmental factors such as wind, cold, and dampness have almost no chance to enter the organism. To search for the source of a disease may therefore include an examination of states of repletion and depletion; the latter, in turn, may result, for example, from excessive expenditure of a depot's resources. Presumably, this is why one of the authors quoted above requested medical experts to take emotional stress as well as conditions of general lifestyle into account in their examinations.

Once a natural environmental factor such as wind has entered the organism, it will cause ailments, which the patient notices as pathological conditions. Different preconditions of individual patients may lead to different pathological conditions. Hence to search for the source of the disease may also be interpreted as a request to search for the source of the specific pathological manifestations present. Again, *Su wen* 42 offers a good example of what is at stake here.

In case the [afflicted] person is fat, then the wind qi cannot flow away toward outside.

This, then, causes a heated center and yellow eyes.

In case the [afflicted] person is lean, then [the wind qi] flows away toward outside, and [the patient feels] cold.

This, then, causes a cold center and tears to flow.<sup>619</sup>

That is, the wind is not the only source of a "hot center" and of "yellow eyes." The corpulence of the patient constitutes an important causal factor too. Medical examination and diagnosis, then, is not a simple, one-dimensional endeavor. When a patient meets a physician, the disease and its manifestations have a history. Without tracing that history, both legitimation and success of a therapy would be questionable. Hence the *Su wen*, in contrast to Chinese prescription literature in the pharmaceutical tradition, cannot base a treatment on a one-to-one relationship between a current sign of an illness and a substance directed at this sign or at this illness. *Su wen* examination and diagnosis is designed to know more about the disease, to understand a disease and the pathological conditions arising from it as a problem of the organism as a system. An appropriate therapy should be possible only against the backdrop of such an understanding.

No rule, however, is without exception. A few traces of opposition to such highly conceptualized approaches can be found in the *Su wen*. For example, when the introductory line of *Su wen* 55, which is not related to the subsequent portions of the text, relates the following:

In case an expert in piercing does not  $^{620}$  diagnose [but prefers to] listen to the patient's statement: "It is in the head. The head has an illness, pain," and [if then] he needles him <the depot>,  $^{621}$  the disease ends when the piercing reaches to the bones.  $^{622}$ 

Zhang Jiebin, the eighteenth-century physician, author, and commentator of the *Su wen*, acknowledged this passage as reflecting a certain reality of clinical practice. Nevertheless, he emphasized the value of "diagnosis" and hence of taking into account the theories of systematic correspondence:

Those who are good in piercing, they must not take recourse to diagnosis. They only listen to what the patients say and whatever they undertake will be effective. This, however, is a statement with regard to those only who have a miraculous command of piercing; it is not to say that experts in piercing must not diagnose at all. Nowadays the masters of later times are neither excellent in piercing, nor do they know how to diagnose. Hence, when it comes to supplementing a depletion or to draining a repletion, how could they avoid committing mistakes? When the treatise in *Ling shu* 1 states: "Whenever one is about to employ the needle, one must first diagnose [by feeling the movement in] the vessels and examine whether the [movement of the] qi [indicates] a severe problem or [a disease which is] easy to handle. Only then one may commence the treatment," then the meaning of the present [passage] can be understood. 623

## 9.2. Inspection

The first access a physician usually has to the condition of a patient is through visual contact. The *Su wen* speaks of several visual parameters to be taken into

account when assessing the nature and location of a disease. In terms of the five-agents doctrine, color changes in the face are most important. For example, in an exchange between Huang Di and Qi Bo, the former asks what is meant by an earlier statement of Qi Bo's, namely, "from inspection one can obtain insights." Qi Bo explains:

The five depots and six palaces, they definitely all have [corresponding] sections. When inspecting the five colors there, yellow and red represent heat, white represents cold, green-blue color and black represent pain. This is the so-called from inspection one can obtain insights. 624

One would have expected a different second sentence in Qi Bo's response. The five depots and the six palaces are associated with specific agents and hence with specific sections in the face and also with specific colors. Hence a red color in a specific region of the face may indicate that something has happened or is happening in the heart, and so forth. However, this is not the path followed by Qi Bo. Yellow and red, white, and green-blue and black are mentioned here as three parameters informing an expert of the presence of heat, cold, and pain. Either the second part of Qi Bo's response was worded to deliberately contradict the five-agents correlations of complexion and specific depots/palaces or it is an addition by someone who adhered to a school not tied as closely to the five-agents doctrine as the first sentence leads one to expect. Reading the subsequent passage, however, a similar structure parallels the first:

[Huang] Di:
"From feeling one can obtain a hold,"
how is that?
Qi Bo:

Inspect the vessel ruling the disease. When it is firm and has blood, or when it has sunk down, in both cases one gets a hold [of the disease] by feeling [the vessel].<sup>625</sup>

It is not entirely clear whether "to get a hold" is meant here in the sense of "to grasp," that is, "to understand," or whether it is more concrete in the sense that one can actually feel what is wrong with the patient. At any rate, the standard explanation one would have expected of the purpose of feeling the vessels is not given here. The standard explanation would have been to inform one of the nature of the movement in the vessels, which in turn indicates the nature and location of a disease. I return to vessel diagnosis in

more detail below; here it suffices to say that the statement about "feeling the vessels" supports the impression gained from the preceding passage about an inspection of a patient's complexion. Both, I should think, are remnants of conceptual traditions deviating from what was to become the mainstream diagnostic system.

This mainstream system is based on the five-agents doctrine. An exemplary account of how to relate the colors appearing in specific facial sections to diseases located in the five depots is the following:

In the case of heat disease in the liver, the left cheek becomes red first. In the case of heat disease in the heart, the forehead becomes red first. In the case of heat disease in the spleen, the nose becomes red first. In the case of heat disease in the lung, the right cheek becomes red first. In the case of heat disease in the kidneys, the chin becomes red first.

Heat is associated with fire and with the color red. Hence all heat diseases, regardless of which depot they have affected, should manifest themselves in a red complexion. What differs are the facial sections. Because each section was known to be associated with a specific depot, the section where the red color appeared was believed to indicate the present location of the heat in the organism.

In another context, Huang Di specifically requests detailed data on how diseases affecting the five depots manifest themselves in the physical appearances of patients. The parameters listed by Qi Bo as decisive for determining the present location of "wind" diseases include the inspection of a patient's complexion. The system of correspondences outlined here is also based on the five-agents doctrine; nevertheless, it follows a different reasoning. The relevant excerpts from the first five paragraphs of Qi Bo's response may serve to clarify this.

The appearance of lung wind [is such]:

[patients] sweat profusely and have an aversion to wind.

Their [facial] color is a pale white.

They often cough and are short of qi. . . .

It is diagnosed above the eyebrows; the color there is white.

The appearance of heart wind [is such]:

[patients] sweat profusely and have an aversion to wind.

When the burning is extreme, they tend to be angry and to terrorize [others].

Their [facial] color is red.

When the disease is severe, [patients find] it impossible to speak cheerfully. It is diagnosed at the mouth; the color there is red.

The appearance of liver wind [is such]:

[patients] sweat profusely and have an aversion to wind.

They tend to be sad.

Their [facial] color is slightly greenish.

When the throat is dry, they tend to be angry.

At times they hate women.

It is diagnosed below the eyes; the color there is green-blue.

The appearance of spleen wind [is such]:

[patients] sweat profusely and have an aversion to wind.

Their body is tired and [and they are] lazy; their four limbs do not wish to move.

Their [facial] color is slightly yellow.

They do not wish to eat.

It is diagnosed above the nose; the color there is yellow.

The appearance of kidney wind [is such]:

[patients] sweat profusely and have an aversion to wind.

Their face develops a surface swelling of the mang-type.

The spine aches, and they cannot stand upright.

Their [facial] color is [that of] soot.

The passage through the hidden bend is impeded.

It is diagnosed above the jaws; the color there is black. 627

Wind is associated with the color green-blue. Hence, in comparison to the passage on the manifestation of heat in different depots quoted above from *Su wen* 32, one might assume that wind affecting the depots manifests itself in the color green-blue appearing in specific facial sections. In the paragraph just quoted, another line of correspondences was applied.

Heat is associated with summer and fire. Fire burns things and develops a smell. Hence an affliction with heat should produce typical smells, depending on which depot is affected. Wind is associated with spring. Spring is the season when the colors return. Hence an affliction with wind should produce colors in the face. In the paragraph just quoted, a red color, too, appears and indicates a disease in the heart. However, the facial section named is "at the mouth," not "at the forehead," and the disease signified is the presence of wind rather than heat.

Color plays a role as an indicator of the nature of disease in yet another context. The term most frequently used for pulse diagnosis today is still *kan mai* 看版, "to behold the vessels," even though what is meant is feeling the movement in the vessels by means of one's fingertips. Presumably, the expression *kan mai* was taken literally in the early period of vessel inspection. At least this is the case in the context of *Su wen* 56, where it is said of specific network vessels that can be observed near the surface of the skin:

If their color is mostly green-blue, then pain [is present].

If they are mostly black, then a block [exists].

If they are yellow and/or red, then heat [is present].

If they are mostly white, then cold [is present].

If all the five colors are visible, then cold and heat [are present]. 628

This statement can be traced to the usual five-agents correspondences only partially. Heat is associated with fire and red. White is usually associated with metal and with coolness; here it is associated with cold. Black is associated with winter and water; it is associated here with a block, possibly because winter is the season when much of life is hidden. Finally, green-blue is associated with spring and with the liver; a justification of its association here with pain is not obvious. Most important, however, is the lack of an association of the color signs listed and a disease in the depots. That is, the expert should know that color changes in the network vessels underneath the skin are not to be interpreted as indicators of diseases affecting the depots; they simply tell of the presence of pain, block, heat, and cold.

# 9.3. Inquiries

Returning to the list of appearances informing one of the locations of wind in the organism, quoted above from *Su wen* 42, in addition to taking into account color changes in the face, physicians may notice sweating, coughing, shortage of breath, emotional outbursts, depressed speech, sadness, loss of appetite, severe exhaustion, a bloated face or abdomen, inability to stand upright, panting, and other symptoms. Although most of these conditions are open to visual inspection, some may be discovered only through questioning the patient. The comprehensive approach expected to be carried out by a practitioner is recognizable, for example, in the signs of blocks.

A block in the lung manifests itself in panting; the expert hears this. A block in the heart manifests itself in grief and pensiveness; the expert may notice these emotional states either through observation or by talking to relatives or others near to the patient. A block in the kidneys manifests itself in an involuntary loss of urine. Presumably this is known to the patient himself, who either informs the physician of his condition spontaneously or has to be asked. A block in the liver manifests itself in fatigue and exhaustion. Again, an expert notices such a state or is told of it. The same is the case when a block affects the spleen, a disease that manifests itself as muscle weakness.<sup>629</sup>

As we saw in the account of general principles above, when the patient is a stranger, "he must be asked whether he is of noble or low rank; whether he was a feudal lord who has been destroyed or harmed; or whether he aspires to be price or king. 630 Aside from relating the significance in the generation of disease that some authors attribute to social status and the emotional stress caused by upward or downward mobility, this statement says a lot about the nature of certain patient-physician relationships in Han dynasty China. If a physician must ask his patient about his social history to understand the nature of his disease, this patient must have come a long distance

to consult the practitioner. As should be expected in such a stratified society, we may conclude that some physicians were successful and famous enough to attract a clientele from far away, and this clientele, in turn, could expect to be accepted and to be given professional treatment.

### 9.4. Three Sections and Nine Indicators

As important as visual inspection and oral inquiries may be, by far the most space in the Su wen is devoted to an examination of the movement in the vessels. Such an examination corresponds to what is called pulse diagnosis today. For the most part, we speak of movement in the vessels, nevertheless, because this is the concept and the terminology prevailing in the Su wen. Regardless of whether the Su wen authors spoke of an inspection of the vessels themselves or of the movement inside the vessels, they almost always simply employed the term mai M, "vessels." Hence wherever I have interpreted a passage as referring to the vessels directly, I have translated mai as "vessel(s)." Wherever it seemed plausible that the movement in the vessels was meant, I have translated mai as "[movement in the] vessel(s)."

Apart from the need to identify the present location of a disease, a second frequently emphasized objective of an examination of the vessels is prognosis. *Su wen* 20, the "Discourse on the Three Sections and Nine Indicators," combines both these themes. Interestingly, it does not make use of the five-agents doctrine and employs the yin-yang doctrine only in its naming of the conduits. Instead, it relies on the heaven-man-earth correspondence first featured in the philosophy of Dong Zhongshu (179–104). And yet the theoretical foundation of *Su wen* 20 is not a perfect reflection of Dong Zhongshu's thought.

In Dong Zhongshu's moral philosophy, heaven was considered a supreme being overseeing the course of events in nature and the righteousness of the emperor as Son of Heaven. In the words of Michael Loewe, "[T]his special relationship provided for Heaven to take deliberate steps to look after the fate of human beings and to express concern over the quality of the emperor's stewardship. If that charge was being conducted inadequately or irresponsibly, Heaven thought it right to issue a warning to the emperor, in the hope that he would so readjust his policies or reform his personal conduct that a state of well-being would be restored on earth. . . . By bringing about a strange phenomenon in the skies or on the earth, Heaven can indicate to its son, the emperor, the nature and the extent of his misgovernment." 631 Wang Chong (A.D. 27–ca. 100) rejected such personalized views of heaven. Heaven, he taught, does not care about man; whatever it does is part of an ongoing creation of nature as a whole, and this creation, in turn, is to be understood as a spontaneous process.

To trace the moral philosophy of Dong Zhongshu to the signs of illness produced by the human body, one should expect that a "heaven" and an "earth" indicator had been conceptualized to parallel the portents in the sky and on the ground and that these "heaven" and "earth" indicators were believed to send warnings to man regarding a misgovernment not of the state but of the individual body. The concepts presented in *Su wen* 20 are different.

Su wen 20 speaks of a total of nine indicators issuing warnings. These are three heaven, man, and earth indicators in each of three sections covering the upper, the central, and the lower third of the human body. Medical thought here, once again, reflects moral and political philosophy. In opposition to a hierarchy that might have been deduced from the philosophy of Dong Zhongshu, the Su wen attributes equal status to the signs issued by the indicators of heaven, man, and earth. The sequence of heaven, man, and earth does not indicate any ranking; it is just the projection of what is seemingly above, in the center, and below in nature to those morphological features in the body that can be identified as above, center, and below too. It is hard to resist further speculations, but it may not be coincidental that the five-agents doctrine, so central to the philosophy of Dong Zhongshu, does not appear in this context, and it may not be coincidental either that it is not the three major sections of the body, that is, head, chest, and abdomen, that were paralleled with heaven, man, and earth. Rather, it is within these three sections that a distinction between above, center, and below was applied.

Hence heaven is represented by the corners of the head in the upper section, by the lung in the central section, and by the liver in the lower section. Man is represented by ears and eyes in the upper section, by the heart in the central section, and by the spleen and the stomach in the lower section. The earth is represented by the mouth and the teeth in the upper section, by the qi of the chest in the central section, and by the kidneys in the lower section. With these correlations as background, it would be difficult to assign an eminent position to heaven or to attribute any special role of supervisor to it. Indeed, by locating heaven, man, and earth in each of the three sections, a notion may have been spread to the effect that heaven is everywhere, and earth as well as man too. If this is not yet a clear enough message, while the listing of the nine indicators in the three sections follows a sequence of the latter from the upper section down, the subsequent listing of the nine organs and body parts, whose qi can be examined at these indicators, follows a sequence from the lower section up. The worldview of Su wen 20, it may not be too far-fetched to conclude, is closer to the philosophy of Wang Chong than to that of Dong Zhongshu. As the text states:

Man has three sections.

[Each] section has three indicators.

They serve to decide about death or survival.

They serve to manage the one hundred diseases.

They serve to regulate [states of] depletion and repletion and to eliminate evil and disease....

The heaven [indicator] of the upper section:

the moving vessels on the two [sides of the] forehead.

The earth [indicator] of the upper section:

the moving vessels on the two [sides of the] cheeks.

The man [indicator] of the upper section:

the moving vessels in front of the ears.

The heaven [indicator] of the central section:

the major yin [locations] of the hands.

The earth [indicator] of the central section:

the yang brilliance [locations] of the hands.

The man [indicator] of the central section: the minor yin [locations] of the hands.

The heaven [indicator] of the lower section:

the ceasing yin [locations] of the feet.

The earth [indicator] of the lower section:

the minor yin [locations] of the feet.

The man [indicator] of the lower section:

the major yin [locations] of the feet.

Hence, in the lower section,

the heaven [indicator] serves to examine the liver.

The earth [indicator] serves to examine the kidneys.

The man [indicator] serves to examine the qi of spleen and stomach.

In the central section,

the heaven [indicator] serves to examine the lung.

The earth [indicator] serves to examine the qi in the chest.

The man [indicator] serves to examine the heart.

In the upper section,

the heaven [indicator] serves to examine the qi at the corners of the head.

The earth [indicator] serves to examine the qi of mouth and teeth.

The man [indicator] serves to examine the qi of ears and eyes. 633

The rather atheoretical nature of these data on where to diagnose the location of specific diseases and where to examine the status of qi at specific locations may not have been an isolated phenomenon. In *Su wen* 26, a quote is commented on, and the commentary hints at the diagnostic procedures associated with the nine indicators in the three sections as if everyone knew that they did not aim at recognizing the "nature" of a disease and were in-

stead directed at simply taking into account its tangible manifestation as a starting point of a therapy:

"To know where [the disease] is" is

to know how to diagnose at the nine indicators in the three sections the locations of the vessels having a disease and to treat them. . . .

One does not know the nature [of this process]

but sees the physical appearance of the evil. 634

Not everyone liked such abstention from theorizing about the nature of a disease. In *Su wen* 27, a statement emphasizes that

if one pierces without knowing the nine indicators in the three sections and the locations of the vessels affected by a disease, . . .

the practitioner is unable to stop it. . . .

He does not know the three sections and the nine indicators.

Hence, he cannot continue for long. 635

This is followed immediately by a sarcastic commentary outlining the consequences that are unavoidable if the physician fails to link the information gained from the nine indicators in the three sections with those data and doctrines that permit an assessment of the nature of a disease:

Because he does not know how to bring the [three sections and nine indicators] together with the four seasons and the five agents, he will, as a consequence, add to their mutual domination. He releases the evil [qi] to attack the proper [qi] [thereby] interrupting the long life of [that] person. 636

# 9.5. Empirical and Conceptualized Prognosis

A major part of the text of Su wen 20 is devoted to prognosis. Again, no theoretical basis is explicitly mentioned. Vessel examination in this context is based on standards that appear based in experience rather than in any conceptualization. A few examples taken from many such separate statements in Su wen 20 demonstrate the character of these passages:

When the physical appearance is lean while the vessels are big and when there is much qi in the chest,

[this indicates] death....

When all the [movements in the vessels at the] nine indicators in the three sections do not conform with each other,

[this indicates] death.

When the [movements in the] vessels above and below, on the left and on the right

correspond to each other like the pounding in a mortar, [this indicates that] the disease is severe.

When [those movements in the vessels] above and below, on the left and on the right that do not conform are innumerable, [this indicates] death.<sup>637</sup>

Prognosis is the assessment of the future course of a disease. As *Su wen* 21 put it in a statement on the location at the wrists where the status of qi was supposed to show:

At the qi opening [a section of one] inch is established to [feel the movement in the vessels and] decide about [a patient's] death or survival.<sup>638</sup>

In ancient societies, a knowledgeable physician was not supposed to devote his attention to a moribund patient. If a practitioner treated such persons only two conclusions were possible. Either the practitioner was too incompetent to be able to foresee the development of the disease in question, or he was aware of the status of the patient but continued to treat him simply out of greed. Both these alternatives deserved to be despised. To escape any situation that might give rise to suspicions, prognostic signs were quite important before the time when treating hopeless cases no longer posed a danger to the physician, because it was now considered either as humanitarian or as contributing to the advancement of knowledge.

In the Su wen, prognostic signs are listed in several discourses. Su wen 20, in addition, offers a list of signs indicating whether a patient has a disease in the first place. Usually, one might assume, a patient sought expert advice only if he or she considered his or her state one of ill health. To define such a state as "free of disease" is not a response one would expect from a physician of ancient Chinese medicine, who was expected, as we have seen elsewhere, to intervene as early as possible.  $^{639}$  And yet, in the absence of a concept of routine checkups, Su wen 20 lists conditions that indicate either presence or absence of disease; it would certainly be interesting to know more about the setup in which such a decision was required; the text offers no clues, however. A few selected examples from Su wen 20 read as follows:

If [the vessels at] any single one [of the nine indicators] are small, [this indicates] disease.

If [the vessels at] any single one [of them] are big, [this indicates] disease. If [the movement in the vessels at] any single one [of them] is fast, [this indicates] disease. . . .  $^{640}$ 

If the [movement] responding [to one's finger] extends over more than five inches.

as if there were wriggling worms, [this indicates] there is no disease. . . . <sup>641</sup>

When the [movement in] these vessels is fast, [this indicates] no disease. When the [movement] in these vessels is retarded, [this indicates] disease. When no [movement in the] vessels comes and goes, [this indicates] death. When the skin sticks [to the bones, this indicates] death. 642

There is no need to be an expert in any of the doctrines of systematic correspondence, nor does one even have to know anything about the special relationships between specific movements in the vessels and the status of qi either in the conduits or in the depots. The prognostic knowledge outlined in *Su wen* 20 is based on rather simple parameters. The diagnostic principle expressed in the following lines has, therefore, very little in common with the elaborate conceptualizations of vessel examination elsewhere in the text and considered characteristic of Chinese medicine to this day.

One must inquire about the [patient's] initial disease and about the present disease.

Then one [must] squeeze all the vessels and

inspect the conduits and the network [vessels] near the surface and in the depth.

One follows them upward and downward, contrary to and following [the flow of their contents].  $^{643}\,$ 

Su wen 20 is not the only discourse in the Su wen teaching detailed prognostic knowledge without resorting to a theoretical background. In Su wen 18, for example, a noteworthy approach to quantifying physiological and pathological processes is documented. The compiler of the text let Huang Di inquire from Qi Bo how to distinguish a normal, that is, healthy, person from a sick person. Qi Bo responded by defining a normal pulse frequency; a later commentary insert suggested comparing a potentially sick person's pulse frequency with a supposedly healthy norm:

In man

during one exhalation, the vessels exhibit two movements.

During one inhalation, the vessels exhibit two movements too.

Exhalation and inhalation constitute one standard breathing period.

If the vessels exhibit five movements,

this is an intercalation [of a fifth movement] because of a deep breathing.

That is called "normal person."

 $\{A \text{ "normal person" is not ill. As a rule, one takes [someone] who is not ill [as a standard] to assess a patient's [condition]. The physician is not ill. Hence one makes it a law to assess the [condition of the] patient [on the basis of a] normal breathing.}$ 

Starting from knowledge of normal and abnormal pulse frequency, certain prognostic judgments could be made that did not require any further explicit theoretical explanation:

When man

exhales once and his vessels exhibit one movement and when he inhales once and his vessels exhibit one movement,

that is called "short of qi." . . .

When man

exhales once and his vessels exhibit four movements or more,

that is called "fatal."

If the [movement in the] vessels is interrupted and fails to arrive,

that is called "fatal."

If at times it is spaced, at times frequent, that is called "fatal." <sup>645</sup>

Similarly, Su wen 19 includes quantification in its prognostic advice:

When a [movement in the] vessels is interrupted and fails to arrive, or when it arrives five or six times while a person breathes once, even if the flesh of his physical appearance has not fallen off and even if one does not notice a true [qi of a] depot [in the movement in the vessels],

[that person] must die nevertheless.646

Quantification is coupled here with an empirical assessment of the patient's body status as well as with a conceptual parameter, namely, the presence or absence of the true qi of a depot. The physiological basis of this parameter is the dependence of the five depots on a constant supply of stomach qi. Each depot sends its own qi out to pass through the conduits. Given that each depot is granted a period of domination in the course of the seasons, the liver qi should be prominent in the vessels during spring, a status that becomes apparent through, or should normally be accompanied by, a string[like] movement in the vessels. In summer, with the domination of heart qi, a hook[like] movement is considered normal. In autumn, when the lung dominates, a hair[like] movement should appear, while in winter, when the qi of the kidneys dominates, a stone[like] movement should be felt.

However, in a healthy person, the qi emitted by the depots must always be accompanied by a stomach qi, because the well-being and functioning of all depots depends on a continuous supply of stomach qi. If the hand great yin conduit at the wrist, where the movement in the vessels is usually felt, is passed by the pure qi of a depot without an admixture of stomach qi, this is a very inauspicious sign. The arrival of a pure or, as the text calls it, true qi of a depot indicates domination of a disease qi in that depot. In general, this is fatal <sup>647</sup>

Based on this concept of the necessary presence of stomach qi, *Su wen* 18 offers a detailed and systematically structured list of criteria to assess a patient's current status and to foresee the course of any disease. For example,

When in spring [the vessels have] stomach [qi and exhibit a] slightly string[like movement], that is called "normal."

If it is mostly string[like] with diminished stomach [qi present], that is called "liver disease."

If it is only string[like] with no stomach [qi present], that is called "fatal."

If stomach [qi is present] and if [the movement] is hair[like], that is called "autumn disease."

If it is very hair[like], that is called "present disease."

When in summer [one feels] stomach [qi together with a] slightly hook[like movement in the vessels], that is called "normal."

If it is mostly hook[like] with diminished stomach [qi present], that is called "heart disease."

If it is only hook [like] with no stomach [qi present], that is called "fatal." If stomach [qi is present] and if one has a stone [like movement in the vessels], that is called "winter disease."

If [the movement is] very stone [like], that is called "present disease." And so on.  $^{648}$ 

The concept of the presence or absence of stomach qi is not the only underlying assumption of this passage. The predictive values of the various movements in the vessels are, in addition, based in the theories of systematic correspondence in general and in the five-agents doctrine in particular. Spring is associated with the liver and with a string[like] movement in the vessels. However, in spring, a normal person exhibits only a "slightly string[like]" movement in the vessels, because the qi of the liver ought to be mixed with stomach qi. The less stomach qi is present, the stronger the string[like] quality of the movement in the vessels appears. Total absence of stomach gi is a portent of death. However, even in the presence of sufficient stomach qi, the movement in the vessels may indicate a disease if it is hair[like] in spring. A hair[like] movement, we have read earlier, is associated with autumn, with the lung, and with the agent metal. Metal is able to cut wood. If in spring, which is the season associated with the agent wood, a metal movement shows, then a disease must be present. The same is true with a stone[like] movement showing in summer, because the former is associated with the agent water and the latter with the agent fire, and so on.

Not only that a disease is fatal but also the exact time of death was established on the basis of the five-agents doctrine. For example, if in the absence of stomach qi a pure liver qi movement appears, the patient will die on a *geng* or *xin* day. *Geng* and *xin* are the two heavenly stems associated with metal. Metal cuts wood. Hence a patient whose "pure liver qi" indicates that an evil qi has assumed control of the liver, which is associated with the agent wood, will die on a day associated with the agent metal. Similarly, if in the absence of stomach qi a pure heart qi movement appears, the patient will die on a *ren kui* day,

because the latter is associated with the agent water, while the heart is associated with the agent fire; the former is usually able to extinguish the latter.<sup>649</sup> Hence the author of *Su wen* 22 concluded:

One must first determine the [movement in the] vessels of the five depots. Then one is in a position to speak about the times when [a disease] is minor and serious, and about the times of [a patient's] death or survival. 650

Having seen the embedding of prognosis in the five-agents doctrine, we should also take a look at possible links between prognosis and the yin-yang doctrine. The latter appears in the context of prognosis in that *Su wen* 16 lists specific signs indicating an exhaustion of qi in each of the twelve yin and yang conduits. Such a condition is, of course, fatal. That is, the physician does not examine the vessels to arrive at a prognostic judgment of a patient's status. Rather, specific bodily manifestations inform him of the status of qi in the twelve vessels.

It should be noted when reading these paragraphs that the assumption that the qi in a particular conduit may be exhausted cannot be reconciled with a notion of a continuous circulation of qi through a system of interrelated tubes. The traditional notion of conduits as separate vessels, each holding its own supply of qi, has survived in these statements. The first two paragraphs read as follows:

When the [qi of the] major yang vessel is finished,

the eyeball is turned upward, [the spine] is bent backward, and hands and feet [change between] being cramped and slackening.

The complexion is white.

Interrupted [streams of] sweat leave [the body].

When it has left, [the patient] will die.

When the [qi of the] minor yang [vessel] is finished,

the ears are deaf, and all the joints are loose.

The eyes are turned upward and the connection is cut.

One day and a half after the connection was cut, [the patient] dies.

As for his death, first his complexion is green-white, then he will die. 651

# 9.6. Vessel Diagnosis of Disease

Prognostic and diagnostic vessel examination is outlined beginning in *Su wen* 6. Similar to the prognostic instructions, lengthy diagnostic tables were compiled; they need little if any conceptual background. Interestingly, vessel diagnosis is applied to trace ailments that one might think could be detected through visual inspection or anamnesis much more easily. For example, swollen feet and shins are, in today's perspective, not among the health problems one might want to find out about through pulse feeling. No explicit statement has been received as to why a physician would be motivated to ex-

amine the movement in the vessels of his patient to find out whether his feet are swollen. One can only speculate whether asking such questions was considered indecent or whether in the absence of any qualifying examinations or quality control a physician could prove his expertise by announcing, after feeling the movement in the vessels, facts that could be verified by the patient or the patient's family. Two examples of what might be tentatively called self-qualifying examinations are the following:

If the [movement in the] vessels at the Inch Opening strikes the hand as a short [movement],

that is called: "headache."

If the [movement in the] vessels at the Inch Opening strikes the hand as an extended [movement],

that is called: "foot and shin pain."652

In general, vessel diagnosis served to identify either a disease or the status of the patient. One major block of advice in the *Su wen* helps to assess the movement in the vessels in general. Presumably the authors presenting such information in their texts did not distinguish between separate movements in the vessels revealing the status of qi in the individual conduits or depots. For them, a single movement passed through the vessels and this movement could assume different qualities, which in turn could be felt at the "Inch[-long] Opening" at the wrists and were interpreted as manifestations of certain rather general health problems. For example,

If the [movement in the] vessels at the Inch Opening is in the depth and firm, that is called: "disease in the center."

If the [movement in the] vessels at the Inch Opening is at the surface and abundant,

that is called: "the disease in the outer [regions]."

If the [movement in the] vessels at the Inch Opening is in the depth and weak, that is called: "cold and heat" and

"elevation conglomeration ill," with pain in the lower abdomen.

If the [movement in the] vessels at the Inch Opening is in the depth, with transverse [knottings],

that is called: "accumulations below the flanks."653

Movement qualities such as "in the depth," "at the surface," "weak," "abundant," and "hard," as well as nosological entities such as "disease in the center," "accumulations below the flanks," and "cold and heat," did not require any understanding of a conceptualized relationship between the status of a conduit or depot and a specific movement in the vessels. However, elsewhere in the *Su wen*, quite similar data are given together with some rudimentary theoretical information. The discrepancies between these two sets of data may be signs of different stages reached in a histori-

cal development, or they may document different schools of thought coexisting contemporaneously.

When [the movement in the vessels] is rough and big, the yin is insufficient and the yang has surplus. This is a heated center.

When [the movement in the vessels] comes hastily and leaves slowly, with repletion above and depletion below, this is recession with peak illness.

When [the movement in the vessels] comes slowly and leaves hastily, with depletion above and repletion below, this is [being struck by] bad wind. $^{654}$ 

As in the paragraph quoted before, this passage does not refer to associations between specific movements in the vessels and the status of individual conduits or depots. Yin insufficiency, yang surplus, repletion, and depletion are rather general status descriptions added here to explain the presence or generation of diseases such as heated center, reversal with peak disease, or being struck by bad wind. A heated center signals a surplus of yang qi; a reversal with peak disease is the sign of a movement of qi from the lower parts to the upper parts of the body, leading to a repletion above and a depletion below. A depletion above, finally, allows bad wind to strike and enter the organism.

Another set of instructions aims at assessing the status of qi in individual depots by identifying certain movements whose qualities are described by rather elaborate comparisons with phenomena known from everyone's environment. In a long and highly systematic list of movements in the vessels indicating a normal, a diseased, and a dying condition of each of the five depots, a physician is supposed to be able to judge with his fingertips whether a movement is "repetitive, resembling a string of pearls; as if [one's fingers] passed over lang gang [jade]," whether it is "panting in sequence; in between it is slightly curved," whether it is "curved in front and straight behind, as if one grasped a hook holding a belt," whether it is "neither rising nor descending; as if [one's fingers] passed over chicken feathers," whether it is "soft and weak and waving, resembling the raised tip of a long bamboo cane," and so on.  $^{655}$  Most of these descriptions require at least as much visual imagination as tactile evaluation, which may be why they remained marginal in Chinese pulse diagnosis. The usual terms "smooth," "frequent," "soft," and so on, are, of course, not entirely indicative of movements either; some of them, like "rough" or "smooth," may be remnants of a time when the condition of the skin above the vessels, rather than the movement in the vessels below the skin, was considered a valuable parameter.

On a slightly more conceptualized level of vessel examination, the expert was expected to know that there existed individual vessels at the wrists. It was declared possible, by means of differential palpation of these vessels, to gain information on specific pathological conditions inside the organism and invisible to the human eye. Despite the apparent conceptualization of liver vessels, stomach vessels, and so on, in this context, these statements do not yet document the highest levels of theoretical sophistication reached elsewhere in the *Su wen*. Examples of combined examination of a specific vessel and of the patient's complexion are the following:

When the beating in the vessels of the liver is firm and extended and when the complexion is not green-blue,

[the patient] must suffer from a fall as if he had been beaten.

Hence there is blood below the flanks, letting that person pant because of [qi] moving contrary [to its regular course]....

When the beating in the vessels of the stomach is firm and extended and when the complexion is red,

[the patient] must suffer from a broken thigh bone.

When it is soft and dispersed,

he must suffer from food block.656

In a few instances, the examination of a specific vessel is recommended to diagnose morphological lesions. An example is a piece of advice on how to recognize an abscess in the stomach duct. To follow this advice, all one has to know is, first, the location of the Man's Prognosis points on both sides of the throat and, second, where the stomach vessel can be felt.

[The movement in] this vessel should be in the depth and fine.

When it is in the depth and fine, the qi moves contrary [to its normal course]. When it moves contrary [to its normal course], the [movement in the vessel at] Man's Prognosis is extremely abundant.

When it is extremely abundant, then there is heat.

{Man's Prognosis is [associated with] the stomach vessel.}

Once there is a movement contrary [to its normal course] and abundance,

then heat assembles at the stomach opening and does not move.

Hence, the stomach duct develops a yong-abscess. 657

In Su wen 21, the conceptually most sophisticated levels of vessel movement examination are presented systematically. The underlying paradigms include both the yin-yang and the five-agents doctrine. Vessel examination is supposed to reveal the yin or yang status of a movement, enabling an expert to determine whether a movement is seasonally adequate or not. Vessel examination is also supposed to reveal which depot's qi arrive and in what condition they arrive. The purpose of soliciting such data from the vessels is to define proper treatment.

When only [the qi of] the major yang depot arrives,

[accompanied by] receding [qi], panting, depletion, and qi moving contrary [to its proper course],

this is [a situation] of yin insufficiency and yang surplus.

The exterior and the interior alike must be drained.

Remove it from the lower transporters.

When only [the qi of] the yang brilliance depot arrives,

this is [a situation] of yang qi accumulation.

The yang [qi] must be drained, the yin [qi] must be supplemented.

Remove it from the lower transporters. . . .

When the qi in [all] the five vessels is diminished and when the stomach qi is not balanced,

this is [a situation of excess of] the third yin.

One should treat [this at] the lower transporters

by supplementing the yang [qi] and draining the yin [qi].658

### 9.7. Conclusion

Ancient Chinese medicine as documented in the Su wen employed examination and diagnosis to serve prognostic and therapeutic ends. As was shown by selected passages, empirical knowledge of the future fatal or nonfatal course of a disease was accompanied by highly theoretical constructs to predict the fate of a patient. Similarly, diseases were diagnosed in some text passages through signs whose understanding did not require any deeper theoretical background, while elsewhere the doctrines of yin and yang and of the five agents were invoked to locate the present whereabouts of a disease and to assess its nature. In all instances of changing complexions, an author requested in Su wen 10, the physician had to examine his patients with his eyes, as he had to use his fingers to inspect the movement in and the condition of the vessels. He was expected to know the theories to deduce individual conditions from these parameters. He had to be able to employ his rational mind to reach conclusions through reasoning. He was supposed to be able to compare and was expected to be able to add one plus one and see the sum of it. Hence,

the [movements in the] vessels,

be they minor or strong, smooth or rough, at the surface or in the depth,

they can be differentiated with the fingers.

The images [of the conditions] of the five depots,

they can be deduced through comparison.

The five depots appearing in the tones,

they can be known by way of reasoning.

As for the examination of the subtle appearances of the five complexions,

they can be inspected with the eyes.

Those who are able to match the [movement in the] vessels and complexion, they can achieve myriad cures.<sup>659</sup>

It may be difficult to transpose the theoretical constructs and the relationships among empirical parameters and prognostic or pathological conclusions outlined on the preceding pages into today's paradigmatic context. It is not difficult, however, to perceive the appropriateness of the parameters taken into account. Ideally, the range of parameters considered helpful in establishing a prognosis or diagnosis should include social, environmental, physical, and emotional conditions. Such signs are as meaningful in a physician's evaluation of a patient's status today as they appeared almost two millennia ago. Hence a statement like the following should sound quite familiar even to those representatives of Western medicine who are not used to arguing in terms of yin and yang, depots and palaces.

When the sages treated a disease, they certainly knew the yin and yang [qi] of heaven and earth and the normal arrangements of the four seasons; the five depots and six palaces, female and male, exterior and interior, [as well as] piercing, cauterization, pointed stones, and toxic drugs with all their indications. . . .

The noble and the common, the poor and the wealthy, they all [represent] a structure of different ranks, [and the sages] inquired [from the patients] the structures of youth and adulthood, of courage and timidity.

They investigated [all the] parts and sections [of the human body], and they knew the root and the beginning of the diseases [to be treated].

As for the eight cardinal [turning points] and the nine indicators, in their examinations they were of definite help [too].<sup>660</sup>

#### 10. INVASIVE THERAPIES

Once a Han-era physician had decided that the current state of a patient required treatment, in principle he could choose among several methods to influence the future course of a disease. Presumably all the therapeutic means described in the texts unearthed from the tombs of the second century B.C. were still known and applied in the next two or three centuries. From Harper's detailed discourse on therapy in the Mawangdui manuscripts, it is obvious that, apart from magical and demonological strategies that do not concern us further here, four basic approaches can be distinguished. They are invasive interventions, heat therapy, the use of materia medica, and phys-

ical exercise.  $^{661}$  Examples of all these approaches reappear in the Su wen. The emphasis, however, is on invasive therapies; physical exercises are mentioned only in passing.

### 10.1. The Concept of Invasive Intervention

The concept of invasive interventions, as it may be defined in this context, pertains to all techniques applied to open the skin and either to influence certain processes in the body or to eliminate specific body parts or pathogenic or pathological substances from it. As attested in the Mawangdui manuscripts, invasive interventions in this sense include operations such as petty surgery to remove anal fistula as well as lancing abscesses to drain pus.  $^{662}$ 

The  $Mai\ fa$  脈 法, the Mawangdui text "Model of the Vessels," as Harper translates its title, and other texts specifically name the bian 髮, obviously a stone with a sharp, pointed end, as an implement for opening abscesses. In three of its discourses, the  $Su\ wen$  also mentions the bian as a suitable tool to conduct such invasive interventions. For example, in  $Su\ wen$  12, the people inhabiting the East are said to

have a black complexion and open skin structures. Their diseases are always *yong*-abscesses and ulcers. For their treatment, pointed stones are suitable. <sup>663</sup>

In Su wen 14, the compound chan shi  $\frac{1}{2}$   $\frac{1}{2}$  "chisel stone(s)," may be just another expression for bian; it could equally well denote a differently shaped stone tool, indicating that various such stone instruments were in use to achieve different ends. The exact purpose for which the "chisel stone" was employed is not specified; the text states merely that, at the time the author wrote it, people resorted to "chisel stones, needles, and moxa" to treat patients externally.  $^{664}$  The Su wen authors did not establish any connection between the "pointed stones" or "chisel stones" and the vessel theory or the yin-yang and five-agents doctrines of systematic correspondence. Petty surgery to open abscesses and ulcers may have been an established practice in early Han China; it did not fit into the larger scheme of physiological, pathological, and therapeutic processes outlined in the Su wen and hence attracted no specific interest.

With a considerable degree of imagination, however, at least one passage might be read as a hint at a surgical intervention. In section V.7.11, we have encountered a description, quoted from *Su wen* 40, of a mysterious disease identified as Hidden Beams. Obviously, the metaphor "hidden beams" referred to palpable accumulations in the abdomen. The following excerpt is of interest here.

The lower abdomen [gives the patient a feeling of] abundance. . . .

[It] holds massive pus and blood, located outside of the intestines and the stomach....

This is a chronic disease; it is difficult to cure. . . .

Do not move [it]; quickly remove [it]. 665

One may wonder how "removal" could have been expected to be achieved without moving the pus and the blood by pharmaceutical treatment, massage, or acupuncture. That is, it is difficult to imagine how physicians were able to "quickly remove" the Hidden Beams with an approach other than surgery. For the time being, however, no evidence is available to support such a hypothesis.

As Yamada and Harper have suggested, acupuncture, as it arose in the second or first century B.C., is a continuation of lancing techniques on a new conceptual level and with new therapeutic goals. The recently introduced framework of vessel theory called for curing certain types of illnesses by releasing pathogenic qi from the conduits in the depth of the tissue in the same manner as lancing stones were used to eliminate pus from directly underneath the skin. 666 As that vessel theory linked health to a free flow of both qi and blood, bloodletting, which is not attested in earlier sources, also made a strong but short-lived appearance. As I point out below, the *Su wen* devotes more space to bloodletting than was once thought. However, outside the *Su wen* tradition, printed medical literature of subsequent centuries offers no evidence of continuing widespread representation of this technique.

The needle came to be the instrument used for all purposes of invasive intervention. As the Ling shu specifies, nine different shapes, some of them more reminiscent of lancets or blades than of what we would associate with the term "needle" today, were employed for various therapeutic ends. In this context, the term  $ci \not \! | \! \! |$ , which the  $Su \ wen$  most often uses to denote the insertion of needles, deserves some attention.

The dominant notion associated with ci in pre-Han and Han sources is "to pierce with a sword or pointed weapon" and hence "to kill by piercing." For example,  $Meng\ zi$ , Liang hui wang shang, 孟子, 梁惠王上 states: 是何異於刺人而殺之, "how does this differ from killing someone by piercing him?"

Another meaning conveyed by the character ci is "to take away." As a passage in the Shiji 史記, which was repeated in the  $Han\,shu$  漢書, suggests, this usage may be based on a metaphorical understanding of ci in the sense of "to pierce into and pick out": "Emperor Wen ordered all the erudites to probe into the Six Classics (剌六經中) and [use the data gathered] to prepare the [text]  $The\,Government\,of\,Kings.$ "  $^{668}$  A Tang commentary by Sima Zhen 司馬真 quoted Yan Shigu 顏師 古, another Tang author, with an interpretation of 剌 in this  $Shi\,ji$  context as 採取,"to pick [something] from [something]." Yang Shen 楊慎, a Ming scholar, agreed with this interpretation, as did the

famous Qing philologist Yu Yue 俞樾 (1821–1906), who extended it to a passage in Xunzi, Zheng lun, 荀子, 正論: 聖王者...不得以有餘過度. 盗不竊賊不剌, which should be read accordingly as "The sages . . . did not permit [the people] to own excessive surplus. Hence, robbers did not steal and burglars took nothing away."  $^{669}$ 

Combining these two meanings, the term ci perfectly suits the purpose of needle therapy in acupuncture and bloodletting. By piercing the skin and the tissue underneath, the needle serves to remove qi, blood, or pus. A straightforward concept of "removal" is frequently expressed in the Su wen by the term qu  $\mathfrak{P}$ . For example, Su wen 19 states in a more general context: "One removes (qu  $\mathfrak{P})$  the [disease] in time." The term ci is more encompassing in that it adds a notion of the type of intervention or of the instrument by which this removal is achieved. Ci also stands for a pointed object, for instance, a thorn, that can be used for piercing. In Su wen 63, the advice to "remove [blood] from the left when [the disease] is on the right" is repeatedly expressed as yi you qu zuo y zuo zu

The *Huang Di nei jing* is the major source on the early history of needle therapy in Chinese medicine. In this regard, the *Su wen* differs from the *Ling shu* markedly in that the former offers many insights into the transition of needle therapy from bloodletting to the various approaches known together as acupuncture. The *Ling shu*, in contrast, offers a stabler picture of acupuncture.

The heterogeneity of the contents of the *Su wen* may disappoint anyone searching in it for a closed system of acupuncture theory and practice; it offers a welcome medley of data, however, to those interested in the early history of invasive interventions in ancient Chinese medicine, notably of needle therapy. Altogether, four different approaches are discernible: in an earlier historical layer bloodletting and in a later layer piercing to manipulate qi, piercing to reach specific morphological entities, and the so-called misleading piercing. Presumably the discourses treating these four different approaches were written by different authors belonging to separate traditions.

# 10.2. Bloodletting

It is safe to state that bloodletting occupies a highly visible if not prominent position in the *Su wen*. Altogether twelve treatises refer explicitly to the practice of bloodletting;<sup>673</sup> elsewhere, as in *Su wen* 14, "remove what is densely compacted, cut out the old,"<sup>674</sup> statements may be interpreted as indirect references to bleeding.

In addition, fifteen treatises refer to the possibility of cutting the skin with pointed or sharpened stones.  $^{675}$  In most cases, the purpose of an incision with a pointed or sharpened stone cannot be ascertained immediately from the wording of the text. For example,  $Su\ wen\ 24$  states:

When the physical appearance is joyful and the mind is joyful [too], the disease emerges in the flesh.

Treat it with needles and [pointed] stones.<sup>676</sup>

Several times the use of stones is advocated to open a specific type of abscess, as for instance in *Su wen* 46, where the following dialogue unfolds.

### [Huang] Di:

When someone suffers from a yong-abscess in his neck,

some treat it with stones, some treat it with needles or cauterization.

In all cases [the disease] ends.

Which [explanation] of this is trustworthy?

#### Qi Bo:

This ["yong-abscess"] is an identical name for different types [of diseases].

Now, in the case of a *yong*-abscess, the qi stagnates [at one place]. One must open it with a needle to eliminate it.

Now, when the qi abounds and blood has collected, one must drain it with a stone.

This is what is called "different treatments for identical diseases." 677

The needle was employed in this example to drain stagnating qi, presumably turned into pus. The stone served to drain abounding qi and accumulated blood. Possibly the use of stones predated the introduction of needles into therapy. By the time the Su wen was written, almost all interventions to drain blood or qi were carried out by means of needles, if we consider the usage of the Chinese term for piercing, ci  $\not\equiv$ 1, as exclusively restricted to these metal instruments. One exception appears in Su wen 76, where Lei Gong admits having been at a loss about a case he was supposed to treat:

Here was a person [with a condition as follows:]

his four limbs were sluggish.

He panted and coughed, and he lost blood.

[I, the] ignoramus, diagnosed the [disease], and

I considered it to be a harmed lung.

When squeezing the [patient's] vessels, [I felt a movement] at the surface, large, and tight.

[I, the] ignoramus, did not dare to treat [the patient].

An uneducated practitioner applied a sharpened stone, and the disease was healed.

He let a large amount of blood.

When the bleeding stopped, the body felt light.<sup>678</sup>

The simplest rationale for letting blood is the notion of a local or systemic surplus that causes problems and should be eliminated. Hence in what is a commentary in  $Su\ wen\ 54$  on an indirect reference recalling the statement in  $Su\ wen\ 14$ , the author clarifies:

As for "what is densely compacted and old, eliminate it," [that is to say:] let the bad blood. $^{679}$ 

Similarly, "in case of repletion above and depletion below," Su wen 20 recommends.

squeeze [the vessels] and follow them [with the fingers], search for their knotted network vessels, pierce them, and let their blood flow out to make them passable [again].<sup>680</sup>

The therapeutic approach of bloodletting, it appears from these statements, was not linked to the pathophysiology of systematic correspondence. "Repletion" above, possibly manifesting itself in tangible symptoms such as a red head and swollen blood vessels, was attributed to a surplus of blood causing "knottings," which in turn impeded the flow of the blood.

 $Su\ wen\ 22$  lists heart, spleen, liver, lung, and kidney diseases and their needle treatments. Interestingly, the criteria for deciding whether a patient suffers from a disease associated with one of these organs are not defined in terms of vessel diagnosis but in terms of various ailments experienced by the patient himself.

In the case of a heart disease,

there is pain in the chest.

The flanks have propping fullness.

There is pain below the flanks.

There is pain between chest, back, and shoulder blades.

There is pain inside of both arms.

In case of depletion, chest and abdomen are enlarged.

The region below the flanks and the lower back pull each other and have pain.

[For treatment] select the respective conduits. 681

Obviously, a practitioner who was supposed to follow this recommendation knew which conduits were associated with the heart, and he also knew how to manipulate "the respective conduits." Possibly at a time when the transmission of texts became separated from oral instructions, such knowledge may no longer have been taken for granted by the copyist-editors of this passage. Hence they added commentaries specifying the conduits to treat a heart disease.

The paragraph quoted above is followed by two such supplementations,

each representing a distinct historical layer. The first in the text, which was not necessarily the first to be written, states:

{[namely] the minor yin and the major yang [conduits]}<sup>682</sup>

The hand major yang and hand minor yin conduits form outer and inner; they are associated with the small intestine and the heart respectively.  $Su\ wen\ 41$  advocates piercing "right into the conduit to let blood." However, the context differs in that in  $Su\ wen\ 41$ , "the foot major yang vessel lets a person's lower back ache," $^{683}$  and it is this very conduit where blood is to be drained. It is difficult to determine whether the author of the first commentary quoted from  $Su\ wen\ 22$  above had something similar in mind or whether he suggested a qi manipulation by means of piercing a conduit associated with the diseased organ.

In contrast, the second commentary explicitly requests a piercing of

{those [with] blood below the tongue}<sup>684</sup>

thereby linking the treatment to bloodletting. Here it remains unclear, though, why "those [with] blood below the tongue" should be suitable for treating a heart disease. The hand major yang conduit does not touch the tongue at all. One branch of the hand minor yin conduit rises alongside the throat and ends at the eye. One could think of the blood vessels below the tongue as linked to this hand minor yin conduit branch and, therefore, to the heart; nevertheless, a conceptual model explaining why bloodletting below the tongue could be helpful in treating a disease in the heart is not offered in the present context or anywhere else in the *Su wen*.

The same applies to the remaining four diseases specified in *Su wen* 22. In each case, a list of ailments concludes with a recommendation to "select the respective conduits," which is followed by two distinct commentaries, one advocating conduits associated with the diseased organ on the basis of the sixfold yin-yang categorization, the other pointing out "those with blood."

# 10.3. Bloodletting to Treat Qi

Various discourses in the *Su wen* link bloodletting and qi manipulation. One example is *Su wen* 26:

When heaven is warm and when the sun is bright, then the blood in man is rich in liquid, and the protective qi is at the surface. {Hence, the blood can be drained easily, and the qi can be made to move on easily. . . .

It is therefore that one follows the seasons of heaven in regulating blood and qi.  $^{685}$ 

Although genuine qi manipulation without bleeding eventually came to dominate vessel therapy as its major objective, statements such as the one quoted above from Su wen 26 reveal at least a transitory stage of attempts at reconciling the two approaches to vessel therapy. Although no conceptual link was established between bloodletting and qi manipulation, at least for a while the two were mentioned in one breath, as for instance in the following exchange between Huang Di and Qi Bo in Su wen 27.

[Huang] Di:

Supplementation and draining, how are they carried out?

Oi Bo:

This is [done by] attacking the evil.

Quickly remove [the needle] to remove abundant blood, and to have the [patient's] true qi return.

This is, when an evil has just arrived as a visitor,

it rong-rong [floats around] not occupying a definite location yet.

If one pushes it, then it will move forward;

if one pulls it, then it will stop.

Move [the needle] against [its flow] and pierce it. . . .

Pierce to let the [patient's] blood, and

his disease comes to an end immediately.<sup>686</sup>

The conceptual break in this short dialogue is quite obvious. It is obvious also in *Su wen* 55, where cold and heat are identified as intruders that can be eliminated by bloodletting and where, a little further on, the author suggests:

When piercing large [abscesses, let] much blood, in the case of small ones, lower [the needle] into the depth.<sup>687</sup>

This recommendation is followed, once again a few lines further on, by an assertion that all the piercings mentioned earlier serve "to guide the abdominal qi. When the heat has descended, [the disease] ends." Possibly this statement was added to justify ancient bloodletting in view of a modern theory of qi manipulation required for treatment.

A different combination of bloodletting and qi manipulation is outlined in *Su wen* 62. In this "Discourse on Regulating the Conduits," five states of surplus and insufficiency are listed (i.e., of the spirit, the qi, the blood, the physical appearance, and the will) that can be regulated by vessel therapy. To level a surplus spirit, "drain blood from the small network [vessels]." <sup>688</sup> To eliminate a surplus of blood, "drain the respective conduits abounding [with blood], to let this blood." <sup>689</sup> "When the will has [assumed a state of] surplus, then drain blood from the blazing sinews."

The example of a "surplus of qi" in this list in *Su wen* 62 demonstrates that the notion of surplus that has to be eliminated from the conduits through draining therapy is a transformation of an earlier bloodletting rationale into the age of qi theory.

When the qi has [assumed a state of] surplus, then drain the [patient's] conduit tunnels. Do not harm the conduits, do not let the [patient's] blood, and do not drain the [patient's] qi. [In a state of] insufficiency, supplement the [respective] conduit tunnels, but do not [allow] qi to leave.<sup>691</sup>

The  $Su\ wen$  itself does not explain the notion of conduit tunnels. It states, in  $Su\ wen$  62, "The five depots' passageways, they all emerge from the conduit tunnels, and they serve to pass the blood and the qi." This might indicate that the conduit tunnels are not identical to the "passageways of the five depots," that is, the conduits. This conceptual separation of conduit tunnels from conduits is also apparent from the passage on qi surplus quoted above. To the uninitiated, the text leaves open what is meant by "drain the conduit tunnels" and whether this therapy should serve to drain blood or qi from the conduit tunnels. At any rate, the exhortation not to drain blood and not to drain qi from the conduits demonstrates that bloodletting and qi manipulation existed side by side, at least for a while, in vessel therapy.

The treatment of malaria is another impressive example of a combination of bloodletting with qi theory. In *Su wen* 35 and 36, various types of malaria are explained in terms of wind and cold etiology and in terms of qi pathology. In *Su wen* 36, in certain cases the piercing of malaria patients is explicitly defined as bloodletting, as, for instance,

When the vessels are full and big, quickly pierce the transporters on the back. . . . Let blood in accordance with whether [the patient is] fat or lean. 693

#### Or

when the upper shinbone aches so severely that pressing it causes unbearable [pain], this is called "disease attached to the marrow."

Employ the chisel needle to pierce the Severed Bone, and let blood.

[The disease] will end immediately.<sup>694</sup>

We may interpret this passage, too, as the continuation of an older and trusted therapy, bloodletting, in a modern context of qi theory.

# 10.4. Misleading Piercing and Grand Piercing

The most systematic linkage between ancient bloodletting and more recent qi manipulation is offered in Su wen 63 following a request by Huang Di to be instructed in the technique of miu ci,  $\not \gg \not n$ , so-called misleading piercing, and of ju ci  $\not \equiv \not n$ , so-called grand piercing. Here a long list of possible locations where an evil—which can only be an evil qi—may settle is given together with a list of characteristic symptoms and advice on where to pierce to achieve a cure. The first example reads as follows:

When an evil has settled in the network [vessels] of the foot minor yin [conduits],

it lets the [affected] person experience sudden heartache and violent distension.

Chest and flanks [suffer from] propping fullness.

If no accumulations exist,

pierce in front of the Blazing Bone to let blood.

[The disease] comes to an end in the time span of a meal.<sup>695</sup>

In the subsequent instances of evil settling in the network vessels of the hand minor yang conduits, of the foot ceasing yin conduits, or of the hand yang brilliance conduits, in the regions of arm and palm, in the foot yang walker vessels, and so on, for the most part, the text does not repeat the phrase "to let blood"; it simply recommends piercing a specific location and generating a specific number of "wounds." Near the end of the list, the author returned to explicit advice to let blood:

When an evil has settled in the region of the five depots, the disease is such that the vessels have a pulling pain.

At times it comes and at times it stops. . . .

Find out the vessel [that is afflicted] and let its blood.

Pierce once every other day.

If the [disease] has not ended after one piercing,

it will end after five piercings.696

That is, in several instances the text advises bloodletting to cure diseases that are defined as an evil qi settling in particular sections of the organism, mostly—albeit not exclusively—in specific vessels. Neither here nor anywhere else in the *Su wen* is an attempt apparent to construe a conceptual bridge between what may have been a recent development in physiology and etiology, on the one hand, and an age-old tradition in therapy, on the other.

The concept of misleading piercing has been discussed controversially in the course of the centuries. The technique itself was recommended, aside from the Su wen, in the Ling shu, in the Jia yi jing, and as late as 1601 in the Zhen jiu da cheng 針炎大成. After that, it shared the fate of bloodletting in general and fell into oblivion.

In *Su wen* 14, Huang Di asks how a condition is treated "where the qi is blocked inside and the physical appearance is altered outside." Qi Bo responds:

Restore the balance of weight and beam.

Remove what is densely compacted, cut out the old.

Slightly move the four extremities.

[Let the patient wear] warm clothing.

Apply a misleading piercing to the [pertinent] locations to restore the [patient's] physical appearance. 697

Obviously the author of these lines could presume that the technique of "misleading piercing" was known widely enough to make further elaborations on the locations to be pierced unnecessary.

We learn a bit more about the details of the technique in *Su wen* 62, which speaks both of misleading piercing and of grand piercing:

When the body has pain, while no disease [is detectable] at the nine indicators, then pierce it by applying a misleading [piercing]. When the pain is on the left, while the [movement in the] vessels on the right [is marked by] disease, apply a grand piercing. <sup>698</sup>

Wang Bing considered it helpful for his readers to add a simple definition to distinguish misleading and grand piercing:

"Misleading piercing" is piercing the network vessels. When the pain is on the left, one pierces on the right; when the pain is on the right, one pierces on the left. "Grand piercing" is piercing the conduit vessels. When the vessels ache on the left, one pierces on the right; when the pain is on the right, one pierces on the left. 699

Judged by this definition, the only difference between misleading and grand piercing is that the former is directed at the network vessels while the latter aims at the conduits. It was only in *Su wen* 63 that Wang Bing offered a clue to the meaning of the term *miu ci* 繆刺:

繆刺 is to say: the holes to be pierced should be employed as if one committed an error (紕繆) in applying the [normal] principles.<sup>700</sup>

Because of this definition, I have chosen to translate *miu* as "misleading." The normal principles Wang Bing referred to may have required one to pierce near the location of pain, heat, accumulations, or other such ailments. In a misleading piercing, as Huang Di knew, "given [a disease is] on the left, it is removed from the right, while given [a disease is] on the right, it is removed from the left." <sup>701</sup>

Zhang Jiebing started from this practice when he read 繆 as 異, "another":

When the disease is on the left, one pierces on the right; when the disease is on the right, one pierces on the left. The piercing is conducted at another place [than the location of the disease]. Hence, it is called  $\slashed{spi}$   $\slashed{n}$   $\sla$ 

This notion was repeated by Hu Tianxiong 胡天雄:

繆 刺 is: the piercing is applied on the basis of a crosswise connection between left and right.  $^{703}$ 

Based on the statement in *Su wen* 63 that grand piercing aims at the conduits while misleading piercing is always directed at the network vessels, the *Huang Di su wen zhi jie* 黄帝素問直解 of 1980 declared:

繆剌 is to say: to pierce the network [vessels].... One pierces before the evil has penetrated [the body] deeply. The meaning is that of 綢繆, "to apply preventive measures [before a catastrophe has occurred]."<sup>704</sup>

In a paper published in 1983, Chen Wujiu arrived at yet another conclusion:

綢繆 is to say: the disease is in the network vessels, but the piercing is directed at the conduits; or the disease is on the left, and the piercing is conducted on the right. Because conduits and network vessels are intertwined, the needle is applied [at a location] removed [from the location of the ailment]. In ancient literature, 繆 and 穆 were used identically. Hence, [繆 has] the meaning of 沕 穆高遠, "distant and far away." Wang Bing's comment is incorrect.

The locus classicus for examining what the *Su wen* authors themselves may have had in mind when they used the term *miu ci* is *Su wen* 63, whose title announces a "Discourse on Misleading Piercing."

If one takes a closer look at the occurrences of the term *miu ci* in the *Su wen*, apparently two types of ailments are to be treated by a misleading piercing: those where an evil has entered the organism only recently, unable as yet to deeply penetrate the body, and those where the location of the evil is rather well defined and does not move inside the conduits. In both these cases it is advisable to remove the evil from the network vessels.

In contrast, grand piercing is the method of choice when an evil has caused abundance in the conduits, a condition that can be diagnosed at the nine indicators. *Su wen* 63 explicitly states:

When an evil settles in the conduits.

[first] there is abundance on the left, then [in addition] a disease develops on the right, or

[first] there is abundance on the right, then [in addition] a disease develops on the left.

There are also [situations] where it changes its location.

The pain on the left has not ended yet and the vessels on the right have a disease before [the problem has subsided on the left].

Such cases must [be treated] with a grand piercing.<sup>706</sup>

Abundance may be just another expression for the type of repletion that is defined as the pathological presence of an evil qi. One wonders what the ancient authors may have meant by distinguishing between a presence of an abundance, on the one side, and a presence of a disease, on the other. Maybe theoreticists claimed to know parameters informing them of an exact location of an evil intruder in the conduits on the left or on the right side of the body. The presence of the disease on the right or on the left side, respectively, was defined in terms of pain actually felt by a patient, as is suggested not only by the passage just quoted but also by another line in *Su* wen 63:

When the network [vessels] have a disease, the locations of the pain and of the conduit vessels are misleading. Hence, [this type of piercing] is called misleading piercing.<sup>707</sup>

In conclusion, a misleading piercing was considered misleading because it removed the evil from a location far away from where an uninformed layperson may have expected to be pierced, based on his perception of the location of the disease, that is, of the pain.

The *Su wen* does not elaborate further on the technique of grand piercing. The passages quoted from *Su wen* 63 at the beginning of section 10.4 as evidence of therapeutic approaches to remove evil qi by bloodletting are all examples of misleading piercing. The locations to be selected for this technique were mostly the network vessels situated near the nails of toes and fingers. For example:

(To remove an evil from the network vessels of the hand minor yang conduits:) Pierce the finger next to the middle finger above the finger nail. . . .

(To remove an evil from the network vessels of the foot ceasing yin conduits:) Pierce above the nail of the big toe where it meets with the flesh. . . .

(To remove an evil from the network vessels of the foot major yang conduits:) Pierce above the nail of the small toe where it meets with the flesh.<sup>708</sup>

In a few instances, locations near the ankles are to be pierced, for example:

When an evil has settled in the region of arm and palm . . . pierce behind the respective ankle. . . . When an evil has settled in the foot yang walker vessels . . . pierce two wounds below the outer ankles. <sup>709</sup>

of piercing solely in terms of qi manipulation, generating the myth, so widespread in the West today, that this had always been the case.

# 10.5. Genuine Qi Manipulation

It is only in its twenty-seventh treatise that the *Su wen* offers the first example of a needle therapy that aims at manipulating qi without letting blood:

[When the patient] inhales, insert the needle;

do not let the [proper] qi revolt.

[Hold the needle] calmly and let it remain [inserted] for long;

do not let the evil [qi] spread.

[When the patient] inhales, twist the needle

to get a hold of the qi.

Wait until [the patient] exhales to pull the needle [out].

When the exhalation is completed, [the needle] is removed.

Large [quantities of] qi leave.

Hence this is called "draining."711

Similar to older notions of too much blood in the body, the qi, too, was thought to have the potential of being overabundant. Hence notions of drainage were transferred to a treatment of ailments associated with these pathological states.

The entire passage from *Su wen* 27 quoted above is clearly an attempt to develop a technique and a rationale for such manipulations of qi, freed from any direct reference to bloodletting. Nevertheless, this passage is immediately followed by another passage that was quoted in section 10.3 above as a hint at a transitional parallel existence of bloodletting and qi manipulation. This latter passage is quoted here once more, because it is a reaction to the earlier passage by another author who immediately went back a step and returned to bloodletting, at least regarding draining. The introductory question by Huang Di is, of course, of merely rhetorical significance and was not even answered in full.

[Huang] Di:

Supplementation and draining, how are they carried out?

Qi Bo:

This is [done by] attacking the evil.

Quickly remove [the needle] to remove abundant blood, and to have the [patient's] true qi return.

This is, when an evil has just arrived as a visitor,

it rong-rong [floats around] not occupying a definite location yet.

If one pushes it, then it will move forward;

if one pulls it, then it will stop.

Move [the needle] against [its flow] and pierce it. . . . Pierce to let the [patient's] blood, and his disease comes to an end immediately. 712

Often enough in the Su wen, it is difficult to ascertain whether a recommended piercing aims at bloodletting or at genuine qi manipulation. In Su wen 28, however, it appears that the intended effect of piercing is genuine qi manipulation without bloodletting. Among the ailments mentioned here to be treated by piercing are specific abscesses in the armpits accompanied by massive heat. The healer is advised to pierce the foot minor yang conduit. This conduit descends from the Broken Bowl hole at the clavicle through the Armpit Abyss hole at the side of the chest, which may indicate that the piercing is meant to hit the abscess directly. However, in contrast to Su wen 46, which stated,

in the case of a *yong*-abscess, the qi stagnates [at one place]. One must open it with a needle to eliminate it.

Now, when the qi abounds and blood has accumulated, one must drain it with a stone,  $^{714}$ 

in *Su wen* 28, the text neither explicitly requests a piercing at a particular point nor mentions any pus or other bodily fluid that ought to be drained; the only parameter for continuing or ending the treatment is the presence of heat.

Also, if a repeated piercing into the foot minor yang conduit remains without noticable effect, the healer is advised to pierce the hand heart ruler conduit, that is, the hand ceasing yin conduit, and the hand major yin conduit. While the former passes near the armpits, the latter does not touch this region in a way that one could imagine a point suitable for draining an abscess in the armpit. Hence it may well be that the piercing recommended here was thought either to influence the qi in the conduits in a way that reduced the heat or to exert a curative impact that was unrelated to qi manipulation. The same may be said in view of the subsequent recommendation for treating cholera and convulsions resulting from fright:

In the case of cholera, pierce five transporters on [both] sides, and three on both sides of the foot yang brilliance [conduit], and above.

To pierce convulsions resulting from fright, [select] five [locations on the] vessels:

pierce the hand major yin [conduits] at five [locations] each;

pierce the foot major yang [conduit] at five [locations];

pierce one [location] on both sides of the hand minor yin conduit-network [vessels], and [also]

the foot yang brilliance [conduit at] one [location].

Move five inches upward from the ankle and insert three needles [there].<sup>715</sup>

Another example of such ambiguous advice is *Su wen* 32. In the case of a heat disease in the liver, the recommendation given is to "pierce the foot ceasing yin and the [foot] minor yang [conduits]."<sup>716</sup> The former is associated with the liver and the latter with the gall. It may well be that this manipulation is solely aimed at the qi, but it could also have been meant to let blood, or simply to repeat an efficacious procedure without concern for underlying physiological processes. The wording of the advice suggests the existence of insider knowledge, in that the author of the text must have taken it for granted that his readers knew the rationale for such interventions.

It is only in *Su wen* 59 that we begin to move onto solid ground regarding a piercing that is explicitly directed at the manipulation of qi. Here altogether 365 holes are listed on the foot major yang, the foot minor yang, the foot yang brilliance, the hand yang brilliance, the hand major yang, the hand minor yang, the foot minor yin, the hand minor yin, the supervisor, the controller, the thoroughfare, the yin and yang walker vessels, the vessel below the tongue, the ceasing yin vessels in the pubic hair, and locations at the fish lines of the hands and the feet, where the qi can be effused through insertion of a needle.

Su wen 62, in addition to giving advice on bloodletting, offers a few passages on genuine qi manipulation. Once again, Huang Di asks Qi Bo how to proceed to drain a repletion or to supplement a depletion. The resulting dialogue is unambiguous:

[Huang] Di:

When blood and qi have collected,

when the disease has assumed a physical manifestation, and when yin [qi] and yang [qi] pour into each other's [domain], to supplement and drain [in such a situation], how to proceed?

Oi Bo:

To drain a repletion, insert the needle when the qi abounds.

The needle enters together with the qi.

This serves to open the gate as if a door leaf was made to move freely.

When the needle leaves together with the qi, the essence qi is not harmed, and the evil qi descends.

Do not close the outside gate,

so that the disease is made to leave.

Widen its way by moving [the needle] here and there,

as if its road was made passable.

{This is called "massive drainage."}

It is essential to squeeze [the arm] and make [the qi] leave.

[As a result], large [quantities of] qi will yield.

[Huang] Di:

To supplement a depletion, how to proceed?

Qi Bo:

Hold the needle, but do not position it yet.

In this way stabilize [your] intentions.

Wait for an exhalation to insert the needle.

When the qi leaves [the patient's mouth], introduce the needle.

The needle hole is obstructed on four [sides], and

the essence [qi] has no [possible exit] from which it could leave.

Right at the moment of repletion quickly remove the needle.

When the qi enters [the patient's mouth], withdraw the needle,

lest the heat returns.

Obstruct its gate.

The evil qi will disperse.

As a result, the essence qi is preserved.

To move the qi, wait for the [proper] time.

The qi nearby is not lost.

As a result, the qi far away will arrive.

This is called "pursuing it." 717

The *Su wen*, we learn from these few paragraphs and some others not quoted here, is not a repository of exhaustive theoretical reasoning or clinical recommendations for genuine qi manipulation by means of acupuncture. Rather, the text combines a broad spectrum of concepts and approaches developed around effects that may have been observed after the piercing of patients. Few of these concepts and approaches have survived the centuries to be recognized as basic for the practice of acupuncture today. One final example of such traditions that have been lost long ago is what we may call morphological piercing, as outlined in the next section.

# 10.6. Morphological Piercing

In *Su wen* 50, as the title declares, Huang Di enters with Qi Bo into a "Discourse on the Essentials of Piercing." As Qi Bo elucidates,

The diseases include [those] at the surface, and [others] in the depth; piercing includes shallow [piercing] and deep [piercing]. Always proceed to the respective structure.<sup>718</sup>

Obviously, this is an introductory statement preparing a reader for the following message to the effect, first, that diseases may be located in any morphological section of the body, second, that piercing serves to reach the structures affected, and third, that a practitioner must be very cautious not to miss the structure he aims at, lest he cause considerable damage.

Neither blood nor qi appears to be targeted by these interventions. Presumably, the disease was thought an enemy hidden somewhere in the body; it was by means of poking this enemy with a needle that it was eliminated.

The structures that can be pierced include the skin structures with their fine body hair, the skin, the flesh, the vessels, and the bones. In *Su wen* 51, Huang Di requests further information on "piercing the shallow and the deep sections" of the organism,<sup>719</sup> and Qi Bo offers an identical list of morphological structures with the sole addition of sinews. The message here is identical to that in *Su wen* 50; Qi Bo warns against hitting the wrong structure.

This is different from *Su wen* 52 and 64, which offer a list of structures that must not be struck by a needle at all, such as the organs themselves, specific vessels, or other regions where piercing is bound to cause excessive bleeding, swelling, or certain death. In *Su wen* 50 and 51, the harm warned against is caused by striking a structure that is not affected at present by the disease that is to be eliminated. Hence it may even be detrimental to pierce into the skin as long as the evil is located in the external skin structures holding the fine body hair.

Similarly, in *Su wen* 55, no conduit or conduit hole is recommended for piercing; rather, it is the respective morphological structure affected by the disease that is identified as a suitable target. Heat is to be generated in the affected region, and the patient is expected to sweat.

Wind is an ancient pathogenic agent;<sup>720</sup> it may enter the organism and cause pain at various locations. *Su wen* 60 recommends piercing locations near or above the affected region to achieve a cure.

Finally, *Su wen* 64 again takes up the issue of erroneously piercing the various morphological structures. <sup>721</sup> However, here a third reason to avoid piercing of the muscles, the flesh, the network vessels, the sinews, the bones, the conduit vessels, and other entities is given. According to the text, they can be pierced only when it is their time. To pierce the sinews and bones in summer lets blood and qi rise contrary to their regular course and weakens the patient's memory. To pierce the conduit vessels in winter causes blood loss and has a bad effect on the patient's eyesight. Given the significance of piercing the conduit vessels outlined elsewhere in the *Su wen* and given the conspicuous absence of any reference to bleeding or qi manipulation, the passages on morphological piercing appear to constitute a separate tradition of their own.

# 10.7. The Technique of Piercing

Before concluding this discussion of the various types of invasive therapy recommended in the Su wen, we should take a look at the technical advice accompanying it. The most detailed description of how to prepare a vessel for piercing and how to insert the needle to achieve a supplementation is given in Su wen 27:

It is essential to first feel [the vessel] and move [the finger] along it;

[then] to squeeze it and disperse its [contents];

[then] to push and press it;

[then] to flip [a finger] against [it], and provoke it;

[then] to pull [the skin] up and lower the [needle into it];

[then] to penetrate [the vessel] and remove the [evil].

From the outside, pull the door to shut in its spirit.

When an exhalation is completed, insert the needle.

[Hold the needle] calmly and let it remain [inserted] for a long time to have the qi arrive.

As if one were waiting for someone of noble rank;

one does not know whether [he will come during] daytime or in the evening.

When the qi has arrived,

this is exactly the moment for which one has to be on the alert.

Wait for an inhalation and pull the needle.

The qi must not leave.

At each place [where a needle was inserted],

push [the hole] and close the door, and

thereby let the spirit qi be preserved.

Large [quantities of] qi stay where they are.

Hence this is called "supplementation." 722

In a few instances, the authors of the *Su wen* offered technical advice on how to insert the needle to achieve a desired effect. Experience or considerations whose nature is unknown today resulted in the following requirement laid down in *Su wen* 16.

[Whenever] one pierces the chest and the abdomen,

one must bandage them with a hemp cloth.

Then pierce from above the one-layered cloth.

If [a first] piercing does not heal [the disease], pierce again.

When inserting the needle, [one] must be disciplined.

When piercing swellings, one sways the needle.

For conduit piercing, one must not sway [the needle].

This is the Way of piercing.<sup>723</sup>

Occasionally a practitioner is asked to concentrate his mind on the task before him, to conduct a thorough diagnosis, not to be disturbed by the patient's physical condition, and to act quickly and with determination once the decision is reached as to which action is to be taken. *Su wen* 25 likens the needle to a crossbow and its swift insertion to the release of a bolt by pulling the trigger.

Apart from these and a few scattered remarks elsewhere, the *Su wen* provides little information on the nature of the needles and the various modes of employing them. More information on this is spelled out in the sister volume to the *Su wen*, the *Ling shu*.

Not every patient, however, may be in a condition permitting the application of needle therapy. *Su wen* 35 quotes from an older text:

Do not pierce [a patient with] an intensely burning heat.

Do not pierce [a patient with] a torrential movement in the vessels.

Do not pierce [a patient with] an incessant sweating.

Hence, it is because the disease is in full advance against [the proper qi] that it cannot be treated yet. $^{724}$ 

Obviously, the author of these lines did not consider acupuncture a suitable approach for treating patients exhibiting signs of a sickness at the height of its development. This notion is emphasized later in the same text, where it is pointed out that

[to pierce] right at the moment when [the disease] abounds, must result in destruction;

[when a disease is pierced] after it has weakened, [the success of an] intervention will be most obvious. $^{725}$ 

We are reminded here of a simple military stratagem, that is, not to run against enemy troops in full advance. It is wiser to attack before they are able to gather or after they have started to retreat.

#### 11. SUBSTANCE THERAPIES

# 11.1. From Materia Medica to Pharmacology

To attack an enemy is a military metaphor explicitly associated in the *Su wen* not with piercing but with drug therapy. *Su wen* 14, a "Discourse on Hot Liquids and Medicinal Wines," refers to this metaphor when it expresses the view that the health problems affecting mankind had increased to a degree where it was simply insufficient to rely on the decoctions and wines prepared from grain to achieve a cure. In addition to needles and heat, toxic substances capable of attack were required to overcome health threats that were as dramatic as the deterioration of social morale.

### [Huang] Di:

When the sages in high antiquity made decoctions and wines, they produced them but did not employ them.

Why was that?

#### Oi Bo:

Ever since antiquity, when the sages made decoctions and wines, they did so to be prepared.

#### Now.

in high antiquity, when they made decoctions,

they produced them but did not consume them.

As for the people of middle antiquity,

[their adherence to the] Way and virtue had decreased, and evil qi occasionally reached [into the body].

[People] consumed [decoctions] and achieved myriad cures.

[Huang] Di:

For the people of today, there would not necessarily be a cure. Why?

Qi Bo:

The people of today,

they must administer toxic drugs to attack their center, as well as chisel stones, needles, and moxa to treat their exterior. 726

Despite this gloomy outlook on current therapeutic requirements, the *Su* wen devoted much less space to substance therapies, in particular drug lore, than to invasive therapies. Hints of varying lengths on the use of pharmaceuticals appear in twenty-six of the seventy-nine discourses. A closer look at these references shows that they record an interesting phase in the development of ancient Chinese pharmacotherapy, namely, the transition of a vast body of knowledge from one conceptual framework to another. It was not a simple matter to separate the use of therapeutic drugs from its earlier conceptual background and to integrate it into the new doctrines that had come to dominate the understanding of the normal and abnormal processes in the organism and their manipulation by means of piercing.

In fact, the treatment of drug lore in the *Su wen* confronts us with a puzzle. The main text of the *Su wen* (excluding the "seven comprehensive discourses" added by Wang Bing in the eighth century) mentions very few drugs by name. Drugs are hinted at mostly as a therapeutic category without any reference to the specific properties of individual substances or to their potential to influence pathological processes in the organism. In this regard, the main text of the *Su wen* belonged to a group of ancient Chinese medical texts that largely neglected or, like the *Nan jing* and the *Ling shu*, entirely disregarded the contributions of Chinese pharmacotherapy to health care and healing.

Numerous authors of the Earlier and Later Han dynasties took great pains to write texts on normal and abnormal conditions of the organism and how to treat the latter. Why did they extend the newly elaborated conceptual framework of vessel theory and the doctrines of systematic correspondence to invasive interventions and, to a lesser extent, to cauterization but not to the realm of drugs?

Related to this question is a second puzzle. For the twelve hundred years to come, when texts on materia medica were compiled, the authors of the

so-called *ben cao* 本草 literature of individual drug descriptions and the authors of prescription literature—with the exception of Zhang Ji 張機 circa A.D. 200 (see below)—did not take the doctrines of systematic correspondence into account. What considerations, what barriers invisible to us led these men to describe the properties and effects of drugs as individual substances or as constituents of complex prescriptions as if neither vessel theory nor the five-agents and yin-yang doctrines had been introduced into health care and medicine?

A total of 283 prescriptions documented the effects associated with 224 pharmaceuticals and several substances used as more or less neutral carriers. Of the 224 drugs, 106 can be identified as of herbal, 65 as of animal, 9 as of human, and 15 as of mineral origin. Ten substances were man-made items, such as old cart grease, worn-out straw mats, or a woman's first menstruation cloth. Liquids such as wine, vinegar, and the water used to cleanse rice were listed both as pharmaceutically active drugs and as carrier substances. Other carrier substances included animal blood, children's urine, hog lard, and chicken eggs. The description in the *Wu shi er bing fang* of the processing of all these items from their original, raw condition to numerous drug forms, such as powders, pills, liquid preparations, pastes, and ointments, reveals an advanced technology. The necessary know-how was communicated to interested readers with a highly differentiated technical terminology.<sup>727</sup>

It would, of course, be very difficult to find arguments today in favor of a cross-culturally acceptable clinical effectiveness of substances named in the Mawangdui manuscripts, whose therapeutic application as drugs was intimately tied to a conceptual background of sympathetic magic. For example, to spread dog feces on an incision made along the back of the sufferer's head, then covering it with a white chicken for three days, and to have the patient cook and consume this chicken to treat his "crazed seizure" constitutes a treatment that in hindsight can be attributed with nothing but a psychological effect. Nevertheless, it is equally difficult to doubt that a larger or smaller proportion of the drugs and prescriptions described in the Mawangdui literature may have been legitimated by experience and may indeed have been able to influence specific bodily functions through their chemical and hence pharmacologically active ingredients. The ancient Chi-

nese pharmaceutical tradition, whose impressively sophisticated level in the Mawangdui manuscripts came to historians' attention in the early 1970s, remained the dominant therapeutic approach throughout the history of Chinese medicine. Its unquestioned presence in the therapeutic arsenal of the "sages" was acknowledged by one of the *Su wen* authors with the following words:

When the sages treated a disease, they certainly knew the yin and yang [qi] of heaven and earth and the normal arrangements of the four seasons; the five depots and six palaces, female and male, exterior and interior, [as well as] piercing, cauterization, sharpened stones, and toxic drugs with all their indications.<sup>729</sup>

Still, this knowledge of the sages was disregarded by most of the authors, whose interest was focused on the new worldview in medicine. In fact, for more than one thousand years, a divide opened between a materia medica tradition virtually untouched by vessel theory and the yin-yang and five-agents doctrines of systematic correspondence, on the one hand, and an acupuncture tradition based on these very principles, on the other.

In the Han era, Chinese drug lore was so rich in content and so convincing in its effects that a materia medica, the *Shen nong ben cao jing* 神農本草經, with a total of 365 drug descriptions, was compiled in the first century A.D. It contains no trace of the yin-yang and five-agents doctrines and of vessel theory. The only comprehensive prescription work of the Han era known today is the *Shang han za bing lun* 傷寒雜病論 by Zhang Ji 張機 of circa A.D. 200. At first sight it offers a different picture. One section of it was published by Wang Shuhe 王叔和, author of the *Mai jing* (Vessel Classic), separately under the title *Shang han lun* 傷寒論 (On Harm Caused by Cold) in the third century. It associates the effects of therapeutic drugs with the conduits and the yin-yang doctrine. However, this remained an isolated event. Zhang Ji failed to arouse any widespread interest in his approach until the final years of the Song dynasty, when authors such as Kou Zongshi 寇宗奭 (fl. 1116) and Wang Haogu 王好古 (fl.1246–1248) were among the first to create a pharmacology of systematic correspondence.<sup>730</sup>

Kou Zongshi, Wang Haogu, and their contemporaries of the Song-Jin-Yuan era did not have to start from zero, however. In the so-called seven comprehensive discourses of *Su wen* 66 through 74, which Wang Bing added to the main text in the eighth century, no individual substances are named. Nevertheless, here is where we find much of the theoretical basis for including the application of pharmacotherapy in the doctrines of systematic correspondence. Because of their contents and their rhyme structures,

Tessenow assumes that the "seven comprehensive discourses" were written during the Han dynasty. However, we do not know who composed those sections of *Su wen* 70, *Su wen* 71, and in particular *Su wen* 74 that introduced what could be called a general pharmacology of systematic correspondence or what role these thoughts may have played in actual health care before the Song dynasty. All we can say is that they failed to influence any text of the received literature before the twelfth century, when, obviously for the first time, a pharmacology of systematic correspondence of individual substances was conceptualized.

Why did it take so long to complete a task that should have been undertaken if not finished the very moment when the doctrines of systematic correspondence and vessel theory came to preoccupy many intellectuals and naturalists during the second and first centuries B.C.? The conceptual stage was set in some of the "seven comprehensive discourses" and to a much lesser extent in the main text of the *Su wen*. The developments in the twelfth through fifteenth centuries demonstrate that it was not too difficult to interpret the effects of the drugs in the organism on the basis of vessel theory and the doctrines of systematic correspondence. And yet it was only during the era of the Song, Jin, and Yuan dynasties that the two traditions came together, rather than in the early years of the Han dynasty when the introduction of natural laws to explain natural and social processes must have been received with extraordinary enthusiasm and political backing.

There are good arguments to explain the generation of a pharmacology of systematic correspondence beginning with the twelfth century as a plausible corollary of the elaboration of what is generally called Song Neo-Confucianism. <sup>731</sup> Similarly, it is not too far-fetched to demonstrate that from the Han era to the Song-Jin-Yuan period, the pharmaceutical tradition exhibited conceptual links to Daoist thought while the *Su wen* tradition, not entirely free of Daoist inclinations itself, better fitted into a framework of Legalist-Confucian interests.

For example, both the Su wen and the Shen nong ben cao jing distinguish among different "ranks" of drugs in a prescription, and it may not be coincidental that the term for the ranks of drugs, pin B, is identical to the term for the ranks of officials in the bureaucracy. Both the Su wen and the Shen nong ben cao jing name these ranks "rulers" (jun B), "ministers" (chen B), "assistants" (chen C), and "aides" (chen C). However, the functions assigned to these ranks are diametrically opposed in the two works. The chen nong chen cao chen chen

ben cao jing, not the upper rank, is said to possess toxic qualities required to achieve curative effects. Ministers may or may not have toxic qualities. The image of the ruler reflected in such a classification is fundamentally different from the understanding of the role of a ruler expressed in the following dialogue in *Su wen* 74.

[Huang] Di:

When prescriptions are composed as rulers and ministers, what does that mean?

Oi Bo:

[The drug] which rules the disease is called ruler.

[The drug] which assists the ruler is called minister.

[The drugs] which respond to the minister are called messengers.

This has nothing to do with the three ranks [of drugs as categorized] in the upper, [middle], and lower [ranks].

[Huang] Di:

"Three ranks," what does that mean?

Qi Bo: They serve to clarify the differences and parallels between the good and bad [nature of drugs].<sup>732</sup>

Interestingly, the second half of this dialogue contains a direct hint at the alternative classification of drugs and their functions in the *Shen nong ben cao jing*. By redefining the meaning of the three ranks in the latter, Qi Bo emphasizes that his portrayal of an administrative hierarchy is the only valid portrayal. Accordingly, it is the ruler himself who is supposed to intervene in times of crisis. His subordinates in the administration of government assist him in implementing his political decisions.

To interpret the *Shen nong ben cao jing* classification of drug functions as closer to Daoist ideals of social organization and the *Su wen* classification as closer to Legalist-Confucian positions may be helpful in characterizing the support given to the two traditions in the course of the centuries by persons leaning toward one or another of these worldviews. Similarly, some other features setting the two traditions apart may serve to explain who took an interest in the one and who took an interest in the other. However, none of this helps us to understand why the theoretical instruments used to include drug lore in the medicine of systematic correspondence were not employed on a grand scale at the time of their inception during the Earlier Han dynasty.

# 11.2. Pharmacotherapy in the Main Text of the Su wen

If the entire *Su wen* text had been lost in the course of time with the exception of *Su wen* 12, this single discourse would give a misleading impression of the importance of pharmacotherapy in the remaining sections of the *Su wen*. *Su wen* 12, quoted above in the context of pointed stones and cauteri-

zation treatment, attributes the origins of a total of five therapeutic approaches to the five cardinal points (including the center). There is no hint at any hierarchy among these approaches; each cardinal point is said to be conducive to specific diseases, and the people living in these regions have developed the appropriate countermeasures. Hence the East is the origin of invasive interventions with pointed stones because the local dietary conditions regularly cause the people to suffer from ulcers and abscesses. The North is the origin of moxatherapy, that is, of cauterization, because the local climate often causes diseases of cold and fullness. In the South, heat and dampness prevail, causing widespread cramps and blockages. Hence the treatment of such conditions by piercing with needles was developed in the South. The Center is flat and damp, and the populace has an ample and varied diet. As a result, people frequently suffer from limpness, from recession, and from fits of cold and heat. Physical exercises and massage proved helpful in alleviating patients of these ailments and hence originated in the Center. Finally,

the West.

this is the region of gold and jade.

It is the location of sand and stones.

It is where heaven and earth contract and pull [things together].

Its people live in earthen mounds and the winds are frequent.

The water and the soil are hard and strong.

Its people do not dress with clothes but wear [garments of] hair and grasses.

Its people [enjoy] rich food and they are fat.

Hence, [external] evil cannot harm their physical body;

their diseases emerge from within.

For their treatment, toxic drugs are appropriate.

Hence, [the treatment with] toxic drugs originated in the West too. 733

Fortunately, the *Su wen* was not lost in its entirety, and *Su wen* 12 can be compared with the rest of the text. Quite obviously, the author who wrote the lines quoted above cannot have been the author of many other discourses in the *Su wen*. Physical exercises and massage appear only marginally in the *Su wen*; needle piercing is applied against many more diseases than just cramps and blockages. It is recommended both for treating problems caused by external evils, such as dampness, cold, or wind, and for treating diseases that "arise from within." As stated in *Su wen* 12 and as exemplified in several other *Su wen* treatises, drugs are indeed employed to treat diseases that are not caused by external evil. Hence, we read in *Su wen* 24:

When the physical appearance is frequently affected by fright and fear, the conduit [vessels] and the network [vessels] are impassable. The disease emerges from [sections that are] numb.

The disease emerges from [sections that are] frams.

Treat it with pressing-rubbing and medicinal wines.<sup>734</sup>

Fright and fear are responsible for diseases that "arise from within." Hence the passage just quoted appears to confirm the functions of drugs specified in *Su wen* 12. However, we only have to turn to *Su wen* 19 to realize that other sections of the text also advocate the use of drugs against those diseases that have been caused by external evil.

When wind and cold settle in a person,

they let [this] person's entire finest body hair [stand up] straight.

The skin closes and becomes hot.

At this time,

[the wind cold] can be effused through [induced] sweating.

In some cases, block, numbness, swelling, and pain [result].

At this time.

it can be removed through hot water and poultices, as well as through fire cauterization and piercing.

If no cure is achieved,

the disease enters the lung and lodges there.

It is [now] called "lung block."

It develops cough and rising qi.

If no cure is achieved [at this stage],

then the lung will transmit [the disease] further and pass it to the liver.

The disease is [now] called "liver block."

Another name is "recession."

The flanks ache and food is thrown up.

At this time,

one can press as well as pierce.

If no cure is achieved,

the liver transmits it to the spleen.

The disease is [now] called "spleen wind."

[The patient] develops dan disease and has heat in the abdomen.

The heart is vexed and the discharge is yellow.

At this time,

one can press, one can give drugs, and one can bathe.

If no cure is achieved,

the spleen transmits it to the kidneys.

The disease is [now] called "elevation conglomeration ill."

The lower abdomen feels pressed, is hot and has pain.

One's discharge is white.

Another name is "bug poison."

At this time,

one can press and one can give drugs.

If no cure is achieved,

the kidneys transmit it to the heart.

One suffers from sinews and vessels pulling each other and becoming tense.

The disease is [now] called "spasms."

At this time, one can cauterize and one can give drugs. If no cure is achieved, after [the disease] has lasted for ten days, the law is that death must occur.<sup>735</sup>

I quote this passage in full for at least two reasons. First, it advises the use of drugs at various stages of a disease transmitted through the organism. This disease has not arisen from within; it was caused by an evil from outside. Nevertheless, drugs are applied at a relatively late stage in the passage of the disease through the organism.

Second, we realize that the excerpt quoted from *Su wen* 12 is not the only passage with the message that to cope with the entirety of diseases, all therapeutic approaches are required, be they invasive, like piercing, be they based on providing the body with heat by way of hot water, poultices, cauterization, and bathing, or be they applications of drugs. To be unaware of even one of these approaches is to be unable to confront the advance of a disease at all stages of its development or passage through the organism.

A similar message, one segment of which was quoted earlier, is found in *Su wen* 24. Here, too, the entire range of therapeutic approaches is listed, demonstrating that at least the authors who wrote these lines were firmly convinced that each of them is as helpful and indispensable as any other.

When the physical appearance is joyful, while the mind suffers, the disease emerges in the vessels.

Treat it with cauterization and piercing.

When the physical appearance is joyful and the mind is joyful [too], the disease emerges in the flesh.

Treat it with needles and [pointed] stones.

When the physical appearance suffers while the mind is joyful, the disease emerges in the sinews.

Treat it with poultices and stretching [exercises].

When the physical appearance suffers and the mind suffers [too], the disease emerges in the gullet and in the throat.

Treat it with the one hundred drugs.<sup>736</sup>

The most concise listing of drugs on a par with invasive interventions and heat therapy is given by yet another author in  $Su\ wen\ 76$ . It serves as final evidence of the equal importance assigned to all three therapeutic approaches during the Han era.

Liver depletion, kidney depletion, spleen depletion, all [these conditions] let the body and the limbs become heavy; they [cause feelings of] vexation and grievance.

[Their treatment] requires an application of toxic drugs, of piercing, cauterization, and pointed stones, as well as of decoctions.<sup>737</sup>

All these excerpts tell us that the editors who selected these texts to compile the *Su wen* were not opposed to pharmacotherapy per se. At least the authors of the treatises quoted from *Su wen* 12, 19, 24, and 76 saw no reason to emphasize one therapeutic approach and disregard another. The authors of several other *Su wen* sections named drugs in general as the means of choice in the treatment of specific ailments.

If in spring one hastily treats the conduits and network [vessels], if in summer one hastily treats the transporters on the conduits, and if in autumn one hastily treats the six palaces, then, when it is winter, [the qi] will be obstructed. When it is obstructed, employ drugs and, to a lesser degree, needles and [pointed] stones.<sup>738</sup>

In the case of malaria: when the vessels are relaxed, big, and depleted, then it is appropriate to employ drugs; it is not appropriate to employ needles.<sup>739</sup>

# [Huang] Di:

When [someone] suffers from fullness below the flanks, with qi moving contrary [to its normal course] for two or three years without end, which disease is that?

#### Qi Bo:

The disease is named Breath Accumulation.

If his intake of food is not impeded,

one must not cauterize or pierce.

[Let the patient] practice [exercises of] guiding-pulling continuously and [let him] take drugs.

Drugs alone do not suffice for the treatment.<sup>740</sup>

In *Su wen* 63, the use of drugs is advocated for diuretic and purgative ends to prepare a patient for subsequent bloodletting.

When a person has fallen, when bad blood remains inside, when the abdomen is full and distended, and when he can [relieve nature] neither in front nor behind, [let him] first drink drugs freeing the passage.<sup>741</sup>

Occasionally an author explicitly warns against resorting to drugs, apparently not because he denied this approach its general legitimacy but because he considered it unsuitable in a specific situation. For example, in Su

wen 14, Huang Di asked Qi Bo why physicians confronted with a disease in full advance saw no sense in employing either drugs or needles.

Today, all the good practitioners state: a disease that is fully developed is called "opposition." At this time, needles and [pointed] stones cannot [be employed to] restore order and good drugs cannot reach there.<sup>742</sup>

Similarly, *Su wen* 25 states that when a disease results in a condition termed "destroyed palace," neither piercing nor pharmacotherapy are of any use.

When man has these three [states], this is called "destroyed palace." Toxic drugs do not bring a cure; short needles cannot remove [the disease].<sup>743</sup>

# 11.3. Drug Qualities and Dietary Therapy

In a few instances, individual substances and prescriptions were advocated. For example, *Su wen* 46 offers an interesting dialogue between Huang Di and Qi Bo. It contains all the elements one could expect in a discussion between an eager student and his medical teacher. Huang Di describes six ailments and asks how one contracts them and how they are to be treated. The answers are not always as straightforward as Huang Di might have expected. Hence in two or three instances an exchange of detailed questions and answers develops. Interestingly, the six sections differ in their degrees of theoretical reflection. For example, the final section of this dialogue tells us nothing about the rationale behind the prescription advocated:

[Huang] Di:

Someone has the [following] disease. His body is hot and sluggish.

Sweat leaves [his body] as if he had taken a bath.

He has an aversion to wind and is short of qi.

Which disease is that?

Oi Bo:

The disease is called "wine wind."

[Huang] Di:

To treat it, how to proceed?

Qi Bo:

Take ten parts each of ze-xie and zhu and five parts of mi-xian.

Mix and take before meals [as much as can be] taken up with three fingers.<sup>744</sup>

An earlier section of the dialogue that was discussed in part above in the context of psychosomatic diseases  $^{745}$  is quoted here in full because it offers a different picture. We have learned that the ailment "anger and craziness"

results from sudden blockage of the flow of yang qi, a problem resulting in "yang recession." The recommended treatment is to prevent the generation of further yang qi, which is achieved by barring the patient from the consumption of food and by having the patient swallow iron flakes, because the heaviness of this drugs reverts the recession, that is, undue upward movement of yang qi, and presses the qi down instead.

[Huang] Di:

Someone suffers from anger and craziness;

how does this disease emerge?

Oi Bo:

It emerges from the yang.

[Huang] Di:

The yang? How can it cause a person to become crazy?

Qi Bo:

As for the yang qi, because [its flow] was suddenly cut off and because [this blockage] is difficult to open, one tends to be angry.

The disease is called "yang recession."

[Huang] Di:

How does one know this?

Qi Bo:

The yang brilliance [qi] is in constant movement.

The great yang [qi] and the minor yang [qi] do not move.

While [usually] they do not move, [in the present case] they move with great speed.

This is the manifestation of that [disease].

[Huang] Di:

To treat it, how to proceed?

Oi Bo:

Deprive the [patient] of his food and [the disease] will end.

{Now, food enters the yin and supports the growth of qi in the yang.

Hence, if one deprives the [patient] of his food, [the disease] will end.}

Let the [patient] consume a drink of fresh iron flakes.

{Now, fresh iron flakes cause qi to move down quickly.}<sup>746</sup>

In a certain way, here the application of the drug iron flakes is made to fit into the vessel theory and the yin-yang doctrine. Presumably, if the author of these lines could be asked what quality he assigned to iron flakes, he might speak of a yin quality. Iron flakes constitute a yin drug because they are heavy and move downward in the body. Nevertheless, this is only an interesting beginning, not a full-fledged integration of drugs in this theoretical framework. The idea conveyed here is rather mechanical. What is heavy sinks. No mention is made of any specific quality such as the flavor (sweet, sour, acrid, etc.)

or nature (cold, hot, cool, warm) of the substance as links enabling its association with specific conduits and specific activities in the organism.

The passage below speaks of specific qi qualities of substances. However, once again, these are not the qualities required for and later used in the pharmacology of systematic correspondences. Huang Di wonders why in certain diseases mineral drugs and aromatic herbal drugs are not recommended for treatment. Qi Bo explains that the qi of both are fierce and that their violence may cause more harm than good in the organism when they meet with the equally fierce heat qi underlying the disease.

# [Huang] Di:

You, Sir, have frequently stated [the following]:

in the case of heated center and in the case of wasting center, it is not advisable to consume rich food, aromatic herbs, and mineral drugs.

Mineral drugs [cause one to] develop madness;

aromatic herbs [cause one to] develop craziness.

#### Now.

heated center and wasting center all [occur in] the wealthy and noble.

In this case,

if one forbids [them to consume] rich food, this is not to their liking.

If one forbids [them to take] aromatic herbs and mineral drugs, the disease cannot be healed.

I should like to hear an explanation of this.

#### Qi Bo:

Now,

the qi of aromatic herbs is burning;

the qi of mineral drugs is fierce.

The gi of both is fast and hard.

Hence, any person who is not in a state of harmony and does not have a relaxed mind cannot take these two.

#### [Huang] Di:

Cannot take these two, why so?

#### Qi Bo:

Now,

the heat qi is fierce.

The qi of [those] drugs is so too.

When the two meet, it is to be feared that this harms the spleen in the interior.

The spleen is soil and has an aversion to wood.

For those who consume these drugs, when [the disease] lasts until a jia or yi day, [it is] discussed again.<sup>747</sup>

In *Su wen* 40, Qi Bo recommends treating a disease named Blood Decay, which is "acquired in younger years either [because of] a massive loss of blood or [because] one has entered the bedroom in a state of drunkenness [with

the result that] the qi is exhausted and the liver is harmed," in the following way:

Take four black cuttlefish bones and one [root of] madder, combine these two items and form pills in the size of small beans using sparrow eggs. Five pills are to be taken before meals; they are to be swallowed with carp liquid. They clear the intestines and the center, and they reach a harmed liver. <sup>748</sup>

This prescription is of interest because the four substances advocated, wu zei  $y\ddot{u}$  gu 鳥賊魚骨 (black cuttlefish bones),  $l\ddot{u}$  ru 鷹菇 (i.e., qian gen 茜根, madder), qiao luan 雀卵 (sparrow eggs), and bao  $y\ddot{u}$  zhi 鮑魚汁 (carp liquid), are described in detail in the Han-era materia medica, the Shen nong ben cao jing. That is, we are in a position to compare both sides of the fence. The qualities and functions assigned to the substances in the ben cao text are the following:

Black cuttlefish bones: salty flavor, slightly warm [nature]. Main indication: dripping of red-white menstrual liquid in women. Blockage of blood.  $^{749}$ 

Madder: bitter flavor, cold [nature]. Main indication: blockages resulting from cold, dampness, and wind. . . . [S] tops bleeding, inner flooding, loss of blood.  $^{750}$ 

Sparrow eggs: sour flavor, warm [nature]. Indication: strengthens the yin [i.e., male member] in case of limpness and failure to rise. Provides heat, plenty of [seminal] essence, so that one has offspring.<sup>751</sup>

Carp: acrid flavor, stench, warm [nature]....[B]reaks stagnating blood and cases of blood blocked in the four limbs that does not disperse.<sup>752</sup>

Three of the substances named in the Su wen prescription against "blood decay" are listed in the ben cao text with indications related to blood blockage. The fourth substance, sparrow eggs, restores male potency. Given that the Su wen says that the disease "blood decay" is caused by excessive sexual activity, the choice of the four substances makes good sense even though we are unable today to see the link between the concept of blockage of blood, on the one hand, and the loss of blood through blood spitting and through blood in the urine and the feces, described in the Su wen as signs of blood decay, on the other. Most important, however, is the lack of any attempt to explain why a prescription made up of substances with salty, acrid, and sweet flavors, as well as with cold-balanced and warm-balanced nature, should be able to achieve the effects ascribed to it. Su wen 22 informs us of the pharmacological effects of the individual flavors, as they came to be integrated in the pharmacology of systematic correspondence during the Song-Jin-Yuan era. However, this list does not entirely agree with the effects promised in the Shen nong ben cao jing:

Acrid [flavor] disperses; sour [flavor] pulls together; sweet [flavor] relaxes; bitter [flavor] hardens; salty [flavor] softens.<sup>753</sup>

Madder and carp liquid have an acrid flavor and are recommended against blood blockages. That is, they are expected to have a dispersing effect. The effect of sparrow eggs in causing an erection of the male member, as specified in the *ben cao* text, is difficult to explain by its sweet flavor, which according to *Su wen* 22 should exert a relaxing function. Similarly, drugs with a salty flavor, *Su wen* 22 informs us, should have a softening effect. In the *ben cao* text, however, black cuttlefish bones are recommended for opening blockages in the stream of blood in females.

Apparently the author of Su wen 22 did not have individual therapeutic drugs in mind but thought of food when he recommended using substances with certain properties in the treatment of diseases associated with specific organs, as the following excerpt from Su wen 22 demonstrates.

The liver [is associated with] the color green-blue; [in the case of disease] one should consume sweet [flavor]. Nonglutinous rice, beef, dates, and the *kui* [herbs] are all sweet.

The heart [is associated with] the color red; [in the case of disease] one should consume sour [flavor]. Small beans, dog meat, plums, and scallions are all sour.

The lung [is associated with] the color white; [in the case of disease] one should consume bitter [flavor]. Wheat, mutton, almonds, and shallots are all bitter.

The spleen [is associated with] the color yellow; [in the case of disease] one should consume salty [flavor]. Large beans, pork, chestnuts, and bean leaves are all salty.

The kidneys [are associated with] the color black; [in the case of disease] one should consume acrid [flavor]. Yellow glutinous millet, chicken meat, peaches, and onions are all acrid.<sup>754</sup>

Hence the following excerpt from Su wen 22, which Wang Haogu quoted in his Tang ye ben cao 湯液本草 of 1246–1248 as a guideline for the application of therapeutic drugs, was meant to direct dietary changes.

When the liver suffers from tensions, quickly consume sweet [flavor] to relax [these tensions]....

When the heart suffers from slackening, quickly consume sour [flavor] to contract it together again....

When the spleen suffers from dampness, quickly consume bitter [flavor] to dry it. . . .

When the lung suffers from qi rising contrary [to its regular course], quickly consume bitter [flavor] to drain it. . . .

When the kidneys suffer from desiccation, quickly consume acrid [flavor] to moisten them.

{[Acrid flavor] opens the skin structures, lets the [body] liquids reach [their destination], and [makes] the qi penetrate [the body].}<sup>755</sup>

Different historical layers or contemporary schools of pharmacotherapy were taken into consideration by the *Su wen* compilers. The knowledge just quoted from *Su wen* 22 disregarded the yin-yang doctrine and is only loosely associated with the five-agents doctrine; it may reflect primary conclusions drawn from clinical observations. These conclusions occasionally contradict advice, offered on the basis of the five-agents doctrine, on how to use drugs, as is evident from a passage in *Su wen* 5. Here, flavors are employed not so much to treat but to prevent disease. For example, in spring one tends to consume too much sour flavor because the seasonal qi of spring, which is the qi of the agent wood, manifests itself in, among other phenomena, sour flavor. Sour flavor harms the sinews. Hence the flavor associated with the agent that is able to dominate wood, that is, acrid flavor associated with the agent metal, is to be consumed to control an excessive intake of sour flavor.

The East generates wind; wind generates wood.
Wood generates sour [flavor].
Sour [flavor] generates the liver.
The liver generates the sinews.
The sinews generate the heart.
<The liver rules the eyes>...
The spirit,
in heaven it is wind,
on the earth it is wood,
in the body it is sinews.

Among the depots it is the liver; among the colors it is greenish; among the tones it is *jue*; among the voices it is shouting; among the changes and movements [of the body] it is grasping; among the orifices it is the eye; among the flavors it is sour; among the states of mind it is anger.

[If] anger [causes harm, it] harms the liver; sadness dominates anger.

[If] wind [causes harm, it] harms the sinews; dryness dominates wind.

[If] sour [flavor causes harm, it] harms the sinews; acrid [flavor] dominates sour [flavor].  $^{756}$ 

The principles outlined here are still quite simple. Because the East is associated with the environmental factor wind, with the affect anger, and with the flavor sour, people living in the East may suffer from an unbalanced impact of these three on their organism. Following the correspondences specified in the five-agents doctrine, dryness, which is associated with metal, should control a dominance of wind, which is associated with wood, because metal fells wood. Similarly, acrid flavor, associated with the agent metal, should balance the one-sided impact of sour flavor. Finally, grief, the affect associated with the agent metal, alleviates the results of anger. Whether the acrid flavor is provided to the organism by means of food or therapeutic drugs is not specified.

It may well be that the correspondences between qualities such as flavor and thermonature, on the one hand, and certain desired functions fulfilled by substances in the organism, on the other, were elaborated first, not in view of therapeutic drugs, but in regard to the consumption of food. The image of pharmaceutical substances killing, an image closely associated with the functions of the lower class of drugs as described in the *Shen nong ben cao jing*, is clearly expressed in *Su wen* 22, where it is contrasted with positive effects expected from the intake of the various types of daily food.

Toxic drugs attack the evil.

The five grains provide nourishment.

The five fruits provide support.

The five domestic animals provide enrichment.

The five vegetables provide filling.

When they are consumed in [appropriate] combinations of their qi and flavors, they serve to supplement the essence, and to enrich the  $qi.^{757}$ 

Presumably, the references to flavor in the following statement in *Su wen* 22 pertained to food only, not to "toxic drugs."

These five [five grains, five fruit, five domestic animals, and five vegetables] have acrid, sour, sweet, bitter, and salty [flavors].

Each exerts its [specific] benefit.

Some disperse, some pull together; some relax, some tighten; some harden, some soften.

As for the diseases of the four seasons and five depots, [they are treated] in accordance with the capabilities of the five flavors.  $^{758}$ 

The same applies to a series of correspondences expressed in *Su wen* 23. Here, too, no mention is made of individual substances. The references to

flavors focused on dietary therapy rather than on therapeutic drugs, as the final exhortation not to consume "large quantities" suggests.

Where the five flavors enter: Sour [flavor] enters the liver. Acrid [flavor] enters the lung. Bitter [flavor] enters the heart. Salty [flavor] enters the kidneys. Sweet [flavor] enters the spleen.<sup>759</sup>

When the five flavors are to be avoided:

The acrid [flavor] proceeds to the qi;

in the case of diseases in the qi [section], one must not consume acrid [flavor] in large quantities.

The salty [flavor] proceeds to the blood;

in the case of diseases in the blood, one must not consume salty [flavor] in large quantities.

The bitter [flavor] proceeds to the bones;

in the case of diseases in the bones, one must not consume bitter [flavor] in large quantities.

The sweet [flavor] proceeds to the flesh;

in the case of diseases in the flesh, one must not consume sweet [flavor] in large quantities.

The sour [flavor] proceeds to the sinews;

in the case of diseases in the sinews, one must not consume sour [flavor] in large quantities.

These [probihitions] are called "the five interdictions." Do not let [the patient] eat large quantities.<sup>760</sup>

# 11.4. The Dawn of Pharmacology in the "Seven Comprehensive Discourses"

Modern pharmacology is that part of the medical sciences that strives for an understanding of why, where, and when therapeutic drugs are active in the organism and what effects they have on specific parts of the organism or on the organism as a whole. Modern pharmacology applies the laws of biochemistry and molecular biology to study the reception, transformation, and routes of transmission of specific substances in the human or animal body. To unveil the effects a chemical compound may exert, for example, on a heart muscle, modern pharmacology relies on theoretical models are well as on examinations of living or dead tissues.

Traditional Chinese pharmacology served an end similar to that of modern scientific pharmacology. Based on the natural laws of systematic correspondence as expressed in the yin-yang and five-agents doctrines, traditional Chinese pharmacology offered an explanation of the activities of individual substances in the organism. Using the theoretical and the empirical tools at their disposal, Chinese naturalists sought to trace the paths of therapeutic drugs and food, and they published theoretical models specifying the locations and times of activities of individual substances, as well as the effects exerted in the organism. The one major difference between traditional Chinese pharmacology and its modern counterpart is the exclusive reliance on theory in the interpretation of observed and assumed effects.

To establish conceptual links between physiological and pathological processes assumed to occur in the organism, on the one hand, and the qualities of individual substances, on the other, both must be interpreted by means of the same theoretical model. Such a model was supplied in ancient China by the yin-yang and five-agents doctrines of systematic correspondence. Once the organism, its parts and sections, and the normal and abnormal processes occurring in it had been associated with specific yin-yang and five-agents categories, a bridge could be built to the properties of individual substances, whose qualities were likewise associated with the categories of systematic correspondence.

Interestingly, in its descriptions of individual substances, the *Shen nong ben cao jing* of the Later Han dynasty listed both the flavor and the thermonature of each drug. For example, ginseng was characterized as "taste: sweet; [thermonature:] slightly cold." Grapes were identified as "taste: sweet; [thermonature:] neutral." Quicksilver was characterized as "taste: acrid; [thermonature:] cold." The indications following these data appear entirely unrelated to the qualities of taste and thermonature. For example, in the case of ginseng, the following effects are attributed to the drug:

Masters supplementation of the five depots. Pacifies the spirit. Fixes the *hun*-and *po*-souls. Ends fright and agitation. Expels evil influences. Clears the eyes. Opens the heart and enhances one's wisdom. Consumed over a long time, it takes the material weight from the body and extends one's years of life.  $^{761}$ 

Ginseng provides a good example of a mixture of conceptual levels apparent in many of the drug descriptions in the *Shen nong ben cao jing*. Demonological, macrobiotic, parasitological, and empirical considerations were combined in the lists of effects. However, despite occasional references to the five depots, there is hardly any mention of the conduits or of vessel theory in general, and with the exception of the drug *zhi*  $\not\equiv$ , most likely the Chinese name for the Indian drug *soma*, no traces of the yin-yang or five-agents doctrines can be discerned. It is hard to escape the impression that the concepts of systematic correspondence were omitted from *ben cao* literature deliberately. Why, however, one might ask, did the author of the *Shen nong ben cao jing* decide to systematically include the qualities of flavor and thermonature in his drug descriptions? Was there any use in specifying that a substance's thermonature was cold, slightly cold, or neutral other than in-

tegrating it in the yin-yang and five-agents doctrines? Perhaps the solution is simple. Pharmacists or physicians needed certain criteria to distinguish between good, that is, effective, drugs and worthless, that is, ineffective, substances. It is difficult to ascertain whether the listing of flavor and thermonature did indeed serve such a pragmatic purpose unrelated to the doctrines of systematic correspondence. For the time being, this issue must remain unresolved.

In the main text of the *Su wen*, as we have seen above, *Su wen* 5, 22, and 23 are the only discourses establishing theoretical links between substance qualities and substance effects. However, these data were recorded with an eye to therapeutic accommodating of diet to disease rather than in regard to drugs. Within the corpus of the "seven comprehensive discourses," *Su wen* 70, 71, and 74 offer a wealth of data on food and drug use in the context of the doctrines of systematic correspondence. *Su wen* 71 is of particular interest in that it offers several passages that could, as a whole, be read as stages of transition from food to drug therapy, in part based on the doctrines of systematic correspondence and in part grounded in the system outlined in *Su wen* 22.

In a list of years dominated by either major yang qi, yang brilliance qi, minor yang qi, major yin qi, minor yin qi, or ceasing yin qi, each year is divided into six periods again dominated by six different qi. The account of the effects of the "final qi," that is, of the sixth qi, on the human organism is sometimes followed by suggestions to consume substance of specific flavors and thermonature to counteract the pathogenic effects of the dominating qi. These substances are explicitly referred to as "grain," not drugs. One example is as follows:

The final qi:

The qi of the earth [occupies its] proper [position].

The command of dampness prevails.

The yin [clouds are] condensed in the Great Void;

dust [causes] darkness in the wastelands.

People experience chilliness;

cold and wind arrive.

Contrary to [the regular order,] embryos die.

Hence.

this year it is appropriate [to employ]

bitter [flavor] to dry the [dampness] and to warm the [cold].

It is necessary to break the qi suppressing it and

to supply the source of its transformation first,

to press down its [excessive] period and qi, and

to support that which does not dominate in that [particular year].

Do not permit a violent transgression leading to the emergence of the respective diseases.

Consume the grain [associated with] that year to complete its true [qi].<sup>762</sup>

The "grain associated with a specific year" are those grains that collect much of the qi dominating that year. Su wen 71 does not identify these grains by name; rather, it identifies them by two characteristic colors. The colors listed are those associated with the respective agents. It is unclear whether a listing of grains that are "green and vermilion" refers to certain botanical grain species or simply to any grain of those particular colors, assuming that a "green" and "vermilion" color signals highest accumulation of that year's qi.

Further effects to be achieved with a grain diet are indicated in the following quotations. If it were not for the explicit references to grain, we would be tempted to associate most of them, if not all, with therapeutic drugs rather than food.

Hence, [it is appropriate] to consume the grain of the year to pacify the [patients'] qi and to consume the intervening [qi] grain to remove their evil.

[This] year it is appropriate to use salty, bitter, and acrid [flavor] to sweat it out, to cool it, to disperse it.<sup>763</sup>

Consume the grain of the year to complete its true [qi]. Consume intervening [qi] grain to protect the [body's] essence.

Hence,

this year it is appropriate to use bitter [flavor] to dry it, to warm it. In severe cases, effuse it, drain it.

If one fails to effuse and to drain, then the dampness qi will overflow to the outside.

[As a result], the flesh rots and the skin breaks open, and water and blood flow into each other.

One must support the [patient's] yang fire, and [thereby] let the extreme cold be restrained.<sup>764</sup>

Consume the grain of the year to complete the true qi. Consume intervening [qi] grain to ward off depletion evil.

This year it is appropriate [to use] salty [flavor] to soften it, and to regulate the above.

In severe cases employ bitter [flavor] to effuse it. Employ sour [flavor] to collect it, and to pacify the below.

In severe cases employ bitter [flavor] to drain it.<sup>765</sup>

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Later in Su wen 71, in a long list of the characteristic qi dominating the first half, the central period, and the second half of a cycle lasting a total of

sixty years, once again measures are recommended to counter the effects on the organism of an unbalanced presence of these qi. In this context, too, specific flavors and thermonatures are named as appropriate to achieve this end. However, each of the sixty paragraphs concludes with a stereotypical phrase resembling "these are the so-called requirements of drugs and food." For example, the first two paragraphs read as follows:

Jia zi and jia wu years:

In the upper [half of the year]: minor yin, fire.

In the center: major gong, soil period.

In the lower [half of the year]: yang brilliance, metal.

Heat transformation: two. Rain transformation: five. Dryness transformation: four.

These are the so-called days of proper transformation.

These transformations

in the upper [half of the year require] salty [flavor] and cold,

in the center [require] bitter [flavor] and heat,

in the lower [half of the year require] sour [flavor] and heat.

These are the so-called requirements of drugs and food.

Yi chou and yi wei years:

In the upper [half of the year]: major yin, soil.

In the center: minor shang, metal period.

In the lower [half of the year]: major yang, water.

Heat transformation, cold transformation; domination and revenge are identical [in these two years].

These are the so-called days of evil qi transformation.

Catastrophes occur in the seventh mansion.

Dampness transformation: five.

Coolness transformation: four.

Cold transformation: six.

These are the so-called days of proper transformation.

These transformations

in the upper [half of the year require] bitter [flavor] and heat,

in the center [require] sour [flavor] and harmonious [nature],

in the lower [half of the year require] sweet [flavor] and heat.

These are the so-called drug and food requirements.<sup>766</sup>

It may well be that the six characters for "these are the so-called drug and food requirements" (and also those for "these are the so-called days of proper transformation") are later inserts, added at a time when all drugs had been categorized in terms of a distinct flavor and thermonature. This may have been the case as early as such data appeared in the individual drug descriptions of the *Shen nong ben cao jing* of the Later Han dynasty. The authors of *Su wen* 74 carried this development a decisive step further. Here we encounter what may be termed the dawn of a pharmacology of systematic correspon-

dence. I speak of "dawn" because the scope of the pharmacology outlined in *Su wen* 74 still fell short of the integrating efforts undertaken during the Song-Jin-Yuan era.

Su wen 74 is the only discourse in the entire Su wen corpus distinguishing between such pharmacological categories as "treating above" and "treating below," "urgent effects" and "relaxed effects," and diseases "which are near" and diseases "which are far away." The text attributes certain effects, such as dispersing or causing an outflow, not only to specific flavors but also to their yin or yang categorizations.

[Huang] Di:

What about the operation of yin and yang among the five flavors?

Qi Bo:

Acrid [flavor] and sweet [flavor] effuse and disperse and are yang. Sour [flavor] and bitter [flavor] cause gushing up and outflow and are yin. Salty flavor causes gushing up and outflow and is yin. Bland flavor causes seeping and outflow and is yang.<sup>767</sup>

One of its most interesting features is its attempt to introduce patterns of employing thermonature and flavor that go beyond the simplistic principle of cooling what is hot and heating what is cold. In fact, *Su wen* 74 records a diverse assortment of theoretical approaches underlying the use of therapeutic drugs in clinical therapy. The confrontation model that may have been at the basis of all earlier reasoning is mentioned twice; first in a shorter version and later in an extended version. Both are quoted here to emphasize the importance of this model and to enable a comparison of the two lists included in *Su wen* 74.

What is cold, heat it; what is hot, make it cold; what is warm, cool it; what is cool, warm it; what is dispersed, collect it; what is pressed, disperse it; what is dry, moisten it; what is tense, relax it; what is firm, soften it; what is crisp, make it firm; what is weak, supplement it; what is strong, discharge it.<sup>768</sup>

What is cold, heat it; what is hot, make it cold. What is feeble, oppose it; what is severe, conform to it. What is firm, cut it; what has settled, remove it.

What is fatigued, warm it;
what is knotted, disperse it.

What stays in place, attack it.

What is dry, make it soggy.

What is tense, relax it;
what has dispersed, collect it.

What is injured, warm it;
what is idle, move it;
what is scared, calm it. . . .

Adaptation to the issue [at hand] is the starting point [of any treatment].<sup>769</sup>

Presumably, physicians relying on this confrontation model noticed that they occasionally achieved the opposite of the result they had expected. Hence the authors of *Su wen* 74 recorded the following dialogue between Huang Di and Qi Bo.

# [Huang] Di:

If [a patient] consumes [drugs] of cold [nature] and contrary [to what might be expected] turns hot, or

if [a patient] consumes [drugs] of hot [nature] and contrary [to what might be expected] turns cold,

what is the reason for this?

### Qi Bo:

Because the treatment focused on the flourishing qi [the result] was contrary [to expectations].

#### [Huang] Di:

If the treatment had not focused on the flourishing [qi] and such [a result had occurred nevertheless], why was this?

#### Oi Bo:

An encompassing question, indeed!

This was not a treatment based on what the five flavors are tied to.

Now, the five flavors enter the stomach, [whence]

each of them turns to its preferred [depot].

#### Hence

sour [flavor] first enters the liver;

bitter [flavor] first enters the heart;

sweet [flavor] first enters the spleen;

acrid [flavor] first enters the lung;

salty [flavor] first enters the kidneys.

If [one flavor is consumed] over an extended period, thereby increasing [its particular] qi,

this is a regularity in the transformation of things.

If this increase of qi continues over an extended period,

this is the reason for early death.

[Huang] Di: Good!<sup>770</sup>

The *Su wen* editors portray Huang Di as being happy with Qi Bo's responses to his questions; he was not so happy, however, with the reaction to his therapeutic suggestions from the traditional experts in the use of drugs, the so-called prescription masters. Twice in *Su wen* 74, Huang Di voices his disillusionment with this group. The first such instance has no clear context elucidating the reasons for Huang Di's dissatisfaction:

The Classic states:

"That which abounds, discharge it; that which is depleted, supplement it."

I have conferred [this knowledge] upon the prescription gentlemen.

However, when the prescription gentlemen apply it, they are not yet able to achieve complete [therapeutic] success.

It is my intention to see to it that this important Way will prevail everywhere, so that [therapeutic success corresponds to treatment just as] the drum answers to the drumstick,

as if one pulled a thorn or cleaned the dirt.771

In a second critique, Huang Di specified what he had tried to convince the prescription masters of. He wanted them to leave established paths and follow an innovative pattern rather than stick to some old "Discourse" and treat each cold with heat, and vice versa. Obviously, the conservatism of the conventional experts prevented them from adopting new concepts. We are not told of the considerations underlying this conservative attitude. One may wonder, however, whether the critique expressed here is an acknowledgment of the unwillingness on the side of the "prescription gentlemen" to apply more sophisticated theories to drug use.

[Huang] Di:

The Discourse states:

"Treat the cold with heat:

treat the heat with cold."

But the prescription gentlemen are unable to leave this marking line and alter its Way.  $^{772}$ 

Huang Di's remark comes after Qi Bo explained to him two therapeutic concepts that must have appeared rather difficult to accept, at least on first sight. There are clinical situations, as we have learned above, where the usual, "regular" treatment of a heat problem with cold may result in the generation of additional heat, and vice versa. In such cases, an approach "contrary to the rules" is required. That is, heat may have to be treated with drugs that are known to supply the organism with heat. Naturally, in a law-abiding society like that which Legalism-Confucianism aspired to, there may have been

some mental barriers to obeying such a call to oppose age-old definitions of what is regular. Nevertheless, there are always situations in which this is the only correct way if one wishes to achieve a certain end.

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[Huang] Di:
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What is that to say: "oppose" and "conform"?

#### Qi Bo:

To oppose [a disease] is a regular treatment;

to conform [to it] is a treatment contrary [to the rules].

[A decision whether] to conform a little or to conform a lot [should be based on] an assessment of the issue [at hand].

# [Huang] Di:

A "treatment contrary [to the rules]," what is that to say?

#### Qi Bo:

If the cause [of the disease] was heat, one employs cold [to treat it]; if the cause [of the disease] was cold, one employs heat [to treat it].

If the cause was obstruction, obstructing [drugs] are employed [to treat it]; if the cause was [uncontrolled] passage, [drugs] opening passages are employed [to treat it]....

# [Huang] Di:

Good!

If [a disease] was contracted even though the [patient's] qi was regulated, how [to treat that]?

#### Qi Bo:

Oppose the [disease] and conform to it. While opposing it, conform to it. While conforming to it, oppose it. To open [the flow of] the qi, and to regulate it, this is the Way of this. 773

The last sentence is probably an insert brought here from another context; nevertheless, the paragraph seen as a whole is a first example of the association of the use of therapeutic drugs with the explicit intention to free the flow of qi, that is, to achieve the major therapeutic end required by vessel theory.

To achieve a qi regulation in general appears to have created conceptual problems, too, as another section in  $Su\ wen\ 74$  shows us. In the  $Shen\ nong\ ben\ cao\ jing$ , drugs were distinguished on the basis of whether they were toxic,  $you\ du\ fa$  fa, or not,  $wu\ du$  fa fa. The quality of toxicity was the sole criterion for categorizing a drug as upper class or lower class. The middle class combined both types. The question appears to have been raised of what difference it made in efforts to regulate qi if a drug was considered poisonous or not. As the following exchange tells, it made no difference whatsoever.

#### [Huang] Di:

If someone contracts [a disease] because his or her qi was unregulated,

how is a treatment to be performed?

Some [substances] have poison, others have no poison;

which [are employed] first, and which subsequently?

I should like to hear the Way of this.

# Qi Bo:

Whether they have poison or not,

the main [concern in their application] is the [disease] that is to be treated. In accordance [with the severity of a disease], the composition [of the prescription] should be large or small.

# [Huang] Di:

Please speak about these compositions.

### Qi Bo:

One ruler, two ministers,

that is a small composition.

One ruler, three ministers, and five assistants,

that is a middle[-size] composition.

One ruler, three ministers, and nine assistants,

that is a large composition.<sup>774</sup>

Before we continue to look at what appears to have been a new, hierarchical structure of complex prescriptions, it it worthwhile to take a look at *Su wen* 70 where that approach was outlined which may have been in Huang Di's mind when he asked his question concerning the significance of poison.

### [Huang] Di:

[Some drugs] have poison, [others] have no poison.

Are there any essential rules as to their intake?

#### Oi Bo:

Among the illnesses are those that are chronic and those that were newly acquired;

among the prescriptions are those that are large and those that are small.

[Among the drugs] are those that have poison and [others that] have no poison.

[In their application] it is necessary to follow the regular compositions.

If an illness is treated with [drugs of] massive poison, this will remove six [parts] of ten.

If an illness is treated with [drugs of] regular poison, this will remove seven [parts] of ten.

If an illness is treated with [drugs of] weak poison, this will remove eight [parts] of ten

If an illness is treated with [drugs] containing no poison, this will remove nine [parts] of ten.

Employ a diet of grain, meat, fruit, and vegetables to complete [the cure]. Do not permit these [limits] to be exceeded, lest the proper [qi] is harmed.<sup>775</sup>

Farther down in  $Su\ wen\ 74$ , the new principle that should guide the composition of a prescription is laid down explicitly: not only the cause and the nature of a disease is to be taken into account, but the location of the disease is decisive too. Whether a disease is in the central sections of the organism, for example in the depots, or in the exterior sections, for example in the palaces, makes a difference in terms of a suitable treatment. The bridge between these locations and the qualities and effects of drugs is provided by their yin-yang categorizations.

# [Huang] Di:

When a disease is in the center or in the exterior, how is that?

#### Qi Bo:

To establish a [therapeutic] prescription to regulate the qi, it is necessary to distinguish yin and yang and to settle [the qi] in the center or in the exterior. . . .

When a [disease] is in the interior, treat it in the interior; when a [disease] is in the exterior, treat it in the exterior. . . .

If the Way is carefully observed in accordance with the law [just outlined], myriad cures are achieved in myriad [cases] taken up. Qi and blood will assume a proper balance, and the mandate of heaven will last long.<sup>776</sup>

Su wen 74 offers the dawn of a pharmacology of systematic correspondences of individual substances, in contrast to a more general pharmacology hinted at elsewhere in the text, but the same discourse also contains what might be called the earliest traces of prescription pharmacology. Linked to quotations from a text with the title "Great Essential," Da yao  $\pm$ , which is not attested in any ancient bibliography and was already lost in antiquity, Su wen 74 points out that it is not only the qualities of individual drugs that count in therapy. The composition of substances in prescriptions, too, follows specific patterns that have to be adapted to the requirements of each disease. Whether a prescription is "large or small," whether a composition is "even or uneven," "urgent or relaxed," and whether a dosage is "light or heavy" should depend on the location of the disease.

#### Qi Bo:

Among the qi are those high and those below. Among the diseases are those distant and those near. The evidence [of a disease] may be inside or outside. Treatment may be light or heavy. Adaptation to the place [the qi of the drugs is supposed] to go is the starting point [of any treatment].

The *Great Essential* states: "One ruler, two ministers, that is an uneven composition.

Two rulers, four ministers, that is an even composition.

Two rulers, three ministers, that is an uneven composition.

Two rulers, six ministers, that is an even composition."

Hence when it is stated:

"Those who are near, [treat] them [with] an uneven [composition]; those who are far away, [treat] them [with] an even [composition].

To induce sweating, do not use an uneven [composition];

to purge, do not use an even [composition].

When supplementing above, when treating above,

employ a relaxing composition;

when supplementing below, when treating below,

employ an urgent composition.

To achieve a tightening effect, the qi and the flavor [of the drugs must be] strong.

To achieve a relaxing effect, the qi and the flavor [of the drugs must be] weak. [The treatment] is to be adapted to the location where [the qi of the drugs is supposed] to go,"

then this is explained [by what was said above].777

As suggested above, these statements quoted from a larger sequence of similar arguments may be regarded as the beginnings of prescription pharmacology. Readers will have noticed, however, that neither the yin-yang nor the five-agents doctrine was taken into account here. This is all the more surprising because *Great Essential*, a source *Su wen* 74 relies on several times, is quoted farther down with a passage indicating that the author of at least this later statement was by no means opposed to these ideas. The following excerpt from *Great Essential* makes use of both the yin-yang and the five-agents doctrine.

When the minor yang rules, first [use] sweet [flavor], later [use] salty [flavor]. When the yang brilliance rules, first [use] acrid [flavor], later [use] sour [flavor].

When the major yang rules, first [use] salty [flavor], later [use] bitter [flavor]. When the ceasing yin rules, first [use] sour [flavor], later [use] acrid [flavor]. When the minor yin rules, first [use] sweet [flavor], later [use] salty [flavor]. When the major yin rules, first [use] bitter [flavor], later [use] sweet [flavor].

To assist, use that which is beneficial. To support, use that by which it is generated. This is called "to get the qi."<sup>778</sup>

As a final observation, the concept of drugs serving as messengers, that is, guiding other substances in a prescription to reach a specific location in the organism where they are supposed to exert their effects, is one of the major innovations of the Song-Jing-Yuan pharmacology of systematic correspondence. However, as the quotation below suggests, this concept may have had a long tradition. In *Su wen* 74, the role of the messenger is assigned not to drugs but to food:

If the location of the disease is far away, and qi and flavor go [only] halfway, food serves to get them across [to where they should be active].<sup>779</sup>

To conclude, *Su wen* 74 set much of the stage required by Song-Jin-Yuan naturalists to generate their pharmacology of systematic correspondence. However, the puzzle remains why the divide between pharmacotherapy and the yin-yang and five-agents doctrines and vessel theory existed for so long.

#### 12. HEAT THERAPIES

## 12.1. Conceptual Levels prior to Vessel Theory

Harper identified a total of five forms of heat therapy in the Mawangdui manuscripts: cauterization, balneotherapy, hot pressing, roasting, and fumigation. The first two of these are also mentioned in the *Su wen*, in addition to poultices, that is, to the application of heated packages of medicinal substances to specific regions of the body surface. However, in the *Su wen*, advice to treat certain ailments with hot water (balneotherapy of the entire body or of specific parts of it) and poultices is limited to only two statements. Cauterization is recommended or warned against in at least ten treatises. The same statements are commended or warned against in at least ten treatises.

Like the Su wen references to piercing or pharmacotherapy, the references to heat therapy in the various Su wen discourses do not always reveal which pathological processes in the organism were to be influenced or exactly which therapeutic ends were aimed at. In several cases, cauterization is not mentioned as a specific treatment to be applied as a well-defined alternative to other therapeutic strategies. Rather, the advice to use this form of heat therapy is quite unspecific and speaks of cauterization together with invasive interventions and the use of materia medica, as, for example, in Su wen 76:

Liver depletion, kidney depletion, spleen depletion,

all [these conditions] let the body and the limbs become heavy; they cause [feelings of] uneasiness and grievance.

[Their treatment] requires an application of toxic drugs, of piercing, cauterization, and pointed stones, as well as of decoctions.

Sometimes [the disease] comes to an end; sometimes it does not come to an end.<sup>782</sup>

Obviously, the listing here of invasive interventions such as piercing (presumably with a needle) and the opening of the skin with sharpened stones, as well as of substance therapy and heat therapy, has no other purpose than to name all approaches in use. The author was cautious enough, however, not to recommend one of these approaches in particular. The last sentence is an expression of helplessness; it is not clear which therapy is useful.

 $Su\ wen\ 24$  suggested treating a disease originating in the vessels simultaneously with heat therapy and acupuncture and treating a disease originating in the sinews with both physical exercises and hot pressing.

When the physical appearance is joyful while the mind suffers, the disease emerges in the vessels. Treat it with cauterization and piercing. . . . When the physical appearance suffers while the mind is joyful, the disease emerges in the sinews. Treat it with poultices and stretching [exercises]. <sup>783</sup>

A detailed account of a cauterization therapy is given in *Su wen* 60 under the heading "The law of cauterizing cold and heat." Some of the locations named were to be cauterized several times. For example, the number of cauterizations to be applied at the upper and lower ends of the spine should correspond to the patient's age in years.

In a concluding sentence, cauterization was also recommended to treat the location of a dog bite. As a later insert tells us, special patterns existed to cauterize "diseases resulting from harm caused by dogs." The text specifies that altogether twenty-nine locations on the body surface are to be cauterized against such diseases, 785 and it may not be too far-fetched to assume that these diseases were not ordinary dog bites. Rather, the cauterization of twenty-nine locations reflects a desperate attempt to do all one can to rescue the patient from a life-threatening disorder, perhaps a disease such as rabies. Regardless of whether such a treatment had any clinical effect, it is hardly imaginable that the introduction of vessel theory and its dominant therapeutic approach, acupuncture, could have done any better. This may explain why the cauterization treatment of a disease resulting from dog bite survived to be included in the *Su wen*, even though it was based on a conceptual atavism at the time of its compilation.

In a few instances, heat therapy was recommended to expel cold. For example, Su wen 12 links five therapeutic strategies to the requirements of the five cardinal points (including the center). The origin of cauterization by means of burning moxa on the skin is traced to the geographic region dominated by cold.

The North.

this is the region where heaven and earth secure and store.

Its land lies at a high elevation,

[its people] live in earthen mounds.

Wind cold and ice chilliness [dominate].

Its people find joy in living in the wilderness and in consuming milk.

Their depots are cold and generate diseases of fullness.

For their treatment, moxa burning is appropriate.

Hence, moxa burning originated in the North too.<sup>786</sup>

In other words, diseases of fullness can be treated with moxa burning because such heat therapy expels the cold responsible for the emergence of pathological conditions of fullness.

Similarly, Su wen 19 states:

When wind and cold settle in a person,

they let [this] person's entire finest body hair [stand up] straight.

The skin closes and becomes hot.

At this time,

[the wind cold] can be effused through [induced] sweating.

In some cases, block, numbness, swelling, and pain [result].

At this time

it can be eliminated through hot water and poultices, as well as through fire cauterizaton and piercing.  $^{787}$ 

Induced sweating, hot water, poultices, and cauterization, the entire range of heat therapies mentioned in the *Su wen*, are listed here as suitable to treat certain cases of block, numbness, swelling, and pain, as long as these pathological conditions were caused by cold.

### 12.2. Cauterization and Vessel Theory

The Mawangdui text *Zu bi shi yi mai jiu jing* offers long lists of ailments for each of its eleven vessels. Each list ends with advice to cauterize the vessel.<sup>788</sup> No hint is available, however, to clarify the reason for such a therapy. Hence, when looking at the *Su wen* now, we should keep in mind that cauterization was a treatment directed at the vessels already at the time of the writing of the Mawangdui texts.

A first conceptual rationale for application of heat therapy to the vessels is provided in *Su wen* 28. Here, cauterization is used to supplement, presumably with qi, what is considered depleted, while piercing serves to drain what is considered full.

When the network [vessels] are full while the conduits are depleted, cauterize the yin and pierce the yang.

When the conduits are full while the network [vessels] are depleted, pierce the yin and cauterize the yang.<sup>789</sup>

The network vessels are yang; the conduits are yin. Hence the former are to be pierced to drain their surplus contents while the latter are to be cauterized to supplement missing qi. This is a nice example of a treatment whose conceptual basis could very well predate the transition of vessel theory from a notion of the existence of unrelated "containers" to a notion of a system of interrelated vessels. As pointed out earlier, the *Su wen* does not attest a concept of a single tubular system of circulation. Hence it makes perfect sense to identify a depletion in the network vessels that is present together with a fullness in the conduits and to treat the former with heat therapy and the latter with piercing. The underlying idea is a mechanical one. A hose that is bloated to such a degree that it may explode is relieved of the internal pressure by piercing it with a small hole, allowing its contents to leave. A hose that is flat and has lost pressure may regain its tautness if the vapors it holds are heated.

A second example demonstrating that *Su wen* authors understood cauterization as a technique to add yang qi to the organism surfaces in a statement in *Su wen* 60. Here, cauterization is named as a standard approach used to treat "harm caused by food." However, the text indicates that such a therapy may fail to achieve the desired effect and that the yang qi added to the organism may fill some vessels to such a degree that it is advisable to open them to relieve the surplus. The treatment of the original health problem itself is to be continued with drugs rather than heat therapy.

In the case of harm caused by food, cauterize it. If [the disease] does not come to an end, it is essential to watch for those conduits excessively [filled] with yang [qi].

Pierce the respective transporters several times and give [the patient] drugs. 790

The following dialogue quoted from *Su wen* 40 reveals some of the problems that developed from the perception of cauterization as a therapeutic strategy to add yang qi to the organism, on the one hand, and the new concepts of qi flowing through a system of interconnected vessels, on the other.

Huang Di:

[Someone] has the [following] disease:

the breast is swollen; the neck aches, the chest is full, and the abdomen is distended.

What disease is that?

How is it acquired?

Oi Bo:

It is called recession with countermovement.

Huang Di:

To treat it, how to proceed?

Qi Bo:

When the [patient] is cauterized, then he will turn mute; when he is [treated with] stones, then he will become crazy.

Wait for his qi to merge.

Then he can be treated.

Huang Di:

How is that?

Oi Bo:

When yang qi doubles above, there is a surplus above.

If one cauterizes it, then the yang qi enters the yin.

When it has entered [the yin], then [the patient] turns mute.

If one treats him with stones, then the yang qi is depleted.

When it is depleted, then [the patient] becomes crazy.

It is essential that his qi merge; only then treating him can achieve the cure.<sup>791</sup>

Once again, cauterization is understood as a therapeutic approach to add qi, while piercing, here with stones, is seen as setting qi free. To cauterize a "surplus above," that is, to add heat to yang qi, would create an even stronger surplus of yang qi. Because the vessel cauterized was no longer considered a separate entity, this surplus was believed to have an effect on the entire system. Hence yang qi would spill over into the yin section, an unwanted development leading to loss of the patient's voice. Piercing, in contrast, would allow the yang qi to leave the body. This, too, is an unwanted development causing depletion in the yang section and finally resulting in the patient becoming crazy. It remains open to discussion whether this dialogue should be interpreted as a warning specifically against employing cauterization to treat recession with countermovement or against using such heat therapy in the context of diseases associated with the flow of qi in general.

Heat therapy, in particular, cauterization, we may imagine in hindsight, was a trusted and effective remedy for certain health problems. The techniques of cauterization are not mentioned in the *Su wen*, an omission suggesting that this was common knowledge and did not require written instruction. Nevertheless, widespread familiarity with heat therapy cannot have been the sole or even dominant variable guaranteeing its reappearance in texts primarily—albeit not exclusively—based on a theory of qi movements in a system of interconnected vessels. After all, materia medica played a much more important role in treatment and must have been common knowledge among all strata of the population at the time the *Su wen* texts were written. Nevertheless, it gained only marginal recognition by the *Su wen* authors.

The legitimation for including cauterization in the *Su wen* may have rested on heat therapy's potential, however limited, to be integrated into the new

vessel theory. After all, the ability of cauterization to influence two major pathogenic environmental factors that played an important role in vessel theory, cold and wind, and its ability to supplement qi in case of depletion suited some of the demands of vessel theory. This adaptability of cauterization, however, did not prevent acupuncture from becoming the dominant therapeutic technique for both draining and supplementing qi. Cauterization played only an insignificant role in the *Su wen*.

# VI

# Epilogue: Toward a Comparative Historical Anthropology of Medical Thought

### 1. THE SU WEN: DOCUMENT OF A NEW STYLE OF THOUGHT

The texts collected in the *Su wen*, as heterogeneous and at times contradictory as they may be, share at least one central feature. They reflect a deliberate break with an older tradition and the genesis of an innovative style of thought that proved to be the seed of a long-lasting new tradition. Briefly, the older tradition comprised a concept of health care on the basis of the firmly established belief that human illness was caused by demons, ancestors, and "bugs"; curing, it was believed, could be achieved by placating ancestors with prayers, by warding off demons with spells and apotropaic substances, and by killing "bugs" by means of pharmaceutical drugs.<sup>1</sup>

In stark contrast, the new tradition that evolved from the *Su wen* refused to assign numinous agents and bugs such a role. It focused on environmental conditions, climatic agents, and behavior as causal in the emergence of disease; on the importance of laws, structures, and morale in the explanation of illness; and, in addition to dietetics, on a new technique, acupuncture, in the prevention and treatment of ailments.

The new therapy system evolved after the unification of the empire in 221 B.C. and found expression in a large pool of texts written between the second century B.C. and the first century A.D., which in turn found entrance into compilations such as the *Su wen*, the *Nan jing*, the *Ling shu*, and the *Tai su* beginning in the first century A.D. It conveyed images of the human body and theories concerning the functioning of the human organism and its various parts that went far beyond the ideas and the knowledge expressed in the Mawangdui manuscripts and other documents reflecting the status quo of the third and second centuries B.C.

Most important, the texts collected in the *Su wen* and other Han-era compilations mark the beginning of medicine in China. Chinese civilization had

developed a culture of health care in prehistoric times; the period from the late Zhou to the late Han saw the emergence of medicine as a new and distinct facet of health care. Medicine in this narrow sense is the attempt to explain disease and health of man solely on the basis of natural laws. These laws guarantee a natural order independent of place, time, and human or metaphysical beings. For the first time, "nature was indeed understood as impersonal, constant, and rule-governed."<sup>2</sup>

The *Su wen* is of pivotal importance as a literary source in examining these dramatic developments and in asking what stimuli may have prompted them. Based on the early bibliographic history of the text,<sup>3</sup> we may hypothesize that most of the contents of the textus receptus (excluding the one-third added by Wang Bing in the eighth century) was written between the first century B.C. and the second century A.D. That is, while the *Su wen* itself documents a decisive turning point in ancient Chinese intellectual history, its compilation occurred long after Chinese intellectuals had begun to write down and make known to others their insights into, their opinions on, and their knowledge of the issue of human existence, in regard to both its social and its natural environment. Hence a wealth of sources are available to examine the concepts of health and illness, the groups in society ascribing to them, the worldviews adhered to by these groups, and the socioeconomic structures in existence in China before the first century B.C. and in subsequent centuries.

The contents of the *Su wen*, then, and the literary materials preceding it offer a unique opportunity to analyze the generation of a new perspective on an old human problem: how to interpret illness and how to devise strategies to avert situations perceived as threats to one's well-being or even to one's life. The emergence of the new perspective outlined in the *Su wen* was no natural event like the eruption of a volcano or the drifting apart of the continents, and it was not a purely intentional act committed by some curious naturalists either. Rather, it was a production of knowledge and values by humans acting in what could be hypothesized as an inescapable response to far-reaching changes in their environment.

Analyzing the *Su wen*, therefore, means uncovering a large number of factors that fed into the emergence of a new understanding of man and his position in his natural habitat in ancient China from the late Zhou to the late Han era. This new understanding emerged in the minds of intellectuals, and the degree to which these intellectuals were free to substantiate their perspective with abstract theories and observable data and the degree to which external, uncontrollable influences shaped their knowledge should be a matter of central interest.

The expressiveness of the human body is rather limited; except for its tangible morphological constituents, for some liquids and colors, smells and

sounds, and changes of its temperature, the organism tells the observer very little if anything about its functions.<sup>4</sup> Much of what therapeutic systems of ideas surmise about the organism's physiological and pathological secrets is simply a projection—a projection informed not by what is inside but by what is outside the body.

Hence the image of the organism portrayed by the *Su wen* authors reflects values posited by dominant social philosophies, as well as structural elements of the administration and national economy of the newly established unified empire. One of the tasks of the historiography of medicine is to untie the close network of ideas that is formed when data expressed by the body itself are woven together in the minds of observers with notions projected from outside. In the *Su wen* medicine, the situation is complicated further in that certain aspects of the old style of thought found their way into the new style of thought, as did, perhaps, some foreign conceptual imports.

The generation of the *Su wen* medicine allows one to examine the way in which the underlying understanding of nature is "a product of human labor with the resources that local cultures make available." However, as evidenced by a first survey, a conventional constructivist point of view may not suffice to grasp as complex a procedure as was the transition from one style of thought to a new one in ancient China. Constructivism, while emphasizing the "understanding of science as a human enterprise," has as yet little to offer about the factors that have guided this human enterprise, regardless of whether the history of science, the history of medicine, or the history of natural knowledge in times and regions without modern science is concerned.

In the following, I recall some of the factors that came together to shape the style of thought and the medical knowledge publicized in the Su wen. I do not intend to present a complete analysis of all the social, economic, structural, and philosophical factors that shaped its texts; that would require an entire monograph of its own. My aim here is simply to offer an initial hint at the significance of the Su wen as a noteworthy document of ancient Chinese culture. To assess this significance, it is essential to discuss social facts and worldviews present in China during the formative period of the Su wen medicine to elucidate the conditions that allowed the new perspective to appear plausible. At stake, in the words of Ludwik Fleck, is "the entirety of intellectual preparedness or readiness for one particular way of seeing and acting and no other." Or, as David Bloor remarked in his discussion of Wittgenstein's later philosophical work, "the final form in which a languagegame is actually played can only be understood if one knows all of the factors that underlie each move. If we just look at technical problems confronting a thinker we will not understand why this rather than that is counted as a solution. If we just look at the social circumstances (conceived in a broad and superficial way), we will not discern their connection with the rest of thought. If we filter out certain patterns of relevance, and pick out only some of the contingencies that impinge on a particular piece of discourse or concept application, we will have failed in our descriptive enterprise."

Although it is tempting to apply the Wittgensteinian idea of language-games to a text like the *Su wen*, the focus of this epilogue is somewhat different. The history of natural knowledge in ancient China is a remarkable setting to test some of the paradigms that have been advanced in more recent writings on the history of Western science. Before I continue, however, a word on the application of the concept of science to the history of natural knowledge in China is necessary.

"Science" may be defined as merely another word for "knowledge"; as the latter was derived from Latin *gnoscere*, the former can be traced to *scire*, both of which can be translated as "to know." In conventional usage, however, the concept of science is resorted to in order to emphasize the highest and most trustworthy form of secular knowledge; it is the type of knowledge that is considered the basis of modern Western civilization, in particular, its advances in areas such as physics, chemistry, and technology in the course of the past three centuries.

That much of the halo surrounding the concept of science has been deconstructed by modern trends in the history of science does not diminish the outstanding reverence it still enjoys—one of the reasons being that none of the relativistic attempts at explaining away the special status of science has been able to explicate why science continues to be the preferred source of knowledge when it comes to completing tasks such as implanting an artificial hip joint or constructing a bridge over a deep valley. And yet, even though science offers the one and only theoretical guideline in the advancement of medicine and technology worldwide, the borders of science remain unclear. This is true not only in regard to so many findings that are sold as results of systematic scientific research when in fact they were discovered more or less accidentally. It is also true in regard to the historical onset of "true" science. Charles Lichtenthaeler, for example, defended ancient Greek naturalistic teachings against the label "prescientific." To use such a term, he warned, implies that one has a definition of what real science is, and this, in turn, may close one's eyes to the dynamics constantly altering the shape of the scientific pursuit. "True science," Lichtenthaeler claimed, "is always in flux. Let us beware of the illusion of something final!"9

Pointing out the biases and limits of contemporary "scientific medicine," Lichtenthaeler saw distinguishing between periods by means of the labels "prescientific" and "scientific" as obfuscating not only the merits of the ancients as initiators of the present but also the real meaning of science.

What is science and being scientific in the work of a physician and researcher of nature? As far as I see, science and being scientific has three preconditions—

one might speak of a scientific tripod. The first is, nature and its inherent order are perceived as a really existing research subject. The second precondition is, it is further recognized that natural phenomena repeat themselves under the same conditions continuously without change. Third and finally, the human spirit must subject itself to experience to be able to grasp phenomena mentally. No scientific achievement can come about without harmony between ratio and reality, between rational thought and what is. Those working in modern times—as important as they may otherwise be—are not the first to fulfill these three mental preconditions. These fundamentally new steps, the most difficult, most characteristic, and most decisive steps of science ever, were all taken by the Greeks in classical antiquity. The ancient Greeks were no "prescientists"; they represented originality. It is with them that we see science, truly being scientific, *in statu nascendi*. We, posterity, simply continue.<sup>10</sup>

These are clear words. Do they apply to ancient China too? I think so. China and Europe each took its own distinct path in the transformation of science to knowledge. Although we may think of modern Western science when we speak of systematic experiments and the search for statistical evidence, paths of science unknown to Chinese physicians and naturalists before their encounter with the West, for the past two millennia, both Chinese and Western natural knowledge have rested on the tripod identified by Lichtenthaeler. It should be one of the tasks of a cross-cultural history of science to search for the specifically Chinese and European modes of cognitive dynamics.

Returning to the situation in ancient China when the contents of the *Su* wen were conceptualized, one encounters some of the issues at the core of older and more recent efforts to understand and write the history of European science. The shift by a large number of intellectuals from a conceptualization of health and illness rooted in the numinous to a theorizing in terms of natural laws<sup>11</sup> permits us to ask questions about man's attempts to grasp "what there really is" in the world we live in and to address the issue of whether "the entities postulated" in the ancient Chinese paradigms really exist.<sup>12</sup>

Aside from a purely academic interest in such questions, the introduction of certain facets of traditional Chinese medicine in the West has raised a question about the need to preserve some of the theoretical foundations of classical Chinese medicine. Are these foundations required to understand Chinese medicine and practice it successfully, or can the substances and techniques used in Chinese medicine be effectively separated from their traditional background and explained in terms of Western science without becoming useless?

In this regard, it is imperative to ask whether traditional Chinese natural knowledge or modern Western science, or both or neither of them, "give[s] us a literally true story of what the world is like" and whether they are to be

accepted or rejected on the basis of positivist beliefs that one is true and the other not.<sup>13</sup>

For the time being, however, rather than focus attention on the divide between modern Western science and traditional Chinese natural knowledge, I focus on the divide between ancient Chinese numinous beliefs and ancient Chinese natural knowledge. Neither the belief in demons or ancestors nor the acceptance of the validity of the yin-yang and five-agents doctrines was based on experimentation, that is, on strategies to justify these belief systems by a more systematic approach than reflection, logic, and anecdotal evidence.

A question arising at this point is whether any factors can be discerned that may have contributed to an increasing plausibility or acceptance of the one and a loss of attraction of the other. As Hilary Putnam phrased it in a very different context, "Rationality requires that if two hypotheses have all the same testable consequences, then we should not accept the one which is a priori the less plausible. Where do we get our a priori plausibility orderings? These we supply ourselves, either individually or as communities: to accept a plausibility ordering is neither 'to make a judgment of empirical fact' nor to state a theorem of deductive logic; it is to take a methodological stand. One can only say whether the demon hypothesis is 'crazy' or not if one has taken such a stand."

Presumably, ancient Chinese intellectuals acted as rationally as European scientists two millennia later. When the former were faced in the second and first centuries B.C. with a choice between continuing a tradition of demonological and ancestral explanations, on the one hand, and trusting new explanatory models based on systematic correspondence, on the other, many of them opted for the latter for very much the same reasons that, in the late eighteenth and early nineteenth century, European naturalists and physicians turned their backs on what was henceforth considered speculation and began to favor scientific inquiry. Empirical evidence that the latter would result in more successful therapies than the former was not at hand. The plausibility of tying medicine to modern science and only to modern science rested on a promise of greater therapeutic efficacy that required almost another century to come true.

Plausibility and promise, then, are what lead a society or distinct groups within a society to accept new styles of thought in interpreting the health and disease of man. Where, the historiographer is asked, does the plausibility of a new style of thought originate, and what is the promise that stimulates individuals to accept a new way of confronting disease, even though the old way is "known" to be helpful while the new approach can point to little if any success for quite some time to come?

Medical and nonmedical therapy systems, historical evidence suggests, are not the outcome of purely rational reasoning; rather, they result from a subconscious combination of emotion and rationality. It is the fear of dying early or of falling ill that guides the search for and the acceptance of explanatory models and remedial action in the first place. Again and again in the history of medicine and healing in the East and West, what appears to be an inevitable imprint by the social body—real or imagined—has served and continues to serve as a model for how to safeguard the personal body. What is considered successful crisis prevention and management in society promises to be appropriate also in curing the individual of his or her ills. Contemporary natural knowledge and technology inform health care only after a primary, unintentional decision on the nature of health and disease has been made. The development of the *Su wen* medicine was no exception.

# 2. SOCIAL FACTS, WORLDVIEWS, AND MEDICAL IDEAS: PARALLEL STRUCTURES

Part of the elite in late Zhou, Qin, and Han China appears to have lost faith in the all-encompassing validity of numinous explanatory models. A new worldview emerged that saw human existence as depending on natural laws of systematic correspondence that pervade the universe. What changes in their environment may have provoked these dynamics? We may hypothesize that the increasingly complex states formed in the final decades of the Warring States period and in particular the united empire beginning with the late third century B.C. required and led to new forms of government.

Both the conventional ethics guiding the dealings among the various ruling families and the traditional relationships between rulers and ruled proved inadequate in the context of political structures that were very different from the feudal past. Successful government demanded an impersonal, constant, and law-inspired foundation; an increasingly complex bureaucracy served as the necessary mediator between the interests of the sovereign and his people.

The development of social order, guaranteed by social laws and rules, then, may have stimulated intellectuals to perceive a natural order, expressed in natural laws (fa  $\,$   $\,$   $\,$  and rules (ze  $\,$   $\,$   $\,$   $\,$   $\,$  ). We do not know the range of political interests served by the naturalization of social law and the subsequent reinterpretation of natural law as social law. After all, naturalization immunized the notion of laws in general and of social laws in particular against possible allegations that they were man-made. The two groups whose interests were at stake were the Legalists and, in their footsteps at the end of the Zhou era and in the early Han period, the proponents of Huang-Lao philosophy.  $^{15}$ 

It remains a matter of speculation to what extent these dynamics in China should be seen also as distant echoes of the acknowledgment of natural laws in the eastern Mediterranean only about two centuries earlier.

From all we know of the fundamental changes in ancient Chinese intel-

lectual history, we may conclude that the physicians who transferred the paradigms of systematic correspondence to the realm of health care, that is, to an explication of normal and abnormal states of the human organism, did not act on whim but followed a trend encompassing a wider sphere of social life. That is, something was "out there" that convinced more than just one or two individuals of the necessity for change. A large segment of society, presumably a majority of the social elite, felt compelled or at least encouraged to embark on a shift from the familiar to the unknown.

This was a turn away from the plausibility of dealings with more or less anthropomorphic cohabitants of the universe, whom humans were able to placate, chase away, or even kill in times of crisis. It was a turn to a conviction of the existence of an encompassing order, active day and night, in heaven and on earth. A major representative of this new intellectual climate was the third-century philosopher Xun zi. He stated:

The activities of heaven follow a regularity. It is not because of [the good ruler] Yao that [this regularity] exists, and it is not because of [the bad ruler] Qie that [this regularity] is destroyed. If one responds to it by building order, then good luck results. If one responds to it by permitting disorder, then bad luck results. <sup>16</sup>

Man himself is responsible for his good or bad luck; he cannot expect help from "heaven." The passage of the stars, the alternating brightness of sun and moon, the succession of the four seasons, the major changes of yin and yang, and the appearance of wind and rain are a few examples of many occurrences in man's environment that persist regardless of whether man loves or dislikes them. Man has to adapt to survive. <sup>18</sup>

Did the adoption of the yin-yang and five-agents doctrines bring ancient Chinese naturalists closer to "knowing the structure of the world" than their predecessors who explained "regularities in the observable phenomena," including the seasonally changing origins of winds in various cardinal points, by the motions or acts of spirits? At least the material evidence was on their side. Even though spirit entities such as the winds and the stars belonged to the realm of the observable, the yin-yang and five-agents doctrines could point to a vastly larger battery of factual evidence. The succession of day and night, of the seasons, of the tides, and of sun and moon, the duality of male

and female, and many more observable facts may have promised a closer proximity to the real structure of the world.

But was that all that drove ancient Chinese naturalists to accept the notion of an all-pervasive "legal system" of correspondences? Or was the discovery of systematic correspondence simply the ideological smoke screen required to at the same time hide and bring to fruition a widely felt desire to take things into one's own hands rather than to share power over one's existence with demons and ancestors? The origins of such a desire, if indeed it was at the root of these profound shifts in ancient Chinese intellectual history, may be too obscure to discuss here. Nevertheless, one may note that it was Xun zi again who voiced the most fervent arguments against a belief in demons and spirits.<sup>20</sup>

Once the shift was initiated, many of the phenomena that had been explained by recourse to demons and ancestors before (and continued to be explained this way by some social strata for two millennia) had to be explained on the basis of the new knowledge. In some regards, fundamentally new approaches were conceptualized. Ian Hacking's proposition that "every style of reasoning introduces a great many novelties including new types of objects, evidence, sentences, laws, and possibilities" applies to the scenario in ancient China. Tor the first time in Chinese history, a systematic image of the body's interior, of the various organs and their connections both among each other and with the outside world, was discussed and verbalized. The factors identified as causing this organism to stay in good health or to fall ill, however, partly remained in familiar confines and partly entered new ground.

In fact, the new medical theory of the Han era resulted from an incomplete turn to the new and the adaptation of central principles of the old style of thought to a changed conceptual environment. Hence an innovative systematic approach to health and illness, based in an acceptance of the notions of an all-pervasive systematic correspondence, was fused with an ontic approach whose justification and plausibility lay in past centuries of civil war and in the equally long-established familiarity with concepts of demonic attack as causes of illness.

Demons, we have seen, did not appear in the *Su wen* as noteworthy pathogenic agents. In fact, a most telling dialogue in the opening lines of *Su wen* 13 explains that times have changed and that new concepts are required to cope successfully with the ailments of today. The existence of demons is not rejected or even questioned explicitly; the need for a shift from demonological healing to a new perspective is suggested much more elegantly.

Huang Di asked: I have heard that, when [the people] in antiquity treated a disease, they simply moved the essence and changed the qi.

They were able to invoke the origin, and [any disease] came to an end.

When [the people of] nowadays treat a disease,

[they employ] toxic drugs to treat their interior, and

[they employ] needles and [pointed] stones to treat their exterior.

Some are healed; others are not healed.

Why is this so?

### Qi Bo responded:

People in antiquity lived among their animals.

They moved and were active and this way they avoided the cold.

They resided in the shade and this way they avoided the summer heat.

Internally, they knew no entanglements resulting from sentimental attachments:

externally, they did not have the physical appearance of stretching toward officialdom.

In this peaceful and tranquil world,

the evil was unable to penetrate deeply.

Hence toxic drugs were unsuited to treat their interior, and

needles and [pointed] stones were unsuited to treat their exterior.

Hence it was possible to move essence and invoke the origin and [any disease] came to an end.

The people of today are different.

Anxiety and suffering affect their interior;

taxation of the physical appearance harms their exterior.

Also, the [people] have lost [the knowledge of how] to follow the four seasons, and

they oppose the requirements of cold and summer heat.

The robber wind frequently reaches [them].

The depletion evil [is present] in the morning and in the evening;

internally, it reaches to the five depots, to the bones, and to the marrow;

externally, it harms the orifices, the muscles, and the skin.

This is why

minor diseases inevitably develop into serious [problems];

serious diseases inevitably result in death.

Hence.

invoking the origin cannot end [a disease any longer].<sup>22</sup>

With regard to the European theater, A. C. Crombie has stated "the history of science has been the history of argument." The same is true, as can be seen here, for the ancient Chinese history of knowledge. This short dialogue's refutation of the old style of thought's belief in human dependence on the acts of demons and ancestors is a rhetorical masterpiece. As if in anticipation of Hacking's assertion that "there simply do not exist true-or-false sentences of a given kind for us to discover the truth of, outside of the con-

text of the appropriate style of reasoning,"<sup>24</sup> the existence of demons and, therefore, the rationale of any health care based on their alleged presence are not flatly denied. Rather, the new style of thought of the dependence of human health and life on an adaptation to the natural environment is employed to explain why "invoking the cause," a well-understood code word for apotropaic practices, can no longer be effective.

That is, the new style of thought is authenticated not only for the present and the future but also for the past—since time immemorial. Techniques such as "invoking the cause" are not defamed as being antagonistic to it; they are simply depicted as superfluous now that life has changed and society has become much more complex. The notion of a deterioration of the quality of life was common to all the social philosophies proposed during the late Zhou era; to tie the argument against apotropaic practices to this ubiquitously shared conviction added to its plausibility.

Moreover, the expressions *yi jing bian qi* 移精變氣 (to move essence and to change qi) and *yi jing zhu you* 移精祝由 (to move essence and to invoke the origin) may be interpreted as perfect links between the old and the new; the phrase *yi jing* may have been meant here to convey two different meanings.

In the first phrase yi is to be read literally. To deny the technique "to move essence and to change qi" any further legitimation rejected the validity of the cultivation of such techniques as breathing, sex, and exercise, as proposed by the  $Guan\ zi$   $\mbox{\footnote{1}{l}}\mbox{\footnote{2}{l}}\mbox{\$ 

In the second phrase, *yi jing zhu you*, the term *yi* parallels a usage of *yi* in the sense of "to make an offering," "to give," attested in the *Han shu* in the phrase *yi zhen* 移珍, "to confer precious items."<sup>27</sup> Qi Bo, however, did not speak of "precious items"; he spoke of "essence." By the time this dialogue was written, essence and qi were by no means concepts unequivocally employed in the context of natural knowledge only. As Harper has pointed out, before the fourth century B.C., "things that were pure and refined were considered 'essence', be they the offerings presented to the external spirits or the potency of the spirits themselves."<sup>28</sup> Beginning with the *Guan zi*, Nei ye 內業, of possibly the fourth century B.C., physiological theories were formulated "which fused the physical and spiritual components of the human organism, and which made vapor (qi) the source of each."<sup>29</sup> To state that "moving/conferring essence and invoking the origin [of an illness]" is no longer helpful is to say that, under current conditions, making offerings to external spirits to invoke the spiritual-demonological cause of an illness is meaningless.

Finally, the dialogue made use of the concept of evil, xie #. The significance of this concept was discussed earlier and need not be repeated in detail here. I should like to draw attention to it once more in its function as a convenient replacement of the notion of demons while at the same time retaining and reinforcing the plausibility of the ontic approach.

The ontic approach was to stay with Chinese medical theory until the twentieth century. One of the obvious features of its terminology is the use of military metaphors. No factual evidence could be adduced to demonstrate the existence, for example, of a camp qi (ying qi 營氣) and of a defense qi (wei qi 衛氣) moving in the human organism. The entire ontic approach, with its notions of attack and defense, of tracing, locating, destroying, or eliminating an enemy, "the evil" that has entered the body, was stimulated by and reflects experiences with certain types of social interactions. Does it reflect the structures of the "real" world too? Enough evidence exists to affirm that it does, at least in its basic principles. After all, it is difficult to deny the causal role of bacteria, viruses, and so on, in the generation of illness and the curative effects of tracing, locating, killing, or eliminating such microorganisms in the human organism.

However, the ontic approach originated in an environment that offered to an observer little else than frequent hostility and violence among animals, humans, and human-built social structures. It was continued from its earliest expression in demonological terms to a style of thought based on natural laws expressed in the doctrines of systematic correspondence. Two thousand years later, it was embedded in a new context, modern science, when it found expression in the disciplines of bacteriology and immunology. The ontic approach, it appears, survived from an initial stage of merely socially induced plausibility to a stage in which innumerable natural phenomena lent it credibility, to a stage in which the microscope-observed and experimentally proven existence of microorganisms and additional material evidence confirm its truth.

Has the ontic theory, from its historical beginning to its presence in modern medicine, provided a "true story of what the world is like," or is man "misled" to believe in an ontic approach in the age of science as much as he was "misled" in the age of demons? To be sure, there has been sufficient hostility and violence in his environment throughout the millennia to lend it continuing plausibility. Positivists, Bas C. van Fraassen has pointed out, "hold that two theories may in fact say the same thing although in form they contradict each other. But two theories which contradict each other in such a way can 'really' be saying the same thing only if they are not literally construed."<sup>32</sup>

Applied to our case, this argument causes problems. Microscopic and collateral evidence of the pathogenic role of microorganisms is available beyond doubt, but there was nothing really observable when the notions of

demons arose and when subsequently wind, heat, dampness, cold, and "evil" as such were identified as intruders. Are we forced to back away from a literal construing in all three stages of what may be considered a ladder of increasingly material validation, or only in the latter two? An easy way out of this predicament would be to assume that some environmental facts led people in ancient times to construct a theory that accidentally happened to be isomorph with the truth discovered thousands of years later. On the other hand, although this appears inconceivable now, new evidence may cause some future generations of naturalists to deconstruct our present notions of bacteria, viruses, and so on, and to identify them as the "demons" of twentieth-century medicine.

Both the ontic and the systematic approach are products of the human mind, stimulated as they were by a "reciprocal dialectic of nature and culture," of self-understanding and more or less well discernible environmental conditions that, in the course of time, were substantiated by ever more reliable "scientific" facts. <sup>33</sup> After all, what was said of the ontic approach can be said of the systematic approach too. The laws of systematic correspondence, introduced in medicine two thousand years ago, have been replaced more recently by the laws of physics and chemistry. The basic structure of the systematic approach, however, has remained unchanged. It holds that the body is governed by the same laws as the universe. The microcosm of the human organism is an integral part of the macrocosm of the world at large.

The laws of yin and yang and of the five agents serve to explain physiological and pathological processes in the human organism; at the same time they underlie the eternal interactions influencing the most distant corners of the universe. The physical and chemical laws known to be valid on the farthest stars are, conceptualized as biophysics and biochemistry, valid also in the smallest human cell or gene. Hence to oppose yin and yang or the course of the five agents is as detrimental to health as to act against the biochemical necessities of human metabolism. The systematic approach explains it all.

As with the ontic approach, in which naturalists have replaced what are now considered the illusory demons with what are now considered the really existing microorganisms, in the systematic approach we have exchanged the speculative doctrines of yin-yang and of the five agents for the truth revealed by science. But because the underlying paradigm has remained unchanged, the basic principles of ancient Chinese medicine appear familiar to us. Hence a statement in the *Su wen* as fundamental as the following is immediately plausible:

If one follows yin and yang, then life results; if one opposes them, then death results.<sup>34</sup>

The metamessage of this sentence does not confront us with anything foreign; it is the essence of the systematic approach in medicine, then and now.

These, of course, were not the concerns of naturalists in the times of the Han dynasty. Their primary task was to use the resources and the evidence at hand to reconstruct the human body and to establish a suitable theater in which the ontic and systematic paradigms could be applied. Hence the numbers of organs identified as core organs worth being assigned a position in the yin-yang and five-agents schemes were limited to six and five respectively, <sup>35</sup> and the association of these organs with the five agents, eventually adopted by the *Su wen* authors, followed the requirements of political legitimacy of the Later Han dynasty, rather than any factual evidence offered by the human organism. <sup>36</sup>

It may not be possible to trace the social, economic, political, and philosophical background of each and every aspect of the new medicine and to clearly distinguish that portion of its knowledge that was derived from an observation of factual evidence. Nevertheless, in the discussion of morphological, physiological, pathological, and therapeutic knowledge in the preceding survey of the contents of the *Su wen*, numerous examples of social, economic, and political imagery came to the surface. These included the new vision of the organism as an integrated whole whose individual parts depended on each other and were linked to each other through a complex system of passageways facilitating the movement of blood and qi in the same way that the roads and canals in the newly unified empire enabled the exchange of goods and people.

It is my hypothesis that in the *Su wen*'s discussion of the nonacceptance of Mawangdui protoparasitology, we encounter an example of political reasoning influencing the perception of reality. Bugs existed in ancient China as they exist today, and they could be observed causing harm to crops then as now. I have argued that the ontic approach's denial of any pathogenic relevance of this reality, despite its acceptance of the idea of environmental agents

entering the body and causing health problems there, may be tied to "correct" behavior's inability to control bugs. Bugs, like demons, but in contrast to wind, heat, cold, and dampness, cannot be kept away from the human body by simply following the laws of systematic correspondence. Hence they had no place in the *Su wen* medical theory and survived only in the indications of pharmaceutical literature, which was built on a different moral system.<sup>41</sup>

If *Su wen* theory's nonacceptance of protoparasitology is one instance of social ideology closing at least one of the observer's eyes, the *Su wen* tradition's neglect of the self-healing forces of an organism may be another. Several times in the *Su wen*, an author stated that a patient needed no treatment because his illness was expected to heal by itself.<sup>42</sup> That is, the self-healing forces of the human organism were observed. One may wonder, however, why no special attention was paid to this phenomenon.

In Hippocratic medicine, suffering, *pathos*, was also termed *ponos*, work, implying that the body displays efforts to restore a disturbed harmony among its functions. *Nouson physics ietroi*, "[the organisms'] natures are the physicians of the diseases," was the earliest expression of a conclusion reached by Hippocratic authors through the observation of innumerable cases of illness. It was phrased in the second millennium *natura sanat medicus curat* ([an organism's own] nature heals, the physician treats) and *vis naturae medicatrix* (medical force of [an organism's own] nature) and reflects the notion that the human organism reacts against a state of disease and attempts to overcome it. It is the physician's duty to support this "healing force of the organism's own nature." Excretions and secretions are the main modes of the organism's self-help; fever is instrumental in this process in that it cooks and separates from healthy agents those humors and any other matter that are to be eliminated from the body.<sup>43</sup>

Ancient Chinese medicine's systematic style of thought focused on the unimpeded flow of blood and qi, not on an appropriate mixture of the humors blood, phlegm, black bile, and yellow bile on which the Greeks had focused their attention. Nevertheless, ancient Chinese medical writings, too, offer some evidence that prognostic value was attributed to human excretions. In *Su wen* 48, as if loaned from a foreign conceptual background, intestinal, heart, and liver "flushes" are mentioned. These phenomena are occasionally accompanied by a loss of blood. Physicians are even required to examine blood temperature. 44

These are rare examples in the *Su wen* of an acceptance of prognostic parameters that must have been arrived at through clinical observation of natural facts but which found only superficial entrance in the theoretical reasoning of vessel theory. They faintly echo the consideration devoted to excretions by the Greeks, and at the same time they document a major difference from Hippocratic medicine. If ancient Chinese clinicians ever asked whether an intestinal flush was causally linked to a disease ending without

medical intervention, and if so why, then this was certainly not pursued any further and did not enter *Su wen* medical theory.

When the spleen vessel drums outside and is in the depth, this is intestinal flush.

After a long time this will end by itself.

When the liver vessel is small and relaxed, this is intestinal flush.

It is easy to cure.

When the kidney vessel is small and throbs in the depth, this is intestinal flush with blood being passed down. Those whose blood is warm and whose body is hot, they will die.

When in case of a heart and liver flush blood is passed down, too, both depots have a disease alike.

This is curable.45

Here, as in similar contexts in the *Su wen*, the self-healing potential of the organism is stated, but it is neither explained nor conceptualized as a starting point for an appropriate therapy. The same applies to the *Shang han lun* of the early third century A.D. Excretions such as sweating, defecation, and urination figure prominently in the description of diseases.

Also, induced sweating, purging, and diuretics play a decisive role in *Shang han lun* treatments. At the same time, many diseases are said to end spontaneously. Again, as with the *Su wen*, one may wonder why this self-healing of human health problems was not conceptualized.

It is, of course, more legitimate to seek an explanation for a concept that is expressed in ancient Chinese medical literature than for one that is entirely absent, at least from the *Su wen*. <sup>46</sup> Still, in the presence of so many parallels between ancient Greek and ancient Chinese medical reasoning, there may exist some justification in wondering about obvious differences. Both ancient Greek and ancient Chinese medicine emphasized prevention and early intervention. For example, the Greek physician Erasistratos (304–240) concluded that

it is after all better not to let people get sick than to cure their diseases; similarly, the helmsman of a ship will be more eager to reach port before encountering a storm than finally to arrive in port after being buffeted by the storm and enduring many perils.<sup>47</sup>

Perhaps only a little later, a Chinese author, whose text found entrance in *Su wen* 2, offered a similar perspective.

The sages did not treat those already ill, but treated those not yet ill; they did not govern what was already in disorder, but governed what was not yet in disorder. . . .

Now, when drugs are employed for therapy only after a disease has become fully developed,

when [attempts at] restoring order are initiated only after disorder has fully developed,

this is as if a well were dug when one is thirsty,

and as if weapons were cast when the fight is on.

Would this not be too late too?<sup>48</sup>

The true ruler begins to put [his state] in order while [a condition of] order [still prevails]; he does not wait for chaos to happen.<sup>49</sup>

The inclusion of the well and weapons metaphors added considerable plausibility to the  $Su\ wen$  exhortation to prevent rather than cure illness. The strongest appeal, however, was exerted by the juxtaposition of order and chaos,  $luan\ 8$ . As Ralf Moritz pointed out,

The ideas of Confucius constitute a response to the cataclysmic disorder that went along with a structural change of ancient Chinese society. A world dissipated in which intrafamily morality was identical with the morality of the state. The leveling of hierarchy was experienced as chaos. It is here where the fear of chaos set in which was to permeate the entire history of Confucianism. The Master reacted with his therapy to heal the world, a reconstruction program focusing on fu h, the restoration of rites. h0

These words and the preceding quotations from Xun zi and from Su wen 2 tell us that at least the Confucian worldview must have seen little if any justification in a wait-and-see attitude toward both state and bodily crises. Given all the conceptual parallels between body and state, to believe in a self-healing force of the human organism would have meant to accept such a potential in human society too. This, of course, was not a notion prevailing in Confucian philosophy. Not to defend one's residence once the robbers had entered it but to strengthen the walls and keep the robbers out in the first place was the maxim to follow. Fear of chaos meant to prevent disorder or to react to its earliest signs as soon as possible.

Hence crisis prevention and immediate reaction, not complacency or even negotiations with a respected partner, were the strategies recommended to

statesmen and physicians alike for managing their respective "bodies." While clinical reality was taken into account to the degree that it was acknowledged that some diseases end by themselves, the ideological environment of vessel theory medicine may have barred ancient Chinese observers from attributing to the physical or social body a nature that was able to act responsibly on its own behalf. The Confucian Legalist ruler was not prepared to take into account the movements of the social body to manage its own crises; he imposed his government.

It is the *Nan jing*, the unprecedentedly systematic Chinese classic whose origins may date to the first or second century A.D., that offers a conceptual basis for diseases ending by themselves. Rather than resort to a kitchen metaphor that sees harmful humors cooked and discarded by the nature of the body, as the ancient Hippocratic texts had it, the author of the *Nan jing* took to the five-agents doctrine to explicate why certain diseases end in death and why others require no medical intervention.

In *Nan jing* 13, a discourse on situations in which a patient's complexion and the movement in his vessels disagree, death is said to be looming if the movement in the vessels is associated with an agent capable of overcoming the agent associated with the patient's complexion. That is, if the movement in the vessels is one associated with the lungs and with metal, this could prove fatal if the complexion is associated with the liver and with wood, because usually metal is able to destroy wood. If, however, the agent associated with the complexion is the son of the agent associated with the movement in the vessels, the disease will heal by itself, because a son will receive no harm from his mother.<sup>51</sup>

Although we encounter an explanation here of the observable fact that some diseases end by themselves, the model offered is different from that arrived at in Hippocratic medicine. The organs, in ancient Chinese medicine, were seen as agents either hostile to each other, hence the winner-loser relationship of interagent domination, or as friendly to each other, hence the mother-son relationship of interagent generation. The physician is the observer of this theater. In some cases he joins the fight to support the weak; in others he does not have to intervene.

This relation between physician and organism parallels the relation between a wise ruler and his people. The ruler looks upon these people from above. He knows that he has to beware of social unrest, and he does not believe that once such unrest has broken out the people are able to return to peace and harmony by themselves. Hence he watches closely and acts immediately. He is aware, however, that some conflicts, such as those between mother and son, bear no danger. In such cases no intervention is necessary. Perhaps the ancient Greek view reflected another attitude, that is, one of an organism—be it social or biological—that is often able to handle its problems itself, without immediate intervention by its rulers.

To sum up this deliberation on the status of the organism's self-healing potentials in ancient Chinese medicine, it is safe to say that the natural fact that some diseases end by themselves was observed and received conceptual attention. Differences in the political philosophy, that is, in the outlooks on the functioning and ideal governing of social systems, between the creators of Hippocratic medicine in ancient Europe and of medicine in ancient China may have led to the formation of paradigms characteristic of the two traditions. Fung Yulan included in his *Short History of Chinese Philosophy* a few paragraphs discussing the impact of maritime and continental environments on the formation of philosophies in the civilizations of ancient Greece and China.

The Greeks lived in a maritime country and maintained their prosperity through commerce. They were primarily merchants. . . . Merchants are townsmen. Their activities demand that they live together in towns. Hence they have a form of social organization not based on the common interest of the family so much as on that of the town. This is the reason why the Greeks organized their society around the city state, in contrast with the Chinese social system, which may be called that of the family state, because under it that state is organized in terms of the family. In a city state the social organization is not autocratic, because among the same class of townsmen, there is no moral reason why one should be more important than, or superior to, another. But in a family state the social organization is autocratic and hierarchic, because in a family the authority of the father is naturally superior to that of the son.<sup>52</sup>

Since we are talking here about the formative period of Chinese medicine, the Han era, the conclusions reached by Fung Yulan may have something to them even if applied to the differences between ancient China and ancient Greece in the conceptualization of self-healing forces. If we accept the lasting influence of archaic, rural family structures on social organization and, hence, the outlook on social relations in Chinese civilization, it may well be that the singularly autocratic position of the "father," be he the biological father in a family or the emperor in the empire, contributed to a notion, shared by Confucianism, Legalism, and Huang-Lao philosophy alike, of an organism requiring guidance—strong guidance—to maintain its functions.

If we were to apply Fung Yulan's comparison to the development of ancient Greek medicine, it should be no surprise that the egalitarian tendency characterizing the elite group of merchants supported a belief in a partnership between the "physicians" innate in human nature and the physicians attending to human health. After all, ancient Greek medicine, like ancient Chinese medicine, was not formed to appeal to society in general; Hippocratic medicine and the medicine of systematic correspondence were conceptualized by and for social elites. Hence they were bound to reflect the worldviews and social organization of these elites.

### 3. PHILOSOPHICAL KEY TERMS IN A MEDICAL CONTEXT

So far, I have hypothesized the construction of Han-era medicine by tracing parallels in the structures of the socioeconomic environment of the late Zhou, Qin, and Han era and the emerging medicine of systematic correspondence. In the following I wish to point out further ties between Zhou, Qin-, and Han-era social ideologies and the contents of the *Su wen* by examining the appearance in this text of some key terms originating in specific philosophical views. For example, in *Su wen* 25 we find the following statement:

Covered by heaven, and carried by the earth, all the myriad beings have come to existence.

None has a nobler position than man.

Man comes to life through the qi of heaven and earth; he matures in accordance with the laws of the four seasons.<sup>53</sup>

"For the Confucian," to quote Michael Loewe, "man was the center and the measure of all things. Human beings possess certain qualities that set them apart from the other creations of nature and make them potentially the most valued living things on earth." In contrast, Daoist philosophy held that "man is but one of the myriad creatures of nature, but he is bound by a built-in tendency to regard himself as master of the others. Only by escaping from this constraint, by accepting that his comprehension is subjective and delusory, and by rejecting man-made values in favor of those of dao, can a man shake himself free of his limitations." It would be very difficult to fit the above passage from *Su wen* 25 into such Daoist thinking.

When applying labels such as Daoism, Legalism, and Confucianism, we should be careful to distinguish between an early period, the Spring and Autumn and Warring States eras when authors wrote works that could be termed Daoist, Legalist, or Confucian, on the one hand, and a later period of the Han dynasties, when the distinction between these schools was no longer such a sharp one. Also, the increased attention devoted to Huang-Lao philosophy following the recovery of several manuscripts from tomb no. 3 at Mawangdui in 1973 has shown that newly available documents may offer fresh insights in that they reveal philosophical currents meandering between the hitherto established main currents that were not previously fully recognized.

Many eminent Confucians in Han times who had been adherents of other schools of thought were converted through the official education system. After a nominal conversion, such men tended to continue to think and act in accordance with principles found in the philosophic systems to which they had originally given allegiance, expressing these in Confucian terms. Thus, eclectic strains of thought, originating from the late Warring States period and sus-

tained by the pragmatic attitude of the early Former Han government, continued to develop under the nominal dominance of Confucianism.  $^{56}$ 

In this sense, the *Su wen* is eclectic. Nevertheless, as some of the structural parallels pointed out above suggest, the authors who contributed to the corpus leaned more to Confucian or late Zhou, early Han Huang-Lao notions than to anything else.

Basically, the notions of disease causation and therapy in the *Su wen* parallel both the social structures of the united empire and the worldview supporting these structures. The bodily organism was perceived much the same as the national organism. Various individual units fulfilling different functions were considered to form a complex whole. The well-being of this complex whole was thought to depend on the exchange of resources among its parts. Stability of the state was guaranteed as long as its inhabitants observed morality and laws. Punishment of those who acted against morality and laws led to bodily mutilation or even death. Stability of the body, that is, health, was guaranteed as long as the exchange between the various functional units continued and as long as the inhabitant of the body observed certain rules. This is the basic message of *Su wen* 1 when it states:

When essence and spirit are guarded internally, where could a disease come from?

Disease, the reader of this rhetorical question is informed, can be avoided as long as a person's behavior serves to guard the organism's central material and nonmaterial constituents, that is, essence and spirit. The advice to follow certain rules ( $ze \, \mathbb{N}$ ) or laws ( $fa \, \mathbb{K}$ ) is linked to the promise of health. This is, of course, in contrast to a Daoist conviction that the material body per se cannot escape illness. A late, albeit pre-Tang commentary introduced this notion into  $Su \, wen \, 68$ :

Without physical appearance there is no suffering.<sup>57</sup>

Apart from this and some other isolated statements, Daoist concepts are absent almost entirely from the *Su wen*. This may be surprising at first sight considering the fact that among all the philosophical schools of the Warring States period, Daoism paid greatest attention to man's position in nature. *Wu wei*, a prominent Daoist motto, implied a request to know nature lest one risks acting against nature.

Hence one might expect that a huge text such as the *Su wen*, expounding the laws of nature and their relationship to the human organism, should reflect first of all Daoist social and natural philosophy. The opposite is true. Daoism found its expression in health care traditions of its own, with the literature on materia medica documenting the social interests of Daoism most impressively. Texts like the *Su wen*, the *Ling shu*, and the *Nan jing* very much

neglected pharmaceutical approaches; the treatment emphasized here is bloodletting and its sequel acupuncture, that is, therapies directed at the flow of blood and qi in the vessels linking the individual organs, or—as one might also say—function centers in the human body.

Acupuncture in particular was not meant to bring a sick organism back to harmony with nature, as the Daoists might have preferred it; it aimed at restoring a complicated system of exchanges among different centers of production and consumption. In other words, acupuncture serves to maintain a system that runs counter to the social structures conducive to peace and harmony demanded by the Daoist worldview. As the well-known passage from the *Dao de jing* states:

Let there be a small land with few inhabitants: even if there were inventions that would reduce the amount of labor tenfold or one-hundredfold, the people would not use them; the people would die twice before they would depart from this place. Perhaps there would be boats and wagons, but no one would travel in them; perhaps there would be weapons, but no one would practice with them. There would be no writing, except for knots in a rope; the people would be satisfied with their food, content with their clothing, happy with their shelter, and would take delight in their [simple] customs. The closest settlement might be so near that one could hear the rooster crow and the dogs bark, but the people would grow old and die without having gone there. <sup>58</sup>

Clearly, the situation that had arisen in China following the unification of the empire was very different from the one envisaged by the author of the *Dao de jing*. While the *Dao de jing* requested "to assist rulers by pointing out to them the Dao, rather than use the army to oppress the world,"<sup>59</sup> the new structure established by the rulers of Qin had been made possible only by military means. Its continuing welfare rested on ever-intensifying economic exchanges between formerly separate settlements. An ever-increasing bureaucracy required written documents rather than knots in a rope, and Confucian education recommended ancient texts as guidelines for a future moral conduct.

Given the structural parallels between Qin and Han society and the vision of the organism in the new medicine and given the transfer of terminology from the public domain to the morphology, physiology, etiology, and pathology of the human body, including the identification of the term used for healing the ills of the human body, zhi %, with the term used for ordering or governing the state, it may not be such a surprise any longer that Daoists stayed away from this body of knowledge and concentrated on the effects of natural substances instead. Hence the arena of the vessel theory–based medicine remained an almost exclusive domain of Confucian thought and of that "sophisticated political philosophy that, on a most general level, represents a synthesis of classical Daoism and Legalism" and that

supported the notion of the complex empire and became known as Huang-Lao philosophy.

It is at this point that we fully understand the significance of the dialectic assignment of Huang Di to the tradition of a medicine informed by notions of a centralized state governed by a central ruler, bureaucracy, and law abidance and of the association of the mythical founder of agriculture Shen Nong 神農 (the "Divine Husbandman") with the tradition of pharmaceutical health care. In his study *Sanctioned Violence in Early China*, M. E. Lewis demonstrated how Shen Nong stood

in direct opposition to the figures of the huntsman and warrior (represented by the Yellow Emperor, i.e., Huang Di). Through his miracles and creations he delivered men from the necessity of the hunt, the eating of flesh, and the drinking of blood, and he thereby made possible a human existence that required no violence whatsoever. . . . This mythic opposition of the creator of agriculture to sanctioned killing . . . reflects the political program of the philosophical adherents of the Divine Husbandman. The claim that all men should devote themselves to agriculture was an explicit rejection not only of artisanry and trade, but more importantly of any ruling elite that harvested the fruits of taxation rather than those of the fields. The rejection of any government suggests also the repudiation of the punishments and military power that ultimately enforced government authority. 61

When the first materia medica was compiled in the Later Han dynasty, Shen Nong may have been the only antipodean available in Chinese mythology to stand up against the symbol of Huang Di. To attribute to him the founding of the pharmaceutical tradition—a development evidenced first in the *Huai nan zi* 淮南子, a work reflecting notions of natural philosophers at the court of Liu An 劉安(179–122 B.C.)—and to add the name of Shen Nong to the title of the first Chinese drug compendium may have been meant to signify a general tendency in the political program of the supporters of the pharmaceutical tradition.

Shen Nong's way of health care by means of pharmaceutical substances embodied the ideals expressed in Chapter 80 of the *Dao de jing*; the Huang Di medicine symbolized the complex state and its bureaucratic hierarchies.

In one of the Huang-Lao manuscripts, the text offers advice to the ruler "that he must conform his actions to the principles of Heaven and Earth. . . . He must conform his laws and regulations to the ever-changing principles of the cosmos. . . . [W]hen action is called for, he must act immediately, ruthlessly, but dispassionately." <sup>62</sup> It may well be that such notions guided some of the authors of the *Su wen* texts.

The passage quoted above from Su wen 25 refers not only to the extraordinary position occupied by man in his natural environment; it also contains a reference to fa &, "law," a central value of the Legalist school as well as of Huang-Lao philosophy. In the eyes of philosophers and statesmen like Shang Yang  $\ddot{n}$   $\ref{n}$  (390–338 B.C.), fa meant the laws required to rule a state. Hence the most eminent of all Legalist theoreticians, Han Fei (d. 233 B.C.), defined laws together with statecraft as "the instruments of kings and emperors."

The reference to fa in the quotation from Su wen 25 is rather inconspicuous. It is only in conjunction with quite a few other occurrences of the term fa, that is, of the concept of law or pattern, in the context of the Su wen that it is possible to imagine its origin here not in pure Legalist but in Huang-Lao thought.

 $Su\ wen\ 56$ , too, has a passage referring to fa. Six times a statement appears that is not really required in this technical medical context. Six times the author repeats the phrase  $shang\ xia\ tong\ fa\ \bot$  下  $\exists\ \pm$  , "the same law [applies] above and below." The author's motivation to intersperse this stereotypical four-character statement here six times is unclear. It corresponds to similar statements found in varying contexts elsewhere in the  $Su\ wen$ . For example,

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zuo\ you\ tong\ fa\ 左右 同法 "The same law applies to the left and right"^{65} jiu\ xin\ tong\ fa\ 久新 同 法 "The same law applies to old and new"^{66}
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Only a third such phrase,

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yu qi tong fa 餘氣同法
"The same law applies to the remaining qi"<sup>67</sup>
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represents a direct link to physiology.

These statements may be considered coincidental. At first glance, and abstracted from its current medical context, "the same law applies to above and below" reads like a sociopolitical exhortation, and one is tempted to think of the Legalists' emphasis on everybody alike being subject to law enforcement. The problem is, this everybody alike includes everybody except the

ruler. A statement *shang xia*, "above and below," if read as a sociopolitical metaphor, however, can refer only to the ruler and his people. This, however, was not the idea cherished by Legalism. In Chapter 5 and at the end of Chapter 6, Han Fei speaks of "eminent ministers and ordinary men" (大臣 匹夫), of "noble men and commoners" (貴賤), and of "those near the ruler and those distant to the ruler" (親疏) as those of higher and lower status who are equal in front of the law; the ruler himself always stands above the law.

The six *shang xia tong fa*, "the same law applies to above and below," then, make political sense only in the context of Huang-Lao philosophy. The *shang xia tong fa* statements of the *Su wen* may have been informed by notions pointed out by R. P. Peerenboom in his analysis of one of the philosophical manuscripts (*Jing fa* 經法, "Canonical Laws") recovered from tomb no. 3 at Mawangdui in 1973: "Most obviously, the ruler himself is bound by the laws. His actions are restricted. In the eyes of the law, he is to be treated like everyone else." In the words of Robin D. S. Yates: "The treatises emphasize that the ruler himself must abide by the law that emanates out of the transcendent, nameless, formless Dao, which is the origin of all phenomenal things in the universe. According to Peerenboom's interpretation, the ruler is not above the law, which is the position of legalists like the philosopher Hanfeizi, but rather is constrained by the law and the Dao." 69

The following quotation is noteworthy because it is part of the introduction to *Su wen* 77. Such introductory statements are often editorial additions, preceding the purely medical contents of a discourse. The present quotation is a good example; it places the practice of medicine in a philosophical context. In contrast to the passages quoted above, here we may be sure of an intentional wording, most likely meant to convey a programmatic message. Hence it should be no coincidence if we encounter key terms associated with specific social philosophies.

The art of the sages, it sets an example for all mankind. Judgment and mind must be based on laws and rules. If one follows the classics and observes the calculations and accordingly practices medicine with due reverence, this will be beneficial to all mankind.<sup>70</sup>

"Judgment," *lun cai* 論 裁, is required of rulers by the Legalist Han Fei.<sup>71</sup> The term *zhi yi* 志意, translated as "mind," was first used by the Confucian philosopher Xun zi, the teacher of Han Fei, who became the foremost Legalist thinker.<sup>72</sup> *Fa* and *ze*, "laws" and "rules," are mainstays of Legalism and Huang-Lao philosophy. In other words, if medicine is to be practiced in a way that relieves people of its ailments, its practitioners had better follow the same precepts that the Legalist and Huang-Lao worldview had prescribed for so-

ciety. The references to the example set by the sages and the demand to follow the classics, however, have their origin in Confucian thought.

The mingling of Legalist, Huang-Lao, and Confucian concepts in the quotation from  $Su\ wen\ 77$  is exemplary of the philosophical eclecticism of the Han era. One encounters it in a further editorial addition, this time not at the beginning but at the conclusion of a discourse:

If the Way is carefully observed as the law [demands], the mandate of heaven will last long.<sup>73</sup>

These final lines of *Su wen* 3 do not require a medical context. Their only purpose is to emphasize that following the law is a sure way if not the only way to longevity. Such a statement may have appealed both to Legalists and to proponents of Huang-Lao philosophy. However, the reference to the heavenly mandate reflects a Confucian concept. The mandate of heaven is a key notion of Confucianism. It was central to the social doctrine of the philosopher Dong Zhongshu 董仲舒(179–104), and it was the subject of an essay by the historian Ban Biao 班彪 (A.D. 3–54): Wang ming lun 王命論,"On the mandate given to kings." Here, Ban Biao voiced a widely held opinion that "all men, from the Son of Heaven in his nobility to the pauper in his distress, have their appointed mandate."<sup>74</sup>

How is this mandate to be exhausted to its full length? As the author of the final lines of *Su wen* 3 proposes, by adherence to law. Proponents of a pure Confucianism, of course, should have seen this a little differently. Proponents of a pure Daoism would not have found pleasure in this proposal at all.

The final lines of *Su wen* 3 reappear at the conclusion of *Su wen* 74, in a significantly more medicalized wording—an indication that the association of Confucian and Huang-Lao maxims with the medicine of systematic correspondence was more than merely coincidental.

If the Way is carefully observed in accordance with the law, a myriad cures are achieved in a myriad [cases] taken up. Qi and blood will assume a proper balance and the mandate of heaven will last long.<sup>75</sup>

Turning now to an examination of further occurrences of key terms and value words of Confucianism in the Su wen, we notice that neither the term li  $\stackrel{?}{=}$ , signifying the rites to be observed in social relationships between social partners such as rulers and subordinates, father and son, husband and wife, nor the term ren  $\stackrel{\checkmark}{=}$ , "humaneness," found use in the Su wen. Yi  $\stackrel{?}{=}$ , a Confucian key value commonly translated as "righteousness" in Western literature, appears just three times.

Early Confucian texts defined yi as follows.

Yi is that which is right to do (Zhong yong 中庸, Doctrine of the Mean, 5th c. B.C.)

The exemplary man bases his conduct on yi; he practices it by means of the rites li (Lun yu 論語, Confucian Analects, 5th c. B.C.)

Ren is man's heart; yi is man's way (Meng zi  $\Xi$   $\mp$ , The Writings of Mencius, ca. 300 в.С.) $^{76}$ 

Xun zi, a contemporary of Meng zi, defined yi as "following the structures."<sup>77</sup> That is, he considered yi as "conformity with an order or a system of norms which is considered as correct, rational, or natural."<sup>78</sup>

*Yi* is not the lawful behavior resulting from a fear of being punished or from a desire to be rewarded, and it is not the behavior resulting from a Daoist attitude of *wu wei*, that is, of not counteracting the natural course of developments. Yi is a conscientious behavior following moral norms; it is an attitude springing forth from humaneness in one's heart. This goodness is either inborn, as Mencius claims, or it has to be generated by education, as others had it. At any rate, the ability and intention to do what is right, that is, to conform with a system of norms, is the basis of a conduct that is appropriate, whatever the situation may be.

Given that the entire text of the Su wen consists of more than 88,000 characters, three occurrences of the term yi should be considered irrelevant. Nevertheless, it is not without significance to note that all three uses of the term are closely related to acupuncture. Acupuncture, as we had seen earlier, is the therapeutic technique per se associated with vessel theory, that is, with attempts to manipulate the flow of blood and qi in the conduits connecting the organs or function centers in the human body. As I have argued above, this was not a health care approach closely related to Daoist principles, and this, in turn, may explain why the three appearances of a key Confucian value term such as yi in the Su wen are all related to the practice of needle therapy, acupuncture, the method of choice to avert the prime anathema of Confucianism: luan 1, chaos, disorder.

Confucianism, like all the other social philosophies conceptualized in ancient China, had emerged during a period of increasing social disorder. But it is not exaggerated to identify, as Moritz does, *Chaos Angst* as a foremost constitutive element of Confucian philosophy in particular. I have discussed above some of the conceptual consequences this attitude may have elicited in medical thought; in the following quotation from *Su wen* 27, *yi*, to do the right thing in any given situation, and *luan*, here in the sense of rebellion, that is, creating chaos, are mentioned together. The final four characters of the first sentence, *zhen bu ke fu* 真不可復, "what is correct cannot be reinstated," are reminiscent of one of the core ideals of Confucians in a world they saw on a slope of deterioration: *fu li* 復禮, "the restoring of the rites," was believed to be the most effective remedy. Obviously, in medicine the con-

cept of *li* had no place; the restoring of what is correct was a most suitable conceptual bridge between political morality and medicine. In a medical context, "correct" refers to the correct, that is, regular, qi.

If one punishes where there is no transgression, this is called a great error.

If one rebels against the grand norms, the true [qi] cannot be restored.

If [a practitioner] treats a repletion as if it were a depletion, if he considers evil [qi] as if it were true [qi] and if he applies the needles disregarding what is right to do, contrary [to his intentions] he will be a plunderer of qi in that he removes the proper qi of [that] person.<sup>80</sup>

In a society built on law, great care should be taken to punish only those who have committed crimes lest the system of punishment and reward appears unreliable and loses its guiding function. Punishment, as described in this *Su wen* quotation, is not the "draconian instrument of terror of the Qin Legalists Shang Yang and Han Fei." It is a reflection, in a medical context, of the insistence by Huang-Lao philosophy that "each punishment fit the crime. For punishments and rewards to miss the mark is to violate the normative order."

The concept of "grand norms" could be claimed by Confucians and Legalists alike. It appears in what might be a Confucian context in a statement in the historical work *Zuo zhuan* 左傳 in the definition of *li*, "rites." The *Zuo zhuan* says:

Rites ( $\it li$ ) are the grand norms ( $\it da jing \pm \it mathematical$ ) of the kings. 83

Another early source is the  $L\ddot{u}$  shi chun qiu 呂氏春秋, a work written by an eclectic named Lü Buwei 呂不韋 (d. 235 B.C.), who, however, is most often termed a Legalist.<sup>84</sup> He wrote:

If [a ruler] prefers not to encounter obstacles, he should treat scholars generously. If [a ruler] wishes not to risk his position, he should capture the masses. If [a ruler] prefers not to summon misfortune, he should be fully prepared. These three are the grand norms of the rulers of mankind. 85

Finally, the grand historian Sima Qian, in his preface to his "Historical Records," *Shi ji* 史記, of go B.C., linked the term to the course of nature. He wrote:

Now spring generates, summer grows, autumn collects, and winter stores. This is the grand norm of the Way of heaven.  $^{86}$ 

Returning to the passage quoted above from *Su wen* 27, at first sight the author moved from the general in the first sentence to the specific in the

second, that is, from political morale to a medical theme. And yet it is difficult to read the second sentence without becoming aware of a certain philosophical background too. To mistake a state of repletion for a state of depletion is, in the present context, first of all a medical statement. To mistake evil for what is true or correct could occur both in a medical situation and in a broader political or moral context. *Yi* is the way to avoid such mistakes, not only in one's general conduct, but also in the practice of acupuncture. To abandon the right norms has severe consequences, as the final characters demonstrate in a succession of medical and general statements.

It may well be that the author who wrote the lines in Su wen 27 did not intend to reaffirm Confucian or Huang-Lao values in a medical context. Most likely he was imbued with these concepts to such a degree that when he attempted to emphasize a certain behavior in medicine as the one and only correct behavior, he could not think of any other arguments to lend plausibility to his request. However, it should also be kept in mind that philosophical texts of the time used yi sometimes in the morally neutral sense of, for example, "standard," "meaning," or "purpose." In view of its use in Su wen 27, both moral and morally neutral meanings could apply. Perhaps such an ambiguity was intended by the author. After all, he could have used a homophone yi  $\mathbf{E}$ , "a correct behavior required in a specific situation," if he had intended to give more neutral, technical advice.

The second appearance of yi, in Su wen 54, is the phrase yi wu xie xia 義無邪下, obviously a quote from an unknown source that was commented on by the Su wen author. Seen isolated, the four characters yi wu xie xia do not reveal any medical connection. They could translate literally as "do the right thing, do not what is evil, when lowering (something)." By commenting on the phrase yi wu xie xia, the author of Su wen 54 gave a definition of a conduct based on yi: yu duan yi zheng ye 敎端以正也. In a moral context, duan and zheng are often interchangeable; the present statement might be translated as "one must strive for correctness and uprightness." Given that the quotation and the commentary appear in the Su wen, a medical reading is required. I interpret the verb xia in the quotation as "to lower a needle," to insert a needle when practicing acupuncture, and the terms duan and zheng as referring to the positioning of the needle, that is, "upright" and "proper," the latter in direct opposition to xie, "improper," "evil." Hence, in the translation, the full passage reads:

As for

"do what is right to do, do not what is evil, when lowering [the needle]," that is, one should [hold the needle] upright and properly.<sup>88</sup>

In other words, it is only the medical context that makes us read this as a medical statement. When a Chinese read these lines two thousand years ago,

he may have been informed and influenced by both levels, the medical and the moral.

When [the moment] has come to deploy [the needle],

the interval [between decision and action] must not even [be as long] as the blinking of an eye.

The hand is moved with full concentration;

the needle shines and [its shape] is even.

The sentiments are calm and [one] concentrates on what is right to do [here].

[This way] one observes the changes as they happen. 90

### 4. CONCLUSION

The question raised by Bloor in *Knowledge and Social Imagery*, what processes go into the creation of knowledge, <sup>91</sup> is as pertinent in the context of the development of medicine in ancient China as it is in the study of modern European science. Readers of the *Su wen* will find an abundance of morphological data gained from viewing both the exterior and the interior of the human body. Just as the ancient Chinese saw a nose and two eyes and termed them nose and eyes, they knew of the stomach, the kidneys, and the gall as separate functional units and labeled them accordingly. Consumption of food and beverages and the excretion of more or less solid and liquid refuse through upper and lower orifices were recognized, of course, as primary functions of the body; bleedings, ulcers, and headache, to name but a few, were perceived of as abnormal and unwelcome states requiring explanation and therapeutic action.

Such an explanation is the core concern of medical and other health care systems of ideas. To arrive at such an explanation in medicine relies on natural laws, but it has never been neutral science, neither in most recent times nor two millennia ago. The explanatory models proposed by medical systems are the close networks of ideas, alluded to earlier, that are formed when data expressed by the body itself are woven together in the minds of observers with notions projected from outside. In a cross-cultural perspective, there is not much freedom to list the morphological details of the body and to perceive its most essential functions. Also, as the ubiquitous appearance of the ontic and systematic approaches in medical systems suggest, there is not even much if any freedom in how to interpret disease and health. But on top of these anthropological constants colorful variations appear, reflecting the idio-

syncrasies of culture, of physical and social environments, and of specific outlooks on the world as it is and as it should be.

Presumably, the social imagery, to name only three examples, in the novel interpretations of the human organism by the *Su wen* authors, in the disappearance of protoparasitology from vessel theory–based medicine, and in the emphasis on "law and order" as a guarantee of human health was not sought deliberately. Historical evidence suggests that the human mind in conceptualizing the human organism has rarely been capable of creating models independent from the conceptualization of the political organism. In general, the perception of social crisis and the perception of bodily ills are two aspects of one and the same style of thought.

Apparently we are confronted here with a cognitive principle in medicine and health care that transcends cultural borders. This principle, if it then exists, is responsible for the phenomenon noted above that the basic styles of thought underlying Chinese medicine, that is, the ontological and systematic approaches to an understanding of health and disease, are identical to those styles of thought underlying historical European and modern Western medicine. The experiences of aggression and defense are common to all humankind. These experiences form the basis of all medicine. They are covered by a secondary conceptual layer informed by different socioeconomic realities, physical environments, and political philosophies.

Because neither Chinese nor European civilization could be called homogeneous over the past two and a half millennia in terms of worldviews progagated and existential circumstances experienced, neither of the two could be identified with one representative system of medical thought. The philosophical and socioeconomic heterogeneity of Chinese and European civilization is reflected in the heterogeneity of the conceptual layers surrounding the core ideas of its medical and health care systems. The *Su wen* is an invaluable source to validate these conclusions.

### NOTES

### I. BIBLIOGRAPHIC HISTORY OF THE SU WEN

- 1. While the *Su wen* and the *Ling shu*, since their first appearances in bibliographic references, have been transmitted through the centuries in more or less restructured versions, a third text belonging to this group, the *Tai su*, was lost in China, possibly during the later Song dynasty. Fragments permitting a reconstruction of major portions of the *Tai su* were found in Japanese libraries in the nineteenth and early twentieth century. Another title, *Huang Di ming tang* 黄帝明堂, which is also counted among the *Nei jing* corpus, was lost by the Song era. For details on the *Ling shu*, see below, I.2, on the *Tai su*, see below, III.3, on the *Ming tang*, see below, III.1.
- 2. Zhao 1985: 6.
- 3. Quoted by Liu Changlin 1982: 16, from *Chuan jia ji*, Shu qi 傳家集, 書啓. See also Ma Boying 1994: 248.
- 4. Liu Changlin 1982: 8.
- 5. See below p. 4.
- 6. Song 1950: 8.
- 7. Quoted by Liu Changlin 1982:17, from *Bu shang gu kao xin lu*, Huang Di shuo 補上古考信錄, 黃帝説.
- 8. Song 1950: 6. Song Xiangyuan did not specify the author(s) of the article of 1928; he just gave its title, Zhong guo yi shu zhi zu 中國醫書之祖 ("The ancestors of Chinese medical literature"), and the journal it was published in: *Tian jin yi shi bao yi yao zhou kan* 天津益世報醫藥周刊. See also Shi 1940: 17, for a refutation of Huang Di's authorship of the *Huang Di nei jing* and for arguments to the effect that the textus receptus was compiled from pieces written by many different hands.
- 9. Liu Changlin 1982: 8-15.
- 10. Zhao 1985: 9. Similarly, Liu Chuanzhen: "Based on the analysis offered above, I conclude that the *Nei jing* was compiled for the most part during the middle or late period of the Western Han era. . . . Under these conditions, medical

people sat down and gathered and ordered the medical literature. At the same time, they wrote down new experiences, integrated them, and compiled the *Huang Di nei jing*, an immortal medical text of wide scope" (Liu Chuanzhen 1989: 15). See also Xu 1986a for discussions of several views.

- 11. Yang 1987: 2.
- 12. Keegan 1988: 64, 254.
- 13. Ibid., 64. See also Sivin 1993: 199.
- 14. Wind etiology appears to be a concept from the Zhou era perpetuated by the *Nei jing*. See Yamada 1980; Unschuld 1982a. Liu Changlin 1982: 17 discusses parallels between similar concepts in the *Su wen* and in the *Lü shi chun qiu* 呂氏春秋, a text compiled in 239 B.C.
- 15. Of the ten books handed by Yang Qing to Chunyu Yi, eight are mentioned or quoted in the textus receptus of the *Huang Di nei jing*. The two titles not mentioned are the *Yao lun* 藥論, "On Pharmaceutical Drugs," and the *Shi shen* 石神, "Stone Spirit," the latter presumably a work on external treatments with sharpened stones. This may be explained by the fact that both the pharmaceutical approach and the treatment with sharpened stones have received only marginal attention in the *Huang Di nei jing*. Liu Changlin 1982: 12 f. See also below sections V. 10, pp. 265 ff.; V.11, pp. 284 ff.
- 16. Huang Di zhen jiu jia yi jing, 1972, p. 3.
- 17. Han shu, vol. 6, chap. 30, p. 1776-1780. Tsien 1962: 14; Harper 1998: 6.
- 18. Han shu, vol. 6, chap. 30, p. 1776.
- 19. For the latter, see Yu et al. 1992. Some of their arguments will be quoted below.
- 20. Liao Yuqun 1988: 367; Yu et al. 1992: 3 ff.
- 21. Song ben shang han lun jiao zhu, 1982, 2 f.; Mitchell et al. 1999: 29 f.
- 22. Wei shu, vol. 6, 1970.
- 23. Bei qi shu, vol. 2, 680.
- 24. See below, III.4.1.
- 25. Yu et al. 1992: 57.

### II. THE MEANING OF THE TITLE HUANG DI NEI JING SU WEN

- 1. Long 1957: 107.
- 2. Tessenow will substantiate these conclusions in his forthcoming detailed analysis of structure and historical layers of the entire *Su wen*.
- 3. This had led Ma Boying to assume that Qi Bo, Bo Gao, Shao Shi, Shao Yu, and Gui Yuqu constituted a group of knowledgeable physicians who taught a student, named here Huang Di. Only Lei Gong, Ma further assumes, was a medical neophyte who, in turn, was taught by Huang Di. I have been unable to locate the historical evidence to support such a constellation. In fact, the conceptual heterogeneity of the text speaks very much against the existence of such a circle of discussants as the origin of the *Su wen* and the *Ling shu*. Nevertheless, it is of interest to note, as Ma Boying also stated, that except for Bo Gao, who may be identical with the Bo Gao mentioned in the *Guan zi* 管子 of the third or second century B.C., none of the other dialogue partners of Huang Di is attested elsewhere in more ancient Chinese sources. Ma Boying 1994, 254–257. It is not clear whether the Qi Bo mentioned by Sima Xiangru 司馬相如 in his poem Da ren fu

- 大人賦, quoted in the *Shi ji*, lent his name to the Qi Bo of the *Su wen*, or vice versa. See Song 1950: 12.
- 4. It may be that the close textual parallel between the rhymed passage at the beginning of *Su wen* and an identical passage in the *Shi ji* resulted not from the earlier quoting the latter but from both drawing on a third source.
- 5. Su wen 1-1-2. This note and all subsequent notes structured Su wen X-X-X refer to Huang Di nei jing su wen, 1983, with the first number referring to the Su wen treatise (pian), the second to the page of the 1983 edition, and the third to the line on that page. This page-and-line counting is also repeated in the original Chinese text preceding the translations of the seventy-nine Su wen treatises in subsequent volumes.
- 6. Xi ci 繫辭, commentary to the Yi jing, part 2, Shi san jing zhu shu, vol. 1, 86 (bottom).
- 7. Huai nan zi, n.d., 19: 1a.
- 8. Wang Ermin 1997: 6 ff.
- 9. Schafer 1985: 23; Harper 1998: 4. Bokenkamp 1997: 81n: "The 'Thearchs' (*Di*) were, as early as the Shang period, regarded as the ascended ancestors of the king. From 221 B.C.E. on, living emperors adopted the title. In Daoism, *Di* are the god-kings of the heavens."
- 10. Lewis 1990: 210.
- 11. Ibid.
- 12. Su wen 68-386-7.
- 13. Su wen 4-22-8.
- 14. Su wen 7-52-2.
- 15. Su wen 8-58-2.
- 16. Su wen 9-60-7.
- 17. Su wen 9-64-7.
- 18. Su wen 58-292-2, 71-457-9.
- 19. Su wen 9-63-5.
- 20. Su wen 69-402-5.
- 21. Su wen 1-1-3.
- 22. Zhu you 祝 由, "to invoke the origin," is a reference to exorcistic prayers or curses. The term signifies a demonological practice of curing an illness by "invoking," i.e., appealing to, the demon who was considered its "origin." For many centuries, until the end of the Ming dynasty, the "specialty of invoking the origin" (zhu you ke 祝 由 科) was an officially acknowledged discipline in health care, practiced by zhu you specialists. For a discussion of this paragraph, see below pp. 327–328.
- 23. Su wen 13-82-7.
- 24. Su wen 14-86-10.
- 25. Su wen 14-87-1.
- 26. Su wen 13-83-5.
- 27. Su wen 25-159-3.

were conceived of as a "support cord for the multitude of stars" and as holding the heaven together. See Harper 1978-1979: 3; 1980-1981: 50-51. In 1980-1981: 51, Harper stated: "The idea that in its function as the Mainstay of Heaven the Big Dipper regulates celestial movements entered into the political theories of the period. This idea underlies the ancient tradition that the ruler was to occupy the chamber inside the Hall of Light (明堂) which corresponded to the direction indicated by the handle of the Dipper during each of the twelve calendar months. See W. E. Soothill, New York 1952: p. 93." Moreover, the action of  $\mathbb{E}$  天綱, similar to the action of 在增壤玉衡以齊七政 mentioned in the *Shang shu, Yao dian*, was probably linked to "the initiation of a new reign by a ritual act which aligns the new monarch with the model of Heaven" (being a model of the Dipper, which represented Heaven). "An adjustment in the calendar for ritual purposes is probably involved as well." Harper 1980-1981: 51, responding to Cullen 1980-1981: 39.

- 29. Su wen 67-369-11.
- 30. See Harper 1980-1981: 51.
- 31. Su wen 58-302-9.
- 32. Su wen 79-561-2.
- 33. Su wen 76-550-8.
- 34. Su wen 75-549-4.
- 35. Lewis 1990: 211.
- 36. "The *Han Shu* alone lists works with *Huang Di* in the title under the categories of Daoism, yin yang, five phases, militarism, calendars, astrology, astronomy, medicine, sexual yoga, immortals, and more." Peerenboom 1993: 3.
- 37. Yates 1997: 17.
- 38. The topos of "student Huang Di" was, as Anna K. Seidel pointed out long ago, not restricted to the *Su wen*. In fact, as she observed in her study of the rise of Lao zi to divine status in Han Daoism, "the Yellow Emperor is never a Master; his wisdom always originated from instructions received by him as a disciple. His masters were his ministers as well as daoist sages . . . and divine beings." Seidel 1969: 51.
- 39. Qian 1990: 3.
- 40. Han fei zi ji shi 516, 611.
- 41. Qian 1990: 4.
- 42. Zhang shi lei jing 27.
- 43. Ibid.
- 44. Gao 1988: 8. See Xu 1986a: 45 for a similar view.
- 45. Han yu da ci dian, vol. 1, p. 1017.
- 46. Xun zi yin de, chap. 1, p. 2, line 26.
- 47. This was already proposed by Lu Wenchao 盧文昭, a Qing author. Qian 1990: 5 f.
- 48. Zhuang zi yin de, pian 14, p. 39, line 75.
- 49. See Gao 1988: 7 f., for an opposite view. Gao Bozheng equated *jing* 經 with *shu* 書 and saw in the early usages of *jing* 經 merely references to "scriptures" or "texts."
- 50. Graham 1978: 243-245.
- 51. Webster's Seventh New Collegiate Dictionary 1965: 122.
- 52. Shi san jing zhu shu, vol. 2, 2780 (top).

- 53. This view is shared, among others, by Xu 1986a: 45.
- 54. Huang Di nei jing su wen, p. 1, note preceding the heading of the first pian.
- 55. Ibid.; also, Liu Changlin 1982: 15 f.
- 56. Qian 1990: 11, 12.
- 57. Ibid., 12.
- 58. Bai hu tong zhu zi suo yin, 61.
- 59. Qian 1990: 13.
- 60. I am grateful to Donald Harper who attracted my attention to the reference in the *Lie xian zhuan* 列仙傳 to the *su shu* 素書, "pure documents," referring to writings about sexual cultivation. See Kaltenmark 1987: 181 and 182 n. 2 for the account of Nüji.
- 61. Jun zhai du shu zhi jiao zheng no. 990, p. 701.
- 62. See below p. 26-33.
- 63. 平日講求, 謂之素問; Qian 1990: 7.
- 64. ping su wen da 平素問答; Qian 1990: 7.
- 65. ping su suo jiang wen shi wei su wen 平素所講問是謂素問. Zhang shi lei jing, 27.
- 66. Gu jin wei shu kao bu zheng, 204.
- 67. This quote from the *Bie lu* is from the Tang author Yan Shigu's commentary to the *Han shu* (*Han shu*, p. 1732, note 4). Hence at least parts of the original *Qi lüe* may have existed during the Tang era, if Yan Shigu did not quote from yet another secondary source.
- 68. Qian 1990: 13.
- 69. Ibid.

# III. EARLY SU WEN TEXTS AND COMMENTARIES BEFORE THE ELEVENTH CENTURY

- 1. Ma 1990: 89 f.
- 2. Ibid., 90 ff.
- 3. Wang Hongtu 1997: 23 ff.
- 4. Ibid., 24.
- 5. Ibid., 28.
- 6. Ibid.; see *Su wen* 262, note 7.
- 7. The first author to extract a list of treatises, their titles, and their sequence from the *Su wen* commentaries by Gao Baoheng et al. was the Japanese scholar Tamba Genkan 丹波元簡 when he wrote his *Quan Yuanqi juan mu kao* 全元起卷目考 in the nineteenth century. He arrived at a total of 68 treatises, a figure that was adopted by his son Tamba Gen-in 丹波元胤 in his *Zhong guo yi ji kao*. In the twentieth century the Chinese researcher Long Bojian 龍伯堅 discovered a reference to an additional *juan* not noticed by Tamba Genkan and counted a total of 69 *Su wen xun jie* treatises. Ma Jixing, finally, arrived at a total of 70 treatises. See Tamba Gen-in 1983: 17 f.; Ma 1990: 71; Wang Hongtu 1997: 26.
- 8. Ma 1990: 85.
- 9. For a complete list of all the notes on times and copyists added to the individual *juan* as they appear in the fragments found in Japan, see Wang Hongtu 1997: 59–61.

- 10. Ibid., 36.
- 11. Ma 1990: 85.
- 12. Ibid., 85-89.
- 13. Ibid. See also appendix following *juan* 30 of the *Zheng he ben cao* 政和本草: 嘉補注本草奏敕.
- 14. Ma 1990: 85-87; Wang Hongtu 1997: 34-35. See also Xiao 1965.
- 15. Preface to the Chong kuang bu zhu Huang Di nei jing su wen.
- 16. For the most detailed research on the lifetime of Yang Shangshan available at present, see Qian 1998: 40 ff.
- 17. Xiao 1965, 3-4 (introduction by Xiao Yanping). Qian 1998: 44-49.
- 18. Wang Hongtu 1997: 30-32.
- 19. Qian 1990: 6-8; Wang Hongtu 1997: 29.
- 20. Ma 1990: 85.
- 21. Wang Hongtu cites this discrepancy as an argument that the *Qi lüe Tai su* and Yang Shangshan's original were not identical. While we agree with the conclusion, we follow Ma Jixing, who does not exclude the possibility that the discrepancy resulted from the inability to find a twentieth *pian* title in the five lost *juan* of the Japanese fragment.
- 22. Ma 1990: 85.
- 23. Wang Hongtu 1997: 33.
- 24. Ibid., 32. The quotation is from the *Tai ping yu lan, juan* 618. The textus receptus of the *Bo wu zhi* does not contain a reference to the *Su wen*; see *Bo wu zhi jiao zheng*, pp. 72, 77.
- 25. Wang Hongtu 1997: 33.
- 26. Ibid., 34.
- 27. Qian 1998: 75.
- 28. Ibid., 87.
- 29. Ibid., 88.
- 30. Yamada 1979.
- 31. Wang Hongtu 1997: 39-40.
- 32. The bibliographic section of the Earlier Tang History (Jiu Tang shu 舊唐書) lists the following books authored by Yang Shangshan: Lao zi 老子, Lao zi dao de zhi lüe lun 老子道德指略論, Lüe lun 略論, Zhuang zi 莊子, Liu qu lun 六趣論, San jiao quan heng 三教詮衡, Huang Di nei jing tai su 黄帝內經太素, and Huang Di nei jing ming tang lei cheng 黄帝內經明堂類成. Only the latter two are medical texts. Another text listed under "Daoist books" as Tai shang xuan yuan Huang Di dao de jing 太上玄元皇帝道德經 by Yang Shangqi 楊上器 has been suspected to have been written by Yang Shangshan too, with the character 器 being an error for 善. See Qian 1990: 34.
- 33. Huai nan zi zhu zi suo yin, chap. 3, p. 25, line 17.
- 34. Huang Di nei jing tai su, 327.
- 35. Ibid., 5, 58. See also 19, 327.
- 36. Ibid., 5, 57.
- 37. Ibid., 6, 70, identical to a passage in the textus receptus of *Ling shu* 8.
- 38. Huang Di nei jing tai su, 70 f.
- 39. Ibid., 525.
- 40. Ibid., 525-526.

- 41. Ibid., 2.
- 42. Ibid.
- 43. The first two lines are a quotation from the *Li ji*, section Ju li, first part. *Shi san jing zhu shu*, vol. 1, p. 1251, top.
- 44. Huang Di nei jing tai su, 2.
- 45. Ibid.
- 46. Su wen 8-59-3.
- 47. Huang Di nei jing tai su, 127; see also Ling shu, 71 for almost identical wording.
- 48. Huang Di nei jung tai su, 127.
- 49. Ibid., 103.
- 50. Ibid.
- 51. Duan 1991a.
- 52. Duan 1991b; Yang Shizhe et al. 1998: 174.
- 53. Duan 1991b.
- 54. This title is not listed in Hucker 1985. *Tai pu* was an ancient title identified as "Chamberlain of the Imperial Stud"; the term *ling* commonly referred to the position of "director."
- 55. Qian 1990: 63 ff.; reprinted in Wang Hongtu 1997: 92 ff. See also Yang Shizhe et al. 1998: 175 for an identification of Wang Bing as a Daoist.
- 56. See comments by Wang Bing on relevant passages in *Su wen* 11-78-9, *Su wen* 13-82-7, and *Su wen* 66.
- 57. See Zhuang zi yin de, chap. 3, p. 7, line 3, for the origin of this well-known metaphor.
- 58. Presumably, Qin Yueren 秦越人, i.e., Bian Que 扁鵲.
- 59. I.e., Chunyu Yi 淳于意.
- 6o. I.e., Zhang Ji 張 機 and Hua Tuo 華 陀.
- 61. I.e., means to predict the future.
- 62. Chong kuang bu zhu Huang Di nei jing su wen, preface.
- 63. See Wang Hongtu 1997: 72 ff. for a discussion of the following and other examples.
- 64. *Su wen* 41-234, note 9.
- 65. Qian 1990: 78.
- 66. Wang Bing spoke of one *juan*, i.e., the seventh, as missing in his master copy. What he inserted, however, comprises four *juan*, possibly because of the enormous length of the altogether seven *pian*, called the seven "comprehensive treatises" (*da lun 大* 論). It remains unclear whether Wang Bing believed that the text of the seven *pian* inserted by him was identical to the text of the missing *juan*. In this case, the missing *juan* would have to be considered to have been extraordinarily long.
- 67. Harper 1998: 52; Harper 1988.
- 68. See Su wen 46-259, note 2. See also translation Su wen 46, note 37.
- 69. Huang Di nei jing su wen 457, note preceding the heading of pian 71.
- 70. Qian 1990: 79.
- 71. Ibid., 66.
- 72. Ibid., 64 f.
- 73. Song 1950: 11.
- 74. Cf. Tamba Genkan 丹波元簡, Su wen shi 素 問識. Qian 1990: 65. Tamba Genkan

was the first to point out that the very first two characters 昔在, which were not part of the original Shi~ji text, may have been quoted from the Yao dian 堯典 in the Shang~shu 尚書, where the text states 昔在帝堯.

- 75. Qian 1990: 65.
- 76. Su wen 67-373-1.
- 77. Su wen 67-373-1, note 3.
- 78. Qian 1990: 68.
- 79. Su wen 11-78-9.
- 80. Su wen 74-544, note 1.
- 81. Su wen 1-3, note 11.
- 82. Su wen 3-18-6, note 7.
- 83. See most recently Dudbridge 1995.
- 84. Su wen 43-240, note 4.
- 85. Su wen 1-1, note 1.
- 86. *Su wen* 4-22, note 8.
- 87. Su wen 79-562, note 2.
- 88. Su wen 2-9, note 2.
- 89. Su wen 1-2-5.
- 90. Su wen 1-2, note 9.
- 91. Su wen 1-2, note 10.
- 92. Su wen 47-259-11.
- 93. Su wen 47-260, note 1.
- 94. Su wen 24-155-4.
- 95. Su wen 24-155, note 2.
- 96. Fang and Xu 1984: 94-95.
- 97. Su wen 68-390-2.
- 98. Su wen 68-390, note 5.
- 99. Su wen 68-390-2.
- 100. Su wen 68-390, note 6.
- 101. Su wen 68-390-3.
- 102. Su wen 68-390, note 7.
- 103. Su wen 68-390-3.
- 104. Su wen 68-391, note 1.
- 105. Su wen 68-391-1.
- 106. Su wen 68-391, note 2.
- 107. Su wen 68-391-1.
- 108. Su wen 68-391, note 3.
- 109. Su wen 58-292, note 5.
- 110. Su wen 62-336-3.
- 111. Su wen 62-336, note 3.
- 112. Su wen 1-2, note 10; Wang Hongtu 1997: 485.
- 113. Su wen 61-326-12.
- 114. Su wen 43-242-1.
- 115. Su wen 48-264-5.
- 116. Su wen 21-140-1.
- 117. Su wen 21-139, note 11.
- 118. Su wen 21-140, note 1.

# IV. ORIGIN AND TRADITION OF THE TEXTUS RECEPTUS OF THE SU WEN

- 1. Wang Hongtu 1997: 128.
- 2. Based on *Zhuang zi, pian* 28, Rang wang 讓王: 道之真以治身, 其緒餘以為國家: "The true object of the Dao is the regulation of the person. Quite subordinate to this is its use in the management of the state and the clan." *Zhuang zi yin de*, p. 77, line 27.
- 3. See the opening lines of Su wen 67.
- 4. A quote from the section Hong fan 洪範 in the *Shu jing* 書經. The translation here follows James Legge.
- 5. A reference to the documentation of a physician named He of Qin in the *Zuo zhuan*, Chao gong 1st year. *Shi san jing zhu shu*, vol. 2, p. 2025, top. In the *Zuo zhuan*, He drew attention to the relationship between disease and "six qi," i.e., yin, yang, wind, rain, darkness, and brightness.
- A Zhou-era official or institution responsible for recording teachings of lasting value.
- 7. I.e., Bian Que 扁鵲. See his biography in Shi ji 史記, chap. 105.
- 8. I.e., Chunyü Yi 淳于意. See his biography in Shi ji 史記, chap. 105.
- 9. I.e., Zhang Ji 張機, author of the Shang han za bing lun 傷寒雜病論.
- 10. See Lü shi chun qiu zhu zi suo yin, chap. 14.2, ben wei 本味, p. 71, line 15.
- 11. Ji Zi is the man, recorded in the chapter Hong fan of the *Shang shu*, who spoke of several pentic categorizations, including the *wu xing*.
- 12. Huang Di nei jing su wen 1983: 3-4.
- 13. Su wen 1, commentary in small script following the title Shang gu tian zhen lun pian di yi 上古天真論篇第一.
- 14. Wang Hongtu 1997:129.
- 15. Su wen 5-34-5.
- 16. Su wen 66-361-3.
- 17. Su wen 66-361, note 1.
- 18. Su wen 14-87, note 7.
- 19. Su wen 55-285, note 4.
- 20. Su wen 7-55-4.
- 21. *Su wen* 18-111, note 12.
- 22. Su wen 18-114-1.
- 23. Su wen 18-114, note 2.
- 24. Ibid.
- 25. Su wen 58-297-2.
- 26. Su wen 58-297-4.
- 27. Ibid.
- 28. Su wen 6-50-2.
- 29. See above p. 7.
- 30. Su wen 6-50, note 4.
- 31. Mostly written Yuantai 元台 during the Qing because of a taboo on the character *xuan*.
- 32. Si ku quan shu zong mu, 881 (top).
- 33. Su wen 11-78-8.

- 34. Su wen 11-78, note 9.
- 35. Wang Hongtu 1997:108 ff.
- 36. Ibid., 123.
- 37. Xin xiu si ku quan shu ti yao, vol. 15, p. 1113.
- 38. *Ge xia* was identified by an anonymous commentary in the main text as "*Yong*-abscesses inside the stomach duct." It may originally have been a foreign term whose meaning was lost subsequent to its introduction to China. See *Su wen* 40-224-1.
- 39. Su wen 40-224, note 3.
- 40. Wang Hongtu 1997: 125.
- 41. Si ku quan shu zong mu, vol. 1, p. 876.
- 42. Lei jing, 3.11; Zhang shi lei jing, 60.
- 43. Su wen 77-554-1.
- 44. Lei jing, 12.18; Zhang shi lei jing, 251.
- 45. Zhang 1993: 297.
- 46. Qian 1990: 95; also Wang Hongtu 1997: 113.
- 47. Tamba 1956: 44.
- 48. Ibid.
- 49. Zheng tang du shu ji 1959, vol. 2, p. 740.
- 50. Wang Hongtu 1997: 126 f.
- 51. Ibid., 142 f.
- 52. Qian 1990: 157 f.
- 53. Wang Hongtu 1997: 152.
- 54. Ibid., 161-165.
- 55. See above, III.3.
- 56. Wang Hongtu 1997: 165-167.

### V. A SURVEY OF THE CONTENTS OF THE SU WEN

- 1. Harper 1998: 42-67.
- In the sense of a literature devoted to a specific realm of technical or scientific knowledge.
- 3. Su wen 44-248-12.
- 4. *Ling shu* 5-280-8b.
- 5. Su wen 74-507-8.
- 6. Ling shu 48-397-3a.
- 7. Su wen 9-64-7.
- 8. Su wen 9-64, note 5.
- 9. Su wen 77-553-5.
- 10. Su wen 35-203-16.
- 11. *Ling shu* 55-411-5b.
- 12. The Ci fa was also quoted in Su wen treatises 33, 40, 47, and 62.
- 13. Su wen 77-557-7. For an identification of 換度, 陰陽, 奇恆, and 五中 as ancient book titles, see also Fu 1988: 310.
- 14. See Su wen 46, 69, 77, 79.
- 15. See Su wen 34, 44, 46, 77, 79.
- 16. Su wen 15-89-2.

- 17. Su wen 76-549-8.
- 18. Su wen 76-552-9.
- 19. Su wen 77-555-4.
- 20. Su wen 81-571-11.
- 21. Su wen 19-121-10.
- 22. "The Yin and Yang are fully established in the philosophical literature as the two fundamental principles by about 300 B.C., but without yet being fitted into correlative schemes." Graham 1986: 9.
- 23. Neininger 1990: 24.
- 24. Gong 1985: 65.
- 25. "Five phases" is an English rendering of the German expression *Fünf Wandel-phasen*, an interpretive translation suggested by Richard Wilhelm earlier this century. Manfred Porkert introduced the English term "Five Evolutive Phases," which is commonly abbreviated to Five Phases now.
- 26. Kalinowski 1991: 111.
- 27. Harper 1998: 379-381.
- 28. In the *Su wen* 4 statement, "all these are correspondences in the mutual transportation [of qi] among yin and yang, outer and inner, inside and outside, female and male [regions]," the terms "male" and "female" have been interpreted as remnants of an ancient dualistic terminological pattern. See Liu 1989: 14.
- 29. Xi ci 繋 辭 commentary, part 1. Shi san jing zhu shu, vol. 1, p. 76 (bottom).
- 30. Hexagram tai 泰. Shi san jing zhu shu, vol. 1, p. 28 (center).
- 31. See also Peerenboom 1993: 226 ff.
- 32. Guan zi, Cheng ma 管子 乘馬. Xin yi guan zi du ben, vol. 1, p. 70.
- 33. Su wen 5-31-2.
- 34. Su wen 5-42-4.
- 35. Su wen 1-2-1.
- 36. Su wen 1-6-10.
- 37. Su wen 25-160-5.
- 38. Peerenboom 1993: 45.
- 39. Su wen 5-31-4.
- 40. Su wen 5-32-4.
- 41. Su wen 5-32-7.
- 42. Su wen 5-44-6.
- 43. Su wen 5-44-8.
- 44. Su wen 6-48-6, 9-61-2.
- 45. Su wen 7-53-3.
- 46. Su wen 6-48-8.
- 47. Su wen 4-24-9.
- 48. Su wen 6-50-5.
- 49. Su wen 20-135-2.
- 50. Su wen 33-197-5.
- 51. Su wen 34-198-5.
- 52. Su wen 23-152-7.
- 53. Su wen 23-152-9.
- 54. Su wen 4-24-6.
- 55. Su wen 4, note 42.

- 56. Su wen 4-25-5.
- 57. Su wen 5-33-3.
- 58. Su wen 5-33-3.
- 59. *Han Fei zi* 韓 非 子, *pian* 8, Yang quan 揚 權, speaks of 厚酒肥肉, "strong/rich wine and fat meat." *Han Fei zi ji shi*, p. 121. *Zhuang zi* 莊子, *pian* 10, Qu qie 胠 箧, speaks of 酒薄, "wine that is thin/weak in flavor." *Zhuang zi yin de*, p. 24, line 14.
- 60. Su wen 5-33-4.
- 61. Su wen 5-33-7.
- 62. Su wen 4-25-3.
- 63. See below, p. 167-169.
- 64. Su wen 6-50-2.
- 65. Su wen 6-51-4.
- 66. See also below, p. 179.
- 67. Su wen 24-155-1.
- 68. See below, p. 136 ff.
- 69. Su wen 9-67-5. The labeling of the liver as minor yang in the yang is a copying error. The Quan Yuanqi edition, the *Jia yi jing*, and the *Tai su* have "minor yang in the yin." For details, see *Su wen* 9, note 69.
- 70. Ling shu 41-379-3a.
- 71. Ling shu 1-266-3a.
- 72. This was Wang Chong 王充 in chap. 14 of his *Lun heng* 論衡; see also below, p. 110.
- 73. Su wen 29-179-8.
- 74. Su wen 29-180-3.
- 75. Su wen 22-142-1, 32-187-1.
- 76. Su wen 32-190-1.
- 77. Su wen 20-137-2.
- 78. Su wen 17-102-4.
- 79. Yu et al. 1992: 73.
- 8o. See below, V.3.7.
- 81. Su wen 5-45-3.
- 82. Graham noted that "throughout the classical period correlative schematising belongs only to astronomers, diviners, musicmasters, physicians; the philosophers from Confucius to Han Fei do not engage in it at all. We find different levels of thinking in philosophy and in the proto-sciences very much as in Europe." Graham 1986: 8–9.
- 83. This will be dealt with in detail by Tessenow in his structural analysis of the Su wen.
- 84. Kramers 1986: 763.
- 85. *Shi san jing zhu shu*, vol. 2, p. 1997 (center).
- 86. Shi san jing zhu shu, vol. 1, p. 905 (center)
- 87. Yu et al. 1992: 73.
- 88. *Zhou li*, di guan, mu ren 周禮, 地官, 牧人. Zheng Xuan commented: "The six sacrificial animals include ox, horse, sheep, pig, dog, chicken." *Shi san jing zhu shu*, vol. 1, p. 723 (center).
- 89. Zuo zhuan, Zhao gong shi yi nian 左傳, 昭公十一年. Du Yu commented: "The five sacrificial animals include ox, sheep, pig, dog, and chicken." *Shi san jing zhu shu*, vol. 2, p. 2060 (bottom).

- 90. Shi san jing zhu shu, vol. 1, p. 1846 (center).
- 91. Shi san jing zhu shu, vol. 1, p. 135 (top).
- 92. See below, V. 4.6-4.7.
- 93. Guo yu, juan 16, p. 4a.
- 94. Shi san jing zhu shu, vol. 1, p. 188 (center).
- 95. Neininger 1990: 17.
- 96. Xin du Guan zi du ben, 122 f.
- 97. Ibid., 723 f.
- 98. Ibid., 745 f.; see also Graham 1986: 85.
- 99. Shi ji, chap. 28, p. 1368.; Han shu, vol. 4, chap. 25a, p. 1203.
- "The problem of rationalizing and ritualizing the forcible overthrow of the legitimate ruler remained a basic issue in the use of violence throughout Chinese history. The theory that each dynasty had its own characteristic 'potency' associated with one of the Five Phases, that each phase naturally gave birth to the next, and that the propriety of the transition would be revealed in various natural signs and prodigies offered yet another justification of violence through claims of accord with natural patterns and the imitation of Heaven." Lewis 1990: 209.
- 101. Graham portrayed Zou Yan as a figure "right outside the philosophical schools." Graham 1986: 12–13. In contrast, "Zou Yan is an influential figure not only at the Jixia Academy but throughout the state of Qi and beyond. He appears to have been held in particularly high regard by the politicians of his day." Peerenboom 1993: 226.
- 102. In fact, Graham considers the *Lü shi chun qiu* "the earliest firmly dated philosophical text to lay out schemes of correspondences (although there are calendrical schemes in *Kuan-tzu* 管子 which are likely to be a little earlier)." Graham 1986: 13.
- 103. *Mo zi yin de*, chap. 41, Jing xia 經下, p. 66, line 1. *Sun zi bing fa xin zhu*, 58. In Graham's interpretation, the Sun zi and Mo zi statement that "the five agents lack regular conquest" represents the rejection of the conquest sequence within nascent *wu xing* theories as describing a genuine process in nature. Graham 1986: 9.
- 104. Mo zi yin de, chap. 43, Jing shuo xia 經説下, p. 72, line 50. Mo bian fa wei, 292.
- 105. Modified after Yu et al. 1992: 76 ff.
- 106. Yu et al. 1992: 90 f.
- 107. Ibid., 91.
- 108. Ibid., 93.
- 109. Loewe 1986b: 738; Loewe 1979.
- 110. Unschuld 1985a: 154 ff.
- 111. Su wen 22-149-2.
- 112. Su wen 19-128-10.
- 113. Su wen 9-66-9.
- 114. Su wen 4-25-11.
- 115. Su wen 5-36-1.
- 116. See below, V.7.10, for a more detailed discussion of these concepts.
- 117. Su wen 10-70-6.

- 118. Su wen 10-71-2.
- 119. Su wen 23-152-5.
- 120. Su wen 5-36-1.
- 121. Su wen 10-71-4.
- 122. Su wen 10-70-4.
- 123. Su wen 23-154-1.
- 124. Su wen 23-150-2.
- 125. Su wen 44-246-8.
- 126. Su wen 25-160-8.
- 127. Su wen 19-122-1.
- 128. Su wen 22-145-3.
- 129. Su wen 22-145-5.
- 130. Su wen 22-145-7.
- 131. Su wen 22-145-8.
- 132. Su wen 19-124-8.
- 133. Su wen 65-357-10.
- 134. See Su wen 65, note 30.
- 135. Su wen 9-67-6.
- 136. Su wen 10-70-3.
- 137. Su wen 23-150-4.
- 138. See Su wen 23, note 3.
- 139. Su wen 23-150-4.
- 140. Su wen 23, note 4.
- 141. Su wen 23-150-4.
- 142. Su wen 23, note 5.
- 143. Su wen 23-150-4.
- 144. Su wen 23, note 6.
- 145. Su wen 23-150-5.
- 146. Su wen 23, note 7.
- 147. Su wen 23-152-1.
- 148. Su wen 23-154-5.
- 149. See the Appendix.
- 150. Su wen 22-141-11.
- 151. Su wen 16-91-4.
- 152. See also Peerenboom 1993:258 f.
- 153. Su wen 60-323-1.
- 154. Su wen 22-146-6.
- 155. Su wen 63-345-3.
- 156. Su wen 35-202-3.
- 157. Su wen 28-178-4, 74-512-1.
- 158. Su wen 22-146-7, 61-327-7.
- 159. Su wen 40-225-2.
- 160. Su wen 48-264-5.
- 161. Su wen 22-146-6.
- 162. Su wen 19-120-8.
- 163. Su wen 22-146-7.
- 164. Su wen 36-209-5, 42-239-3.

- 165. Su wen 44-247-2.
- 166. Su wen 35-201-15.
- 167. Su wen 35-202-1.
- 168. Su wen 60-321-2.
- 169. Su wen 36-206-15.
- 170. Su wen 17-100-6.
- 171. Su wen 43-242-1
- 172. Su wen 60-320-4.
- 173. Su wen 41-234-1.
- 174. Su wen 59-315-2, 60-320-4, 74-509-5.
- 175. Su wen 60-321-2, 60-320-4.
- 176. Su wen 44-247, note 4.
- 177. Su wen 44-247-3.
- 178. Su wen 44-247-4.
- 179. Su wen 10-70-3, 23-154-1, 44-246-9.
- 180. Su wen 52-276-2.
- 181. Su wen 29-180-14.
- 182. Su wen 79-565-3.
- 183. Su wen 33-197-9.
- 184. Su wen 18-111-4.
- 185. Su wen 41-229-1.
- 186. Su wen 41-229-5.
- 187. Su wen 52-275-9.
- 188. Su wen 44-248-7, 61-326-5 ff.
- 189. Su wen 22-142-5.
- 190. Su wen 61-326-7.
- 191. Su wen 8-59-01.
- 192. Su wen 43-242-3.
- 193. Su wen 47-259-8.
- 194. Su wen 33-197-10.
- 195. Su wen 3-20-4.
- 196. Su wen 42-239-3.
- 197. Su wen 10-71-2.
- 198. Su wen 32-189-2.
- 199. Su wen 37-213-1.
- 200. Su wen 49-271-7.
- 201. Su wen 42-237-3.
- 202. Su wen 32-187-5.
- 203. Su wen 44-248-11.
- 204. Su wen 3-16-6.
- 205. Ibid.
- 206. Su wen 20-133-5.
- 207. Su wen 42-238-6.
- 208. Su wen 69-406-2.
- 209. Su wen 74-512-1.
- 210. Su wen 43-241-11.
- 211. Su wen 74-512-1.

- 212. Su wen 69-404-3.
- 213. Su wen 22-147-4.
- 214. Su wen 65-358-4.
- 215. Su wen 48-264-6.
- 216. Su wen 44-248-8.
- 217. Su wen 43-242-2.
- 218. Su wen 52-279-5
- $219. \ \ Su\ wen\ 52\text{-}279\text{-}2.$
- 220. Su wen 10-73-2.
- 221. Su wen 17-100-7.
- 222. Su wen 52-278-5.
- 223. Su wen 44-246-10.
- 224. Ibid.
- 225. Su wen 19-126-7.
- 226. Su wen 44-247-2.
- 227. Ibid.
- 228. Su wen 3-16-4.
- 229. Su wen 44-248-11.
- 230. Su wen 35-206-3.
- 231. Su wen 44-247-1.
- 232. Ibid.
- 233. Su wen 62-335-2.
- 234. Su wen 8-59-1.
- 235. Su wen 60-323-5.
- 236. Su wen 44-247-2.
- 237. Su wen 35-206-3.
- 238. Su wen 43-242-2.
- $239. \ \textit{Su wen } 44\text{-}246\text{-}13.$
- 240. Su wen 2-11-3, 5-32-6, 3-18-5.
- 241. Su wen 48-266-6.
- 242. Su wen 74-509-6.
- 243. Su wen 69-411-6.
- 244. Su wen 71-467-1.
- 245. Su wen 74-527-3.
- 246. Su wen 17-108-2.
- 247. Su wen 43-242-4.
- 248. See below, V.5.2.
- 249. Su wen 16-94-2; see also Su wen 64-355-7.
- 250. It is noteworthy that the denial of the clearly morphological and localistic meaning of ancient Chinese designations of organs, formerly confined to TCM-apologetic literature, has begun now to affect comparative research in Chinese and Western science. Hence my translation of *Su wen* 8-58-2 ff. differs substantially from that offered in Lloyd 1997: 192.
- 251. Presumably, *zang* and *fu* were chosen originally simply for theoretical reasons, that is, to divide the organs in groups of yin and yang organs. As in some other cases, for this purpose two terms were chosen that had almost identical meanings, in this case, storage facilities. Hence *zang* was used in some ancient com-

mentaries to define fu, as for example in the etymological dictionary Shuo wen jie zi 說文解字, which defines fu as wen shu cang ye 文書藏也, "where literary writings are stored." Shuo wen jie zi defines zang as ni  $\mathbb E$ , "to hide." Ni, in turn, was used in the Huai nan zi in the sense of "empty," "hollow." The rendering by some modern authors of the five zang as "solid organs" and of the six fu as "hollow organs" is entirely unjustified in view of the metaphors implied by the terms zang and fu in ancient China.

- 252. Su wen 11-77-10.
- 253. Harper 1998: 395.
- 254. Su wen 17-98-6, 17-100-5.
- 255. Su wen 5-31, note 5.
- 256. Bai hu tong zhu zi suo yin, chap. 30, p. 56, line 26.
- 257. Bai hu tong zhu zi suo yin, chap. 30, p. 56, line 27.
- 258. Su wen 23-153-6. For comparison, see Su wen 62-334-9, where the following associations are listed: "The heart stores the spirit. The lung stores the qi. The liver stores the blood. The spleen stores the flesh. The kidneys store the will."
- 259. Xu 1986b: 53. Hucker 1985: 189: "Rectifier, from A.D. 220 local dignitaries appointed in each Region, Commandery, and District to register and classify all males in their jurisdictions who were considered eligible for government office on the basis of their hereditary social status, assigning them to 9 ranks theoretically reflecting their meritoriousness."
- 260. Su wen 8-58-2.
- 261. Su wen 79-561-1.
- 262. Su wen 44-247-3.
- 263. Su wen 9-69-3.
- 264. Su wen 47-262-1.
- 265. Su wen 16-94-3, 52-276-2, 64-355-7.
- 266. Meng 1988: 24. See also Shi ji, vol. 6, p. 1853; Bodde 1986: 53.
- 267. Meng zi yin de, p. 55, no. 15.
- 268. See *Han shu*, chap. 99, biography of Wang Mang, third year of *tian feng* 天 原 reign period (A.D. 16); *Han shu*, vol. 12, 4145; Watanabe 1956.
- 269. Schmidt-Glintzer 1990: 110.
- 270. Shi san jing zhu shu, vol. 1, p. 667.
- 271. For the gallbladder, *dan* 膽, see *Shi ji*, Yue wang gou jian shi jia 越王勾踐世家. For the triple burner, a purely theoretical construct possibly paralleling the ancient Greek concept of "innate heat" as a source of changing temperatures of the human body, see *Shi ji*, chap. 105, Bian Que Cang gong lie zhuan 烏鵲倉公列傳.
- 272. Su wen 9-63-2. An identical passage and commentary appear in Su wen 20-32-3.
- 273. See Su wen 9, note 21.
- 274. Su wen 21-139-6.
- 275. Ling shu 54-410-5b.
- 276. Su wen 11-77-3.
- 277. Su wen 9-69-3.
- 278. Quoted from *Tai ping yu lan*, Ren wen bu di ba, 太平御覽, 人文部, 第八, in Yu et al. 1992: 100–101.

- 279. Bai hu tong zhu zi suo yin, chap. 30, p. 56, line 25.
- 280. Su wen 8-58-2.
- 281. Quoted in full above, p. 133.
- 282. Yu et al. 1992: 102.
- 283. Xin du Guan zi du ben, p. 714.
- 284. Huai nan zi zhu zi suo yin, chap. 7, p. 55, line 10. Text according to edition B.
- 285. Fa yan zhu zi suo yin and Tai xuan jing zhu zi suo yin, chap. 88, p. 67, line 1.
- 286. Bai hu tong zhu zi suo yin, chap. 30, p. 56, line 24.
- 287. Yu et al. 1992: 103.
- 288. Su wen 44-246-8.
- 289. Su wen 43-241-6.
- 290. Su wen 44-247-1.
- 201. Putscher 1073.
- 292. Harper 1998: 77-78.
- 293. Putscher 1973: 122.
- 294. Mention should be made here of Lewis's depiction of the concept of qi as an echo of a desire of the Warring States elite to replace chaotic violence by sanctioned violence in the authoritarian state: "Individual bellicosity and valor, the primary expressions of human qi, negated the possibility of human society and reduced men to the levels of beasts. In the social history of violence this bestiality was overcome through the innovations of the sages; in the natural philosophy of violence the creation of order was imagined in terms of giving form to the rampant chaos of qi, on the model of Heaven's patterns emerging from the undivided primordial chaos." Lewis 1990: 226.
- 295. Harper 1998: 77.
- 296. Althoff 1997. It is interesting to note that the flow of these vapors was presumed to occur in the arteries, where they were supposed to be transported together with the blood.
- 297. Both translations by Harper 1998: 380.
- 298. Wu shi er bing fang. Harper 1998: 278.
- 299. Wu shi er bing fang. Harper 1998: 271-272.
- 300. Wu shi er bing fang. Harper 1998: 225.
- 301. Harper trans. Harper 1998: 405.
- 302. Harper trans. Harper 1998: 429.
- 303. Ibid.
- 304. Ibid., 234.
- 305. Ibid., 220.
- 306. Su wen 10-72-10.
- 307. Su wen 44-246-9.
- 308. Su wen 9-67-6.
- 309. Su wen 5-37-4.
- 310. Su wen 5-37-5.
- 311. Su wen 9-68-3.
- 312. Su wen 62-334-10.
- 313. Su wen 48-266-1.
- 314. Su wen 10-73-1.
- 315. See below, p. 175.

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316. Su wen 62-339-4.
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- 317. Su wen 43-246-3.
- 318. Su wen 10-73-3.
- 319. Su wen 3-20-2.
- 320. Su wen 3-22-5.
- 321. Harper trans. Harper 1998: 144-145.
- 322. Su wen 26-164-4.
- 323. Su wen 27-169-10.
- 324. Su wen 12-80-5.
- 325. Su wen 23-154-3.
- 326. Su wen 62-337-10.
- 327. Su wen 39-219-11.
- 328. Su wen 39-220-3.
- 329. Yamada 1980; Unschuld 1982a.
- 330. Harper 1998: 88.
- 331. Ibid., 110 ff.
- 332. Ibid., 117.
- 333. Su wen 2-8-6.
- 334. Harper 1998: 112 ff.
- 335. Su wen 2-13-2.
- 336. Putscher 1973: 122.
- 337. Su wen 16-91-4.
- 338. For camp qi and protective qi, see below, V.5.3.
- 339. Su wen 18-110-3.
- 340. Su wen 61-329-1.
- 341. Su wen 29-180-11.
- 342. Su wen 21-139-3.
- 343. Su wen 21-139-7.
- 344. Su wen 29-180-7.
- 345. Su wen 29-180-14.
- 346. Su wen 18-109-8.
- 347. Hand great yin signals the location where the pulse is felt at the wrists.
- 348. Su wen 19-126-13.
- 349. Su wen 7-52-5.
- 350. Su wen 2-14-1.
- 351. Su wen 7-52-4.
- 352. Su wen 17-108-2.
- 353. Su wen 5-34-5.
- 354. Su wen 39-221-7.
- 355. Su wen 43-244-1.
- 356. Su wen 43-244-2.
- 357. Su wen 43-246-3.
- 358. Su wen 34-198-13.
- 359. Su wen 42-236-10.
- 360. Su wen 39-222-3.
- 361. Su wen 9-68-4.
- 362. Su wen 9-68-4.

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363. Su wen 42-237-3.
364. Su wen 3-18-3.
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365. Su wen 31-184-9.

366. Su wen 18-111-1.

367. Su wen 58-301-5.

 $368. \ Su\ wen\ 62-340-12.$ 

369. Su wen 62-341-13.

370. Harper trans. Harper 1998: 69, 404.

371. Ibid., 77 ff.

372. Ibid., 70.

373.  $Shi \, san \, jing \, zhu \, shu, \, vol. \, 2, \, p. \, 1806 \, (top).$ 

374. Xin du Guan zi du ben, vol. 2, p. 710. See also Harper 1998: 77.

375. Su wen 30.

376. Guo yu, chap. 17, p. 8b.

377. Harper 1998: 83.

378. See also Liu Zonghan 1992: 250 for other occurrences of the compound *mai li* that are probably of Han date.

379. Ling shu 12-311-7b.

380. See above, p. 137.

381. Tessenow points out that in his view, the term *jing* was introduced to designate the major vessels running through the body lengthwise in contrast to other, secondary vessels forming networks and branching out here and there. All vessels, Tessenow holds, are considered *mai*. Hence even if the text speaks only of *jing*, this is just an abbreviation of *jing mai*, "[major] conduit vessel."

382. The term "meridian," introduced by Soulie de Morant in his renderings of the concept of *jing*, has been adhered to ubiquitously in Western acupuncture literature, even though it is widely known that the concept of meridians does not parallel the significance of the historical concept of *jing*. Aside from the stability the usage of an incorrect term may gain from decades of familiarity, meridians appear preferable to conduits because the former, in contrast to the latter, do not raise any questions as to their own morphological reality and to that of the qi they convey. Hence the adherence to the term "meridian" is one example among many others of what might be called a creative reception of Chinese medicine in Europe and North America in recent years that disassociates itself from the historical facts.

383. Su wen 18-111-4. See the discussion of this vessel above, pp. 125-126.

384. Su wen 63-344-3.

385. Su wen 31-183-7.

386. Su wen 16-92-6.

387. Su wen 35-206-2.

388. Su wen 23-154-1.

389. *Su wen* 44-246-8. 390. See above, V.5.1.

391. Su wen 9-67-7.

392. Su wen 62-334-10.

393. Su wen 21-139-3.

394. Su wen 35-203-2.

- 395. Su wen 42-236-8.
- 396. Su wen 39-218-7.
- 397. Zhu 1989: 7.
- 398. That is to say, the qi completes fifty circular passages during a period of one day and one night. The point where these fifty passages are completed and where the next fifty rounds begin is called "great meeting," *da hui* 大會.
- 399. Nan jing, The Thirtieth Difficult Issue. Unschuld 1986a: 341.
- 400. Su wen 5-45-5.
- 401. Su wen 24-155-1.
- 402. Su wen 24-154-8.
- 403. "Hidden bend" is interpreted by most ancient Chinese commentators as a reference to the male sexual organ, or its functions. See *Su wen* 7, notes 15 and 61, for details.
- 404. Su wen 7-53-7.
- 405. Su wen 9-69-3.
- 406. Su wen 60-319-7.
- 407. See also below, 7.6, Lower Back Pain.
- 408. Su wen 6-50-2.
- 409. Su wen 44-246-11.
- 410. Lu and Needham 1980: 31: "It seems likely that the heart must have been thought of through the centuries as a pump of some kind, working in systole to propel the blood through its system of tubes." The erroneous text interpretations on which these conclusions were built have been discussed in detail in Unschuld 1985a: 371–372.
- 411. Harper 1998: 74.
- 412. Harper trans. Harper 1998: 404.
- 413. Su wen 17-102-7.
- 414. Harper 1998: 74-75.
- 415. Su wen 19-124-2.
- 416. Su wen 3-18-4.
- 417. Su wen 19-123-1.
- 418. Su wen 42-238-2.
- 419. Su wen 60-318-2.
- 420. Su wen 39-221-7.
- 421. Yamada 1980: 199-242; Unschuld 1982a.
- 422. Yamada 1980: 218, 203; Unschuld 1982a: 103 f.
- 423. Yamada 1980: 218 ff.
- 424. Su wen 17-105-8. See also Su wen 26-165-7.
- 425. Su wen 4-22-8.
- 426. Su wen 4-23-3.
- 427. Su wen 3-18-4.
- 428. Su wen 10-76-6.
- 429. Su wen 27-169-9.
- 430. Su wen 5-37-3.
- 431. Su wen 18-114-2.
- 432. Su wen 17-105-6.
- 433. Su wen 33-195-9.

- 434. Su wen 3-20-3.
- 435. Su wen 42-236-2.
- 436. As the eleventh-century editors of the *Su wen* noted, *Su wen* 42 appeared as chapter 9 in the version commented on by Quan Yuanqi in the early sixth century. Given the fact that Yang Shangshan prepared the *Tai su* in the eighth century, the two treatises must have existed for some time in a combined version as well as in separate versions.
- 437. Su wen 42-237-4.
- 438. Su wen 42-238-4.
- 439. Su wen 42-240-2.
- 440. Harper 1998: 72.
- 441. Su wen 17-105-7.
- 442. Su wen 42-237-3.
- 443. "癘風 is today's so-called 麻風病, 'leprosy.'" Cheng Shide et al. 1982: 601 f. "癘 is an ancient version of today's 癩, 'leprosy.'" Gao Jiwu 1987: 25.
- 444. For example, in the *Wu shi er bing fang*, "two recipes specify that wind entering the wound is the pathogen causing rigidity." Harper 1998: 72.
- 445. Harper 1998: 249-250.
- 446. Harper 1990: 210-235.
- 447. Harper 1998: 250.
- 448. Lü shi chun qiu zhu zi suo yin, sec. 11.1: zhong dong 仲冬, p. 53, line 17.
- 449. Su wen 42-237-4.
- 450. Unschuld 1985b.
- 451. Jing yue quan shu 590.
- 452. In his translation of the Mawangdui manuscripts, Harper has chosen to render *nüe* as "cold and hot syndrome." Seen from the *Su wen*, such a descriptive rendering is only partially justified, because, in addition to "cold and hot syndrome," *nüe* includes "hot and cold syndrome" and, more important, "solitary heat syndrome" (see below). Also, the *Su wen* refers to "hot and cold syndromes" entirely unrelated to *nüe*.
- 453. Su wen 35-200-2.
- 454. Su wen 35-204-5.
- 455. Su wen 35-203-4.
- 456. Su wen 35-206-7.
- 457. Su wen 35-201-11.
- 458. Su wen 35-201-11.
- 459. Su wen 35-202-4.
- 460. Su wen 35-202-10.
- 461. Su wen 35-200-5.
- 462. Su wen 70-439-1.
- 463. Su wen 5-45-3.
- 464. Su wen 5-34-4.
- 465. Su wen 5-35-2.
- 466. This is a later insert. It may have been added to parallel the contents of the passage quoted above from *Su wen* 5.
- 467. Su wen 3-21-3.
- 468. In the pentic system, autumn is associated with dryness. Why it is associated

here, in a listing of only four seasons, with dampness, the climate associated in the pentic system with late summer, is open to speculation. It may be that in a survey of only four seasons, the dampness following summer heat was considered more decisive than the dryness preceding winter.

- 469. Su wen 74-530-8.
- 470. Su wen 23-151-5.
- 471. See Su wen 23 trans., notes 22 ff.
- 472. Su wen 5-46-6. For the quote from Wang Bing, see note 471.
- 473. Su wen 43-240-7.
- 474. Su wen 29-180-3.
- 475. Su wen 62-340-7.
- 476. Su wen 44-248-3.
- 477. Su wen 1-3-3.
- 478. On the notion of life being allotted by heaven and earth, see Su wen 9-69-7.
- 479. Su wen 2-13-2.
- 480. Some Su wen editions have 奇, "abnormal," instead of 苛, "severe."
- 481. Su wen 2-14-1.
- 482. Su wen 2-14-3.
- 483. Harper 1998: 30 ff.
- 484. Ibid., 70.
- 485. Ibid., 71.
- 486. See Lichtenthaeler 1989.
- 487. For a discussion of the occurrence of this term in the Mawangdui manuscripts, see Harper 1998: 252.
- $488. \ \,$  For a discussion of the occurrence of this term in the Mawangdui manuscripts, see Harper 1998:209 f.
- 489. See above, V.7.3.
- 490. See above, V.7.4.
- 491. Harper 1998: 209. See below, sec. 8.8, Block.
- 492. For a survey of attempts at interpretations of the disease term *dan*, see below, pp. 239–240.
- 493. Schüssler 1987: 375, 362.
- 494. Su wen 28-178-1.
- 495. For instance, Su wen 69-410-7, 71-490-2.
- 496. Su wen 36-206-14, 7-55-2.
- 497. Su wen 43-245-8.
- 498. The possibility of studying stylistic variations employed by authors to express the notion of underlying disease and secondary symptom as clues enabling one to separate the textual layers of the *Su wen* was first seen by Tessenow and will be elaborated in his contribution to the project.
- 499. Su wen 38-215-6.
- 500. Su wen 46-257-12.
- 501. Su wen 17-106-5.
- 502. Su wen 65-356-4.
- 503. Su wen 36-206-14.
- 504. Su wen 36-208-5.
- 505. Su wen 38-214-5.

- 506. Su wen 38-215-2.
- 507. Su wen 38-215-4.
- 508. Ibid.
- 509. Su wen 38-216-1.
- 510. Su wen 38-216-7.
- 511. Su wen 38-217-1. "Transporters" (shu 輸) and "confluences" (he 合) denote specific "holes" for inserting a needle in acupuncture.
- 512. Su wen 41-227-5.
- 513. See above, V.6.5, Vessel Flow, where this hypothesis was presented already.
- 514. Su wen 41-231-1.
- 515. Su wen 41-229-4.
- 516. Su wen 36-206-14. See above, V.8.4, Malaria.
- 517. Zhou li, Kao gong ji, zi ren 周禮, 考工記, 梓人. Shi san jing zhu shu, vol. 1, p. 925 (center).
- 518. Shi jing, Xiao ya, gu feng, 詩經, 小雅, 谷風, Shi san jing zhu shu, vol. 1, 459 (center).
- 519. *Shi ji*, chap. 93, p. 2635. Elsewhere, the *Shi ji* uses the phrase *yin wei* 陰 痿, "lameness/limpness of the yin" in the sense of male impotency.
- 520. *Han shu*, vol. 9, chap. 93, p. 2767. This meaning of *wei* was also perpetuated by the *Yu pian* 玉 篇, a dictionary completed in A.D. 543 and received in a version edited during the Tang dynasty. It offered the following definitions: "*Wei* 痿 is inability to walk; *bi* 痺 is dampness disease." *Da guang yi hui yu pian*, vol. 2, chap. 11, p. 7a.
- 521. Su wen 44-246-8.
- 522. Su wen 44-246-12.
- 523. Su wen 44-246-9.
- 524. Lü shi chun qiu, chap. 1.3: zhong ji 重己. Lü shi chun qiu ji shi, vol. 1, chap. 1, p. 13.
- 525. Er shi er zi, p. 630 (bottom).
- 526. See below, p. 223.
- 527. Su wen 44-248-3.
- 528. Su wen 44-248-5.
- 529. Su wen 44-247-5.
- 530. Su wen 44-248-9.
- 531. Su wen 44-249-4.
- 532. Harper trans. Harper 1998: 208.
- 533. Su wen 65-358-5.
- 534. Su wen 19-126-4.
- 535. Su wen 16-96-1.
- 536. Su wen 62-341-10.
- 537. Shi ji, 1989, p. 2794.
- 538. Su wen 38-215-6. For a reading of 咽腫喉痺 as 咽喉腫痺, see Su wen 38, note 13.
- 539. Su wen 10-73-3.
- 540. Harper quoted a passage from the "Ailment List" of the Zhang jiashan manuscript *Mai shu* attributing a meaning of "numbness" to the term *bi* 痺: "When it is located on the body, and [the person] is in a stunned state so when he is [x] he has no feeling—it is *bi*." Harper 1998: 199. The lacuna of one charac-

ter [x] may or may not be decisive for a correct understanding of this statement. However, based on the text that is left, "no feeling" could have been perceived as one of the symptoms resulting from block, in the same way as pain, distension, and a "feeling like crawling insects" were seen as signs of bi in the Su wen. Hence one might hypothesize that bi was meant in the Mai shu not so much to denote numbness per se but to name an entire disease phenomenon (of blockage?), including numbness.

- 541. Su wen 10-76-3.
- 542. Su wen 10-76-6.
- 543. Su wen 10-76-1. For the interpretation of the term 使内 as "sexual intercourse," see the comments by Wang Bing and others on Su wen 44-248-2 quoted in the translation volume.
- 544. Su wen 43-240-7.
- 545. Su wen 43-241-1.
- 546. Su wen 43-241-4.
- 547. Su wen 43-242-3.
- 548. Su wen 43-243-1.
- 549. Su wen 43-246-3.
- 550. Shuo wen jie zi gu lin zheng bu he bian, vol. 6, p. 875, no. 4729.
- 551. 痿, 風痺疾也, "Wei is a wind-block disease." Han shu 1987, 63, p. 2767.
- 552. 痿亦痺病也, "Wei, too, is a block-disease." Han shu 1987, 11, p. 345.
- 553. Jian ming zhong yi ci dian, 935.
- 554. See also Lo 1999.
- 555. Su wen 5-35-1.
- 556. This is the *Jue lun* 厥論, "Discourse on Recession." See the entire treatise.
- 557. Lo 1999: 65 ff.; Harper 1998: 203.
- 558. Meng zi, bk. II, pt. 1, chap. 11.
- 559. Sima Qian, Shi ji, 1989, 2788.
- 560. Sun zi, jun zheng 孫子, 軍爭. Er shi er zi, 630 (bottom).
- 561. Xun zi, cheng xiang 荀子成相. Xun zi yin de, p. 93, line 17.
- 562. Wen xuan, Ban Gu da bin xi 班固答賓戲, chap. 45, p. 990. The reading of jue 蹶 as "abandonment" was suggested by Lü Yanji 呂延濟: 蹶, 棄也. See Han yu da ci dian, vol. 10, p. 549.
- 563. The *Tai su* speaks of a *jue* 厥 bone, where *Su wen* 60 has 橛骨, *jue gu*, the "peg bone," i.e., the lower end of the spine.
- 564. Lü shi chun qiu ji shi, vol. 3, chap. 21, gui zu 貴卒, 15.
- 565. See above, p. 214.
- 566. Su wen 5-35-1.
- 567. Su wen 45-251-9.
- 568. Su wen 45-251-11.
- 569. Su wen 45-252-4.
- 570. Su wen 40-226-3.
- 571. Su wen 45-253-4.
- 572. Su wen 45-254-5.
- 573. Kleinman 1980: 77-78. The idea of somatopsychics as a process that links corporeal and psychological conditions with an emphasis on the primacy of the bodily component is stated repeatedly in Kleinman 1986.

- 574. See below p. 231.
- 575. Su wen 1-2-3.
- 576. Su wen 34-199-1.
- 577. Su wen 5-34-4.
- 578. Su wen 46-257-9.
- 579. Su wen 3-17-2. The text states 大怒則形氣絕. I agree with those commentators who suggest that the two characters 形氣 are an erroneous insertion. See translation, note 27.
- 580. We agree with those commentators who suggest that the character  $\frac{1}{2}$  and possibly also  $\frac{1}{2}$   $\frac{1}{2}$  are later additions. See translation, note 62.
- 581. Su wen 62-340-16.
- 582. Su wen 62-340-5.
- 583. Wang Bing commented here that the qi made to rise by anger was yang qi. This, however, was his personal opinion; the text contains no clue as to which model its author may have had in mind when he wrote these lines. See translation, note 49.
- 584. Su wen 39-221-9.
- 585. Su wen 39-221-10.
- 586. For a discussion of the Su wen 62 passage in the context of treatment, see V.10.3.
- 587. See below p. 233.
- 588. Su wen 24-155-11.
- 589. Su wen 24-156-3.
- 590. Su wen 5-37-2.
- 591. Su wen 19-124-8.
- 592. Su wen 21-138-2.
- 593. Su wen 21-138-3.
- 594. Su wen 40-223-2.
- 595. Su wen 40-223-5.
- 596. Su wen 40-224-1. For a discussion of the contents of the commentary insert, see the translation, Su wen 40, note 19.
- 597. The *Huang Di nei jing su wen* 1963/86 has the following punctuation: 上則追胃脘, 生鬲, 俠胃脘內癰. This would suggest the following reading: "When it moves upward, then it presses against the stomach duct, where it generates blockage (*ge*). {Inner abscesses on both sides of (*jia*) the stomach duct.}" Yang Shangshan's *Tai su* version reads: 出鬲. 使胃脘內癰, "It leaves [through] the diaphragm, causing *yong*-abscesses in the stomach duct."
- 598. Su wen 46-256-2.
- 599. Su wen 48-265-7.
- 600. Su wen 47-259-6.
- 601. Shi jing, Da ya 大雅, Ban 板.
- 602. Shan hai jing jiao zhu, p. 57.
- 603. Han shu, vol. 6, chap. 30, p. 1778.
- 604. Shi san jing zhu shu, vol. 2, p. 1968 (top).
- 605. Harper 1998: 211.
- 606. Su wen 47-261-6.
- 607. Su wen 17-98-2.
- 608. Su wen 77-556-3.

- 609. Su wen 5-31-3.
- 610. For an interpretation of weight, beam, circle, and square as references to the four seasons and further attempts to explain this statement, see Su wen 5, note 119.
- 611. Su wen 5-46-9.
- 612. Su wen 19-127-7.
- 613. Su wen 20-132-5.
- 614. Su wen 77-554-9.
- 615. Su wen 78-558-9.
- 616. Su wen 76-550-9.
- 617. Su wen 15-90-5, 15-90-7, 77-555-4.
- 618. Su wen 42-236-2.
- 619. Su wen 42-236-9.
- 620. Several modern Chinese commentators have attempted to reverse the meaning of this passage by suggesting either omitting the character 不, "not," or reading it as an erroneous writing of the character 來, "in order to." See the note in the translation volume for various classical and modern views.
- 621. Wang Bing interpreted "藏 as equal to 深, 'deep.' That is to say: pierce deeply." The eleventh-century editors Gao Baoheng et al. noted: "The Quan Yuangi edition does not have the character 藏." The character 藏 appears to be a later insert, possibly added to interpret the phrase 為針之 in view of the subsequent advice 刺大藏, "pierce the big depots," and 刺之迫藏, "pierce close to the depots."
- 622. Su wen 55-285-8.
- 623. Lei jing, chap. 21, 44. Zhang shi lei jing 1983, p. 494.
- 624. Su wen 39-221-2.
- 625. Su wen 39-221-5.
- 626. Su wen 32-189-1.
- 627. Su wen 42-238-7.
- 628. Su wen 56-289-6.
- 629. Su wen 43-243-1.
- 630. Su wen 77-555-6.
- 631. Loewe 1986a: 710.
- 632. Ibid., 713.
- 633. Su wen 20-130-3.
- 634. Su wen 26-167-7.
- 635. Su wen 27-173-3.
- 636. Su wen 27-173-8.
- 637. Su wen 20-133-1.
- 638. Su wen 21-139-6.
- 639. Su wen 2-14-5.
- 640. Su wen 20-133-6.
- 641. Su wen 20-134-1.
- 642. Su wen 20-136-6.
- 643. Su wen 20-136-4.
- 644. Su wen 18-109-2.
- 645. Su wen 18-109-5.
- 646. Su wen 19-126-5.

- 647. Su wen 19-126-13.
- 648. Su wen 18-110-2.
- 649. Su wen 18-113-4.
- 650. Su wen 22-146-1.
- 651. Su wen 16-95-4.
- 652. Su wen 18-111-8.
- 653. Su wen 18-112-1.
- 654. Su wen 17-107-5.
- 655. Su wen 18-116-5.
- 656. Su wen 17-104-1.
- 657. Su wen 46-256-3.
- 658. Su wen 21-140-3.
- 650 Su wan 10 55
- 659. Su wen 10-75-1.
- 660. Su wen 77-557-2.
- 661. Harper 1998: 93 ff.
- 662. Ibid., 274.
- 663. Su wen 12-80-6.
- 664. Su wen 14-87-2.
- 665. Su wen 40-224-1.
- 666. Harper 1998: 93.
- 667. Epler 1980: 337-367.
- 668. Shi ji, chap. 28, 1989: 1382.
- 669. A reading "burglars did not stab [their victims]" is, of course, possible too because the stabbing may be a precondition for taking something from a victim. *Xun zi ji jie* 1971: 225.
- 670. Su wen 19-128-1.
- 671. Su wen 63-344-11.
- 672. Su wen 63-347-1.
- 673. I.e., Su wen 16, 20, 22, 26, 27, 36, 41, 54, 55, 62, 63, 76.
- 674. Su wen 14-88-4.
- 675. I.e., Su wen 4, 10, 11, 12, 13, 14, 24, 25, 28, 40, 46, 47, 76, 77, 78.
- 676. Su wen 24-156-1.
- 677. Su wen 46-257-6.
- 678. Su wen 76-551-12.
- 679. Su wen 14-88-4, 54-281-8.
- 680. Su wen 20-137-1.
- 681. Su wen 22-146-6.
- 682. Su wen 22-146-7.
- 683. Su wen 41-227-5.
- 684. Su wen 22-147-1.
- 685. Su wen 26-164-4.
- 686. Su wen 27-172-8.
- 687. Su wen 55-286-2.
- 688. Su wen 62-335-7.
- 689. Su wen 62-337-7.
- 690. Su wen 62-338-8.
- 691. Su wen 62-336-7.

- 692. Su wen 62-335-2.
- 693. Su wen 36-210-2.
- 694. Su wen 36-211-8.
- 695. Su wen 63-345-2.
- 696. Su wen 63-351-1.
- 697. Su wen 14-88-3.
- 698. Su wen 62-343-4.
- 699. Su wen 62, note 110.
- 700. Su wen 63, note 1.
- 701. Su wen 63-344-11.
- 702. Cheng Shide et al. 1982: vol. 2, p. 132.
- 703. Hu 1991: 370.
- 704. Bi 1986: 31.
- 705. Chen 1983: 29.
- 706. Su wen 63-344-12.
- 707. Su wen 63-344-14.
- 708. Su wen 63-345-6.
- 709. Su wen 63-346-6.
- 710. Unschuld 1990: 246.
- 711. Su wen 27-170-3.
- 712. Su wen 27-172-8.
- 713. Su wen 28-177-5.
- 714. Su wen 46-257-8.
- 715. Su wen 28-178-1.
- 716. Su wen 32-186-10.
- 717. Su wen 62-341-13.
- 718. Su wen 50-273-2.
- 719. Su wen 51-274-6.
- 720. See above, V.7.2.
- 721. Su wen 64-354-7. See also Su wen 16-92-5.
- 722. Su wen 27-170-6.
- 723. Su wen 16-95-1.
- 724. Su wen 35-203-16.
- 725. Su wen 35-204-7.
- 726. Su wen 14-86-10.
- 727. Harper 1998: 98 ff.; Unschuld 1983: 389-416, 1982b: 11-63.
- 728. Harper 1998: 104.
- 729. Su wen 77-557-2.
- 730. Unschuld 1977: 224-248.
- 731. Unschuld 1985a: 179 ff.
- 732. Su wen 74-545-1.
- 733. Su wen 12-80-7.
- 734. Su wen 24-156-3.
- 735. Su wen 19-123-2.
- 736. Su wen 24-155-11.
- 737. Su wen 76-550-6.
- 738. Su wen 28-177-2.

784. Liao Yuqun 1988: 371. 785. Su wen 60-324-7.

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739. Su wen 36-210-5.
740. Su wen 47-260-2.
741. Su wen 63-347-2.
742. Su wen 14-87-8.
743. Su wen 25-159-1.
744. Su wen 46-258-3.
745. See above, V.8.10.
746. Su wen 46-257-10.
747. Su wen 40-225-5.
748. Su wen 40-223-11.
749. Ben cao jing ji zhu 110.
750. Ben cao jing ji zhu 52.
751. Ben cao jing ji zhu 106.
752. Ben cao jing ji zhu 102.
753. Su wen 22-149-1.
754. Su wen 22-148-2.
755. Su wen 22-141-14. Tang ye ben cao, chap. 1, p. 4. See also Unschuld 1972: 114.
756. Su wen 5-36-1.
757. Su wen 22-149-2.
758. Su wen 22-149-4.
759. Su wen 23-150-2.
760. Su wen 23-152-3.
761. Ben cao jing ji zhu, 1972, p. 43B. See also Unschuld 1986b:21-22, 25 ff.
762. Su wen 71-461-2.
763. Su wen 71-464-13.
764. Su wen 71-470-9.
765. Su wen 71-473-3.
766. Su wen 71-477-13.
767. Su wen 74-540-1.
768. Su wen 74-523-4.
769. Su wen 74-541-3.
770. Su wen 74-544-1.
771. Su wen 74-538-1.
772. Su wen 74-543-9.
773. Su wen 74-541-8.
774. Su wen 74-540-4.
775. Su wen 70-455-2.
776. Su wen 74-545-4.
777. Su wen 74-529-4.
778. Su wen 74-537-6.
779. Su wen 74-529-10.
780. Harper 1998: 91.
781. I.e., Su wen 12, 19, 24, 28, 36, 40, 47, 60, 76, 77.
782. Su wen 76-550-6.
783. Su wen 24-155-11.
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- 786. Su wen 12-81-3.
- 787. Su wen 19-123-1.
- 788. Harper 1998: 192.
- 789. Su wen 28-174-12.
- 790. Su wen 60-326-2.
- 791. Su wen 40-226-3.

# VI. EPILOGUE: TOWARD A COMPARATIVE HISTORICAL ANTHROPOLOGY OF MEDICAL THOUGHT

- For the gamut of therapeutic means of major and minor importance resorted to around 200 B.C., see Harper 1998.
- 2. Peerenboom 1993: 41.
- 3. See above, pp. 3-7.
- 4. I owe the term "expressiveness of the [human] body" to Kuriyama 1999.
- 5. Golinsky 1998: 47.
- 6. Ibid., x.
- 7. Fleck 1979: 64.
- 8. Bloor 1983: 110.
- 9. Lichtenthaeler 1989: 116.
- 10. Ibid.
- 11. For a discussion of natural laws in ancient China, see Bodde 1957, 1979; Peerenboom 1993: 81–84.
- 12. Van Fraassen 1980: 6 f.
- 13. Ibid., 8.
- 14. Putnam 1971: 67.
- 15. For a brief discussion of an association of Huang-Lao thought with the contents of the *Huang Di nei jing*, see Ma Boying 1994: 249 f.
- 16. Xun zi, chap. 17, Tian lun 天論, Xun zi yin de, p. 62, line 1.
- 17. Peerenboom 1993: 4. "I argue that there is a notion of transcendence in Huang-Lao thought. That is, in the Huang-Lao system the natural order has normative priority over the human world. It is not a matter of humans fashioning the Way, but of following the Way." Ibid., 5.
- 18. Xun zi, chap. 17, Tian lun 天論, Xun zi yin de, p. 62, line 8.
- 19. Van Fraassen 1980: 73.
- 20. See, for example, *Xun zi*, chap. 19, Li lun 禮論, *Xun zi yin de*, p. 75, line 122; chap. 21, Jie bi 解蔽, *Xun zi yin de*, p. 81, line 75.
- 21. Cited in Hacking 1992: 11.
- 22. Su wen 13-82-7.
- 23. Hacking 1992: 3.
- 24. Ibid., 13.
- 25. Harper 1998: 78.
- 26. "There is little, if any, direct support for immortality practices to be found in the Huang-Lao thought of the *Boshu*." Peerenboom 1993: 257. Peerenboom 1993: 261 contends that "Huang Lao did resurface in the Han in conjunction with immortality practices and religious Daoism." It is noteworthy that the three Han compilations of first century B.C. and A.D. texts, i.e., the *Su wen*, the *Ling*

*shu*, and the *Nan jing*, resisted any temptation to include these popular approaches to health care. The ideological positions of their authors must have been firmly established.

- 27. Han shu, chap. 87, Yang Xiong zhuan shang 揚雄傳上. Han shu, vol. 11, 3552.
- 28. Harper 1998: 119.
- 29. Ibid.
- 30. See above, pp. 201-202.
- 31. See above, pp. 163-167.
- 32. Van Fraassen 1980: 11.
- 33. Lewis 1990: 213.
- 34. Su wen 2-14-4.
- 35. See above, pp, 136–140.
- 36. See above, pp. 109-110.
- 37. See above, pp. 147-148, 175 ff.
- 38. See pp. 129-136.
- 39. See above, pp. 136-141.
- 40. See above, pp. 288-289.
- 41. See above, pp. 181-183.
- 42. See, for example, Su wen 28-176-10, 48-265-1, 48-267-1.
- 43. Neuburger 1926: 5-8.
- 44. Su wen 48-266-1.
- 45. Su wen 48-265-5.
- 46. At least I am in good company when I search for an explanation of something that remained neglected in China while it was developed in Europe. Rolf Trauzettel recently published a study answering the puzzle why the Chinese, prior to modernity, never considered the shadows of persons, mountains, buildings, and so on, as possible structural elements in the composition of drawings and paintings. Trauzettel 2000. For sure, shadows were as visible to the Chinese and the Europeans as was the self-limiting nature of some ailments. Cultural factors accounted for variations in the ways these facts were recognized.
- 47. Edelstein 1967: 307-308.
- 48. Su wen 2-14-5.
- 49. Xun zi, chap. 3, Bu gou 不苟. Xun zi yin de, p. 7, line 20. Yang Jialuo 1971: 27.
- 50. Moritz 1998: 76.
- 51. Nan jing, the Thirteenth Difficult Issue. See Unschuld 1986a: 170. See also p. 237, the Seventeenth Difficult Issue, for the remark "a cure will occur by itself without any treatment."
- 52. Bodde 1966: 25-26.
- 53. Su wen 25-158-2.
- 54. Loewe 1986a: 654.
- 55. Ibid., 693.
- 56. Ibid., 770.
- 57. Su wen 68-400-4.
- 58. Dao de jing, chap. 80. Trans. mod. Bauer 1976: 34.
- 59. Dao de jing, chap. 30.
- 60. Peerenboom 1993: 2.
- 61. Lewis 1990: 177-178.

- 62. Yates 1997: 25.
- 63. Liao 1959: 212.
- 64. Su wen 56-289-5.
- 65. Su wen 74-537-5.
- 66. Su wen 74-454-7.
- 67. Su wen 74-506-3.
- 68. Peerenboom 1993: 101; also ibid., 76–78, in particular p. 78: "significantly, *contra* Legalist thought, even the ruler must abide by the law."
- 69. Yates 1997: 22.
- 70. Su wen 77-553-6.
- 71. Liao 1959: 320.
- 72. Xunzi, chap. 2, Xiu shen 荀子, 修身: 志意修則驕富貴, 道義重則輕王公, "If someone cultivates his will and sense of purpose, he will then look down upon riches and eminence. If he gives due weight to the Way and what is congruent with it, he will have slight regard for kings and dukes" (trans. mod. Knoblock 1988: 154). Xun zi yin de, p. 4, line 19.
- 73. Su wen 3-22-6.
- 74. Loewe 1986b: 736; de Bary et al. 1960: 193 ff.
- 75. Su wen 74-545-7.
- 76. Moritz 1998: 84–86.
- 77. Xun zi, chap. 15, Yi bing 議兵; chap. 27 Da lüe 大略. Xun zi yin de, p. 56, line 66; p. 96, line 20.
- 78. Tessenow 1991: 82 f.
- 79. In a different sense, the notion of *wu wei* was by no means absent from the original teachings of Confucius himself. In the *Confucian Analects* it is stated, "to have done nothing (*wu wei*) and yet have the state well-governed— [sage-king] Shun was the one! What did he do? He merely made himself reverent and correctly occupied his royal seat" (XV:4). De Bary et al. 1960: 35.
- 80. Su wen 27-173-5.
- 81. Peerenboom 1993: 99.
- 82. Ibid.
- 83. Shi san jing zhu shu, vol. 2, p. 2078 (bottom).
- 84. Schmidt-Glintzer 1990: 68.
- 85. Lü shi chun qiu zhu zi suo yin, sec. 20.7: Jiao zi 驕恣, p. 136, line 5.
- 86. Shi ji, chap. 130, vol. 10, p. 3290.
- 87. In *Der Chinesische Moralbegriff* "i" (The Chinese Moral Concept of Yi), Tessenow lists several usages of *yi* without moral undertones. Tessenow 1991:37 and 328, note 85.
- 88. Su wen 54-283-5. In a morally neutral reading, the passage quoted here from Su wen 54 could also be read as "Do not lower [the needle] with an evil intention."
- 89. Tessenow 1991: 100.
- 90. Su wen 25-162-7.
- 91. Bloor 1991: 5.

# APPENDIX

# The Doctrine of the Five Periods and Six Qi in the *Huang Di nei jing su wen*

with assistance by Zheng Jinsheng and Hermann Tessenow

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#### 1. GENERAL REMARKS

# 1.1. The Basic Contents of the Doctrine of the Five Periods and Six Qi in the Su wen

The doctrine of the five periods (wu yun  $\Xi$   $\Xi$ ) and six qi (liu qi  $\dot{\uparrow}$   $\Xi$ ) is outlined in the Su wen in seven "comprehensive discourses" (da lun  $\uparrow$   $\Xi$ ). These are treatises 66 through 74 (not counting the two apocryphal treatises 72 and 73), comprising about one-third of the entire text of the Su wen. The origin of the notions outlined in these treatises is unclear; no parallel literary sources outside the Su wen are known that could be used to date the early development of these thoughts. For the time being, all that can be said is that treatises 66 through 74 form a section of the Su wen that is conceptually rather separate from the remaining two-thirds of the text. That the "seven comprehensive discourses" include commentaries by Wang Bing provides a date ante quem for their compilation, namely, the eighth century. From a statement in the preface to his Su wen edition it must be concluded that this section was added to the text by Wang Bing himself.

The doctrine of the five periods and six qi explains relationships ancient Chinese observers assumed to exist between climate and a broad range of natural phenomena, including human health and illness. Apparently the concepts of the five periods and of the six qi were introduced to distinguish among and specify climatic characteristics of well-defined time periods. By drawing on notions of a cyclical recurrence of calendrical terms and by adopting the doctrines of yin-yang and of the five agents, an attempt was made to order what may at first glance appear to be disorder, namely, the occurrence of rain and wind, dryness, cold, and heat in the course of the four seasons and over the years.

Knowledge of a distinct regularity uncovered in frequent climatic changes not only permitted an understanding of the generation, growth, maturity, and death of numerous phenomena in nature in general; even more important, it enabled man to integrate himself into eternal laws governing all existence. Just as subordination to the laws specified by a ruler in society guaranteed survival and well-being, obedience to the laws set by an unseen, metaphysical force meant life rather than early death. Just as opposition to social laws results in punishment, those who act against the laws of nature are bound to succumb.

Not surprisingly, in many of its statements, the doctrine of the five periods and six qi reads like a political metaphor, its terminology borrowed from the realm of social interactions. For example, treatise 68 explicitly refers to the conservative political tendency of the entire doctrine of the five periods and six qi by pointing out that "opposition,"  $ni \not\in$ , is the basis of "change,"  $bian \not\in$ , and that "change" is the basis of "illness,"  $bing \not inf$ .

To describe and examine long-term cycles of recurring climatic phenomena, ancient Chinese naturalists combined two series of symbols employed for counting calendrical terms, the ten celestial stems (tian gan 夭  $\mp$ ) and the twelve earth branches (di zhi 地支), with the yin-yang doctrine and the doctrine of the five agents. They associated an extended yin-yang doctrine of three yin and three yang categories of all being with the twelve earth branches, thereby creating a sequence of six [climatic] qi, and they associated the doctrine of the five agents with the ten celestial stems, creating a sequence of five periodically recurring terms of characteristic nature, that is, the five periods. By associating each year with a specific combination of celestial stems and earth branches (which was a common method of sequencing years since the Later Han dynasty), each year, in turn, was linked in a specific way to the climatic characteristics associated with the six qi and the five agents.

Given that, over a cycle of sixty years, each year is associated with a different combination of stems and branches, it is within this span of sixty years that all possible climatic constellations may occur.

# 1.2. Summary of the Seven Discourses on the Doctrine of the Five Periods and Six Qi in the Su wen

A close reading of the seven discourses on the doctrine of the five periods and six qi in the *Su wen* suggests that they were not written by a single hand or at one time and that their contents were put together from originally separate and occasionally irreconcilable doctrines and traditions. Nevertheless, the doctrines presented in the seven comprehensive discourses can be conceived of as one more or less systematic whole. However, we prefer to present the doctrine in its many more or less separate building blocks, thereby tak-

ing into account the different historical layers and various conceptual breaks that found entrance into the *Su wen*.

The contents of the seven comprehensive discourses proceed from the general to the specific, from the superficial to the deep, from shorter explications to lengthy lists of data and tables, and from theory to an application of therapy patterns. Treatises 66 through 68 are devoted to an explication of fundamental concepts; treatises 69 through 74 (excluding 72 and 73) offer mostly tables to clarify the application of these concepts. Each of the seven discourses has its particular emphasis. Their contents may be surveyed as follows.

Treatise 66: The "Comprehensive Discourse on Arrangements of the Original [Qi] of Heaven" is the first of the seven treatises on the doctrine of the five periods and six qi in the *Su wen*. Structured as a dialogue between Huang Di and Gui Yuqu, it includes a basic outline of the five periods, the five qi and six qi, and their relationships, as well as a correlation of qi with the sixty-year cycle. Further, it elucidates how to match the five pairings of the ten stems with the five periods and the six pairings of the twelve branches with the six qi and how these correspond to the three yin and the three yang categories of all existence.

Treatise 67: The "Comprehensive Discourse on the Passage of the Five Periods" and the following five discourses are structured as dialogues between Huang Di and Qi Bo. Apparently this treatise was written as an explanation of the preceding treatise.

Huang Di reviews once more the information given to him by Gui Yuqu on the correspondences of the ten stems with the five periods and on the correspondences of the twelve branches with the six qi, and he wonders about these correspondences, which "do not constitute pairings of yin and yang," that is, which are not the normal correspondences. In a response of fundamental importance, Qi Bo distinguishes between a yin-yang categorization of man and a yin-yang categorization of heaven and earth. In an attempt to explain these correspondences, he relies on a text named *Tai shi tian yuan* 太始天元, which deals with five differently colored qi passing through heaven (see below, p. 401 f).

In addition, Qi Bo touches on the notions of "upper" and "lower" [halves] of a year, and, in terms of "left" and "right," he lists different positions of the six qi in the upper and the lower half of a year. From this list, the whole sequence of the six so-called visitor qi can be deduced, and it provides a basis for graphic illustrations of the regular passage of the six qi over the years.

The major part of the second half of treatise 67 is devoted to a detailed elucidation of correspondences between five climatic qi, that is, wind, heat, dampness, dryness, and cold, on the one hand, and a series of natural facts, on the other. The theoretical basis for these correspondences is the doctrine of the five agents.

Treatise 68: The "Comprehensive Discourse on the Subtle Significance of the Six [Qi]" focuses its discussion on the "Way of Heaven," that is, on the six qi. It refers to the cyclical procession of and correspondences among six climatic qi, that is, fire, dryness, cold, wind, heat, and dampness, and the yin and yang terms of a year, and it details, for the first time, the sequence of the six seasonal qi (i.e., the so-called host qi). It introduces notions such as "the year meets" ( $sui\ hui\ \&$  and "heavenly complements" ( $tian\ fu\ \neq$  %). Furthermore, it speaks of excessive dynamics resulting in harm, of "oppression" and "revenge," of "virtue" ( $de\ \@$ ) and "transformation" ( $hua\ \@$ ), and of "realization" ( $yong\ \mbox{$\mathbb{H}$}$ ) and "change" ( $bian\ \mbox{$\mathbb{G}$}$ ). The contents of this treatise are rather heterogenic; they appear like a first reference to many important issues that are discussed in more detail later on. Basically, though, this treatise opens a discourse on the six qi.

Treatise 69: The "Comprehensive Discourse on Changes [Resulting from] Qi Interaction" discusses the climate of each year and then of the five seasons from the perspective of the five periods. As the qi associated with these periods may be excessive or inadequate, different manifestations of natural phenomena occur. It is here that, for the first time in the seven comprehensive discourses on the five periods and six qi, long lists of specific states of illness are associated with each constellation of excessive or inadequate realization of the qi associated with the five periods. No directives are specified, though, as to how to avoid or treat such illnesses.

Further on, treatise 69 enumerates "virtues" (de 德) and "transformations" (hua 化), "policies" (zhi 政) and "orders" (ling 令), "catastrophes" (zai 炎), and "changes" (bian 後) associated with each of the five qi, as well as the reflection of all these phenomena in the appearance of the stars in heaven.

The major political message conveyed is that weakness of a given party invites intrusion and domination by another party. After a while, though, depending on the strength of the weakened party, a third party will take revenge and repel the intruder (see below, 5.2) Also, more explicitly than in any of the other discourses, this treatise is characterized by attempts to understand whether catastrophes in general and human illness in particular are associated with the irregular in nature only, and if this is not the case, why this is so.

Treatise 70: In its initial section, the "Comprehensive Discourse on the Five Regular Policies" offers a detailed listing of natural phenomena corresponding to the presence of excessive and inadequate qi in a given year, as associated with the excessive or inadequate realization of the five periods. In addition, it introduces a new notion, "years with balanced qi" ( $ping \ qi \ {\mathbb F}_{{\mathbb R}}$ ). Excessive qi, inadequate qi, and balanced qi represent the "three arrangements of the five periods."

The second section introduces the six qi "controlling heaven" (*si tian* 司天) and "at the fountain" (*zai quan* 在泉), outlines their effects on human health and on the climate, and specifies the effects of these qi on the gener-

ation and growth to maturity of the various types of living beings, that is, hairy, feathered, armored, naked, and scaly creatures. The concluding section is the first discussion of basic therapeutic principles; these principles, though, bear no direct relationship to the doctrine of the five periods and six qi.

Treatise 71: The "Comprehensive Discourse on the Policies and Arrangements of the Six Originals" is the longest of the seven discourses on the doctrine of the five periods and six qi; it offers the most substantial information on the effects of the five periods and six qi on a number of natural phenomena, including human health. Treatise 71 is the first to combine data on the changing periods and climatic qi of each consecutive year and to provide detailed advice for the treatment of the corresponding illnesses. The contents of this treatise are structured like two extensive tables that repeat almost identical categories of data under the headings of the different years. The first of these "tables" outlines, for each year in a complete cycle of sixty years, the "policies" of the qi associated with that year. Within these years, a listing of the sequence of the five host and visitor periods as well as of the activities of six seasonal qi provides information on the climatic characteristics of the individual seasons.

New concepts introduced in this treatise include "oppression" (yu 鬱) of qi and "outbreak" (fa 發) when oppression has reached an apex, as well as the "twelve [types of] change" ( $shi\ er\ bian\ +\ =\$ 要), that is, specific climates and illnesses brought forth by the six qi. Also, this treatise offers additional discussions of the concepts "heavenly complements" ( $tian\ fu\$ 天符), "identical to heavenly complements" ( $tian\ fu\$ 天符), and "identical to the year meets" ( $tian\ fu\$ 同成會). Thus it contains the most complete version of the doctrine of the five periods and six qi.

Treatise 74: The "Comprehensive Discourse on the Essentials of the Most Reliable" is the second longest of the seven comprehensive discourses. Its systematic, tabular structure is the same as that of treatise 71. The focus of this treatise is, first, the impact of a dominant or excessive presence of any of the six qi in the first or second half of a year on human illness and some other natural phenomena and, second, the diagnosis and treatment of illness resulting from these qi. The therapeutic principles outlined suggest resorting to specific flavors and qi (i.e., warmth, coolness, cold, and heat) of pharmaceutical substances. No specific drugs are mentioned. Additional concepts discussed are "domination" (sheng \( \beta \) had "revenge" (fu \( \bar{q} \)), "domination contrary [to normal]" (fan sheng \( \bar{p} \) \( \bar{p} \), "visitor domination" (ke sheng \( \bar{p} \) \( \bar{p} \), and "host domination" (zhu sheng \( \bar{p} \) \( \bar{p} \).

# 1.3. Stems and Branches and the "Arrangement of Years"

The aim of the discourses on the doctrine of the five periods and six qi is to help readers to understand the cyclical nature of climatic changes, as well

			8						
1	2	3	4	5	6	7	8	9	10
jia	yi	bing	ding	wu	ji	geng	xin	ren	gui
甲	乙	丙	丁	戊	己	庚	辛	壬	癸
yang	yin	yang	yin	yang	yin	yang	yin	yang	yin

TABLE 1. The Yin-Yang Association of the Ten Celestial Stems

as to enable them to predict and prepare for changes resulting in abnormal climatic conditions. The rationale of such predictions is that even seemingly abnormal climatic conditions are part of a regular recurrence of certain constellations when specific qualities of periods and qi may add up to excessive preponderances or weaknesses of these qualities.

The first step is to choose a method that allows one to calculate seasonal or annual constellations and to arrive at their characteristic qualities. As the *Su wen* states:

First determine the [setup of a] year, then the numbers of the movement of the period [qi, that is,] metal, wood, water, fire, and soil, and the transformations resulting from the coming down, and assuming control, of cold, summer heat, dryness, dampness, wind, and fire, then it is possible to perceive the Way of heaven, and [as a consequence] to adjust the qi of people.<sup>2</sup>

In ancient China, the so-called stems and branches were originally used to record months, days, and hours, later also to record years.<sup>3</sup> The ten celestial stems ( $tian\ gan\ \Xi$ ) are  $jia\ \mathbb{P}$ ,  $yi\ \mathbb{Z}$ ,  $bing\ \mathbb{H}$ ,  $ding\ \mathbb{T}$ ,  $wu\ \mathbb{R}$ ,  $ji\ \mathbb{R}$ ,  $geng\ \mathbb{R}$ ,  $xin\ \hat{\pi}$ ,  $ren\ \Xi$ ,  $gui\ \hat{\Xi}$ .<sup>4</sup> The entire sequence is categorized as yang.

The twelve earth branches (di zhi 地支) are zi 子, chou 丑, yin 寅, mao 卯, chen 辰, si 已, wu 午, wei 未, shen 申, you 酉, xu 戌, hai 亥. <sup>5</sup> The entire sequence is categorized as yin.

A combination of one stem and one branch results in one of sixty possible combinations signifying the sequence of the years and associating each year with specific climatic characteristics. That is, within a recurring cycle of sixty years, each year is given its particular label by a combination of one celestial stem and one earth branch. The celestial stems refer to a given year's "period," that is, its "annual period" (sui yun 歲運); the earth branches refer to a given year's qi, that is, its "annual qi" (sui qi 歲氣).

Each cycle of sixty years starts from a combination of stem *jia* with branch *zi*; the first year in a cycle of sixty years is designated as *jia zi* year. As the *Su* wen states:

The qi of heaven starts with *jia*; the qi of the earth starts with *zi*.

The combination of *jia* and *zi* is called "annual setup."

Carefully observe this time [of annual setup].

[Then you] are able to assign the qi of each [year] a time period.<sup>6</sup>

1	2	3	4	5	6	7	8	9	10	11	12
zi	chou	yin	mao	chen	si	wu	wei	shen	you	xu	hai
子	丑	寅	917	辰	巳	午	未	申	酉	戌	亥
yang	yin	yang	yin	yang	yin	yang	yin	yang	yin	yang	yin

TABLE 2. The Yin-Yang Association of the Earth Branches

The second year is listed as *yi chou*, the third as *bing yin*, the fourth as *ding mao*, and so on, through *gui you*. The eleventh year through the twentieth year are listed as *jia xu*, *yi hai*, *bing zi*, and so on, through *gui wei*. And so forth.

The listing of the years along the dual sequences of stems and branches is not simply an enumeration. Because the stems and branches themselves are categorized as yin and yang (with stems and branches carrying uneven numbers being yang and those carrying even numbers being yin; yang stems can be combined only with yang branches, and yin stems can be associated only with yin branches) and because the stem and branch combinations associated with each year constitute pairings of different yin-yang categories with the five agents, they refer to a very specific qualitative meaning. That is, once the stem and branch designation of a given year is known, its climatic characteristics can be calculated through the associations of the respective stem and branch with the five periods and six qi. (See tables 1 and 2.)

#### 2. THE FIVE PERIODS

#### 2.1. The Five Periods, the Five Agents, and the Ten Stems

"Five periods," wu yun 五 運, is a comprehensive designation referring to the nature or quality of periodically recurring phenomena, including qi, associated with the "five agents" (wu xing 五 行), metal, wood, water, fire, and soil, as they may characterize consecutive years or the five seasons in the course of one year. That is, one "period" may refer to one entire year or to one of the five seasons.

The five periods in the doctrine of the five periods and six qi are closely related to the five agents in the doctrine of the five agents, and the seven comprehensive discourses of the *Su wen* go to great lengths to introduce concepts of the doctrine of the five agents in the context of the passage of the five periods. For example:

The east generates wind.
Wind generates wood.
Wood generates sour [flavor].
Sour [flavor] generates the liver.
The liver generates the sinews.
The sinews generate the heart....

TARIF 9	The	Association	of the	Celestial	Stems wi	th the Five	Agents
IADLE 3.	THE.	Association	or the	Geresuai	otems wi	un une rive	Agents

jia yi	bing	ding	wu	ji	geng	xin	ren	gui
甲 乙	丙	T	戊	己	庚	辛	壬	癸
yang yin wood east		yin ire uth	yang soi cen		yang met wes		yang wate nor	er

In heaven it is wind, on the earth it is wood, in the body it is the sinews, <among the qi it is softness.> Among the depots it is the liver.

Its nature is warm.
Its virtue is harmony.
Its operation is movement.
Its color is greenish.
Its transformation is blossoming.
<Its creatures are haired.>
Its policy is dispersion.

Its commands are spreading and effusion.
Its causing changes is to break [things] and pull [them].
Its causing a calamity is making [things] to fall.

Its state of mind is anger. Anger harms the liver. Sadness overcomes anger.

Its flavor is sour.

Sadness overcomes anger.
Wind harms the liver.
Dryness overcomes wind.
Sour [flavor] harms the sinews.

Acrid [flavor] overcomes sour [flavor].<sup>7</sup>

#### And so on.

Similarly, in the doctrine of the five periods and six qi, the relationships of domination and revenge, as well as of generation and overcoming, follow the same laws as in the doctrine of the five agents. However, there are also some differences. For example, *Su wen* 22 provides the usual association of the celestial stems with the five agents in the doctrine of the five agents:

Jia and yi are associated with wood and with the east. Bing and ding are associated with fire and with the south. Wu and ji are associated with soil and with the center. Geng and xin are associated with metal and with the west. Ren and gui are associated with water and with the north.

TABLE 4. The Association of	of the Ten Stems with	the Periods	(Linear)
-----------------------------	-----------------------	-------------	----------

jia	yi	bing	ding	wu	ji	geng	xin	ren	gui
甲	乙	丙	丁	戊	己	庚	辛	壬	癸
soil	metal	water	wood	fire	soil	metal	water	wood	fire

A correlation of these data is shown in table 3.

In contrast, the associations of the celestial stems with the five periods constitute a system of its own. As the *Su wen* states,

Years [classified] *jia* and *ji* are governed by the soil period.

Years [classified] yi and geng are governed by the metal period.

Years [classified] bing and xin are governed by the water period.

Years [classified] ding and ren are governed by the wood period.

Years [classified] wu and gui are governed by the fire period.8

# Similarly,

Soil rules *jia* and *ji* [years].

Metal rules yi and geng [years].

Water rules bing and xin [years].

Wood rules ding and ren [years].

Fire rules wu and gui years.9

# A tabular correlation is shown in table 4.

In diagram 1 we see that the ten stems are paired twice with the five agents, the latter appearing in the mutual generation sequence. Hence in a circular presentation, each period is associated with two opposite stems, one representing yang and one representing yin.

An explanation for the change from an association of two neighboring stems with one identical agent in the doctrine of the five agents to an association of two opposing stems in a circular diagram with the same period in the doctrine of the five periods and six qi is given in a paragraph of *Su wen* 67 dealing with the passage of five qi through the sky:

The Book on the Supreme Beginning and on the Original [Qi] of Heaven [states]: The qi of a vermilion heaven passes through the [stellar divisions of]  $niu \ddagger$  and  $n\ddot{u} \npreceq$  and [through those of] the  $wu \not \precsim$  section.

The qi of a yellow heaven passes through the [stellar divisions of]  $xin \approx 0$  and  $wei \in \mathbb{R}$  and [through those of] the  $ii \in \mathbb{R}$  section.

The qi of a greenish in heaven passes through the [stellar divisions of] wei 危 and shi 室 and [through those of] liu 柳 and gui 鬼.

The qi of a white heaven passes through [the stellar divisions of] kang 亢 and di 氏 and [through those of] mao 昂 and bi 畢.

The qi of a dark heaven passes through [the stellar divisions of] *zhang* 張 and yi 翼 and [through those of] *lou* 婁 and wei 胃.

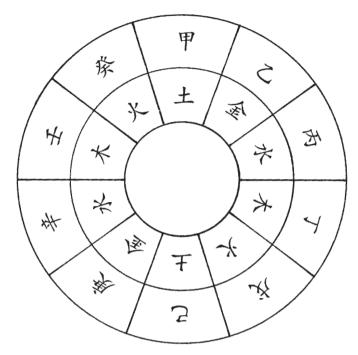


Diagram 1. The Association of the Ten Stems with the Periods (Circular)

{As for the so-called wu 戊 and ji 己 sections, these are [the positions of the stellar divisions of] kui 奎 and bi 壁, and of jiao 角 and zhen 軫. They are the gates of heaven and earth.} $^{10}$ 

Nowhere else in ancient literature or bibliographies is a text named Tai shitian yuan ce 太始天元册, "Book on the Supreme Beginning and on the Original [Qi] of Heaven," mentioned. Hence the background of this statement on the five qi passing through heaven and its exact meaning remain obscure; it may have been meteorological, astrological, or even astronomical. Also, it is not clear whether "the qi of a vermilion heaven" refers to an actual red-colored "qi" observed in the sky or if "vermilion heaven" is simply to be understood as a metaphor for the heaven of summer. The same applies to the remaining four qi.

Obviously the quotation discusses the relationships among the five qi of differently colored heavens and the twenty-eight stellar divisions. The twenty-eight stellar divisions, *xiu* 宿, also called "lunar lodges" or "lunar mansions," are divisions of the fixed stars devised by ancient Chinese astronomers. Their

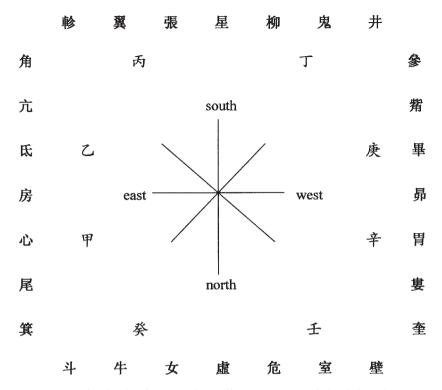


Diagram 2. The Cardinal Points, the Stellar Divisions, and the Celestial Stems

correspondences with the cardinal points and the celestial stems, as seen by Chinese astrology, are shown in diagram  ${\bf 2}.^{11}$ 

Apparently "the qi of a green heaven," that is, the qi of wood or spring, was associated with the stems  $ren \not\equiv \text{ and } ding \ \ \mathbb{T}$ . "The qi of a pure heaven," that is, the qi of metal or autumn, was associated with the stems  $yi \ \ \mathbb{Z}$  and  $geng \not\in \mathbb{R}$ . "The qi of a dark heaven," that is, the qi of water or winter, was associated with the stems  $bing \not\in \mathbb{R}$  and  $xin \not\cong \mathbb{R}$ . "The qi of a vermilion heaven," that is, the qi of fire or summer, was associated with the stems  $gui \not\cong \mathbb{R}$  and  $wu \not\in \mathbb{R}$ . "The qi of a yellow heaven," that is, the qi of soil, was associated with the stems  $jia \not\equiv \mathbb{R}$  and  $ji \not\in \mathbb{R}$ .

It is unclear why the *Tai shi tian yuan ce* refers to *wu* and *ji* in describing the passage of the qi of a vermilion heaven and the qi of a yellow heaven rather than to stellar divisions, as in all other cases. Normally, *wu* and *ji* do not refer to cardinal points; they are associated with the center, as is their corresponding agent, soil. In the *Tai shi tian yuan ce* quotation, though, they

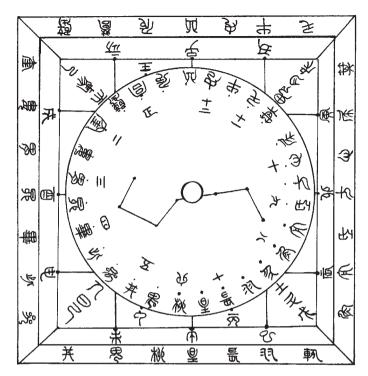


Diagram 3. Facsimile Reproduction of a Han Dynasty Cosmic Board of ca.  $165~\mathrm{B.c.}$ 

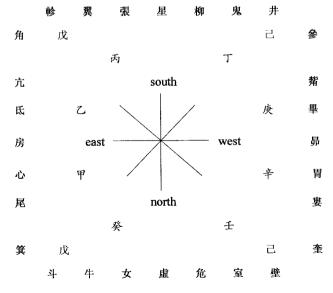


Diagram 4. Extract From the Earth Plate of a Han Dynasty Cosmic Board

are split into two "sections" and appear to have been meant to symbolize different directions.

The commentary added to the *Tai shi tian yuan ce* quotation (probably a commentary on the *Su wen* text, not on the original *Tai shi tian yuan ce* text) identified *wu* as a reference to the stellar divisions *kui* and *bi*, a region in the northwest, and *ji* as a reference to the stellar divisions *jiao* and *zhen*, a region in the southeast.

However, the opinion expressed in this commentary does not necessarily agree with the original meaning of the statement of the *Tai shi tian yuan ce.* In comparison, various "cosmic boards" ( $shi \not \preccurlyeq$ , Harper's translation, or "diviner boards," as they are called today) have been unearthed from Han tombs, presumably displaying correspondences, representative of Han cosmology, among the stellar divisions, the earth branches, and the celestial stems.<sup>12</sup>

The data revealing these correspondences are provided by the lower level of the board, a square plate symbolizing the earth and the earth's permanent correspondences with the celestial bodies. Within this square plate, the two corners of the northeast and the southeast are marked as wu, and the two corners representing the northwest and the southwest are marked by the characters ji. (See diagrams 3 and 4.)

Accordingly, the two celestial stems  $wu \not \exists$  and  $ji \not \exists$  do not refer to one cardinal point but to two different cardinal points each. If this meaning were implied in the Tai shi tian yuan ce quotation, it would explain why the text speaks of "wu section(s)" and "ji section(s)" rather than of stellar divisions. Also, wu is associated with eastern directions, whereas ji is associated with western directions. This corresponds to the usual sequence of wu preceding ji.

If one wished to locate the appearance of the five differently colored qi in their "passage through stellar divisions" as outlined in the *Tai shi tian yuan ce*, at least three different possibilities are imaginable. First, the five qi associated with a specifically colored heaven may have been thought to pass across the sky from one specified constellation of stellar divisions to one or two other specified constellations, without touching the remaining stellar divisions. Second, the five qi associated with a specifically colored heaven may have been thought to pass from one constellation of stellar divisions to one or two others through the remaining stellar divisions above the horizon. Third, the five qi associated with a specifically colored heaven may have been thought to appear only in very limited sections of the sky, that is, within the constellations of stellar divisions associated with them in the *Tai shi tian yuan ce*. These three alternatives are depicted in diagrams 5 through 7. According to the commentary to the *Tai shi tian yuan ce*, the picture would be as shown in diagram 8.

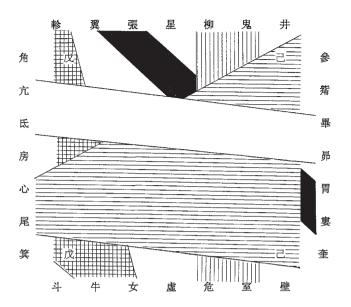


Diagram 5. The Appearance and Passage of the Five Qi Associated with a Specifically Colored Heaven within Specified Constellations of Stellar Divisions. First Alternative.

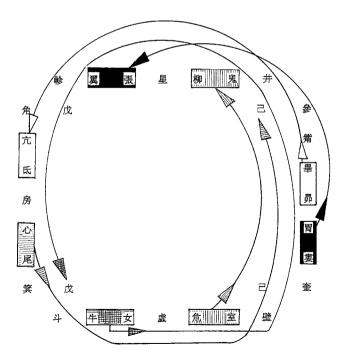


Diagram 6. The Appearance and Passage of the Five Qi Associated with a Specifically Colored Heaven within Specified Constellations of Stellar Divisions. Second Alternative.

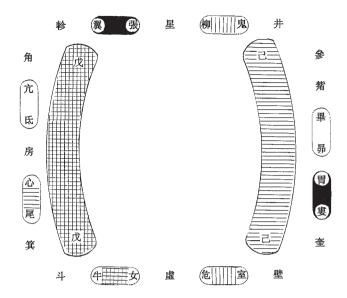


Diagram 7. The Appearance and Passage of the Five Qi Associated with a Specifically Colored Heaven within Specified Constellations of Stellar Divisions. Third Alternative.

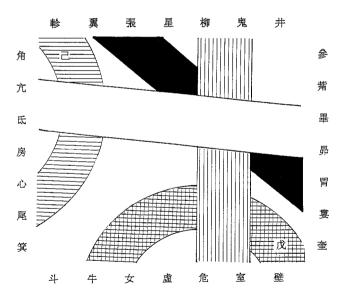


Diagram 8. The Appearance and Passage of the Five Qi Associated with a Specifically Colored Heaven within Specified Constellations of Stellar Divisions. First Alternative, Commentary Version.



TABLE 5. The Five Tones Representing Annual Periods

```
GONG 宮= SOIL
                       jia gong = major gong
                                              = yang gong
                        ii gong = minor gong
                                             = vin gong
SHANG 商 = METAL
                    geng shang = major shang = yang shang
                       yi shang = minor shang = yin shang
   JUE 角 = WOOD
                        ren jue = major jue
                                              = yang jue
                       ding jue = minor jue
                                             = yin jue
     ZHI 徵 = FIRE
                        wu zhi = major zhi
                                              = yang zhi
                        gui zhi = minor zhi
                                              = yin zhi
   YU 羽 = WATER
                        bing yu = major yu
                                              = yang yu
                        xin yu = minor yu
                                              = yin yu
```

#### 2.2. The Annual Period

In general, the annual periods are referred to by the names of the five agents. However, in *Su wen* 70 and 71, a separate system of designations is employed. Here the names of the five musical tones are used. As with the five periods, each of the five tones is associated with two celestial stems. However, the text does not speak of yang or yin tones but of "major" or "minor" tones. For example, the tone *gong* stands for the period "soil." In the doctrine of the five agents and six qi, soil is associated with the two stems *jia* and *ji. Jia* is a yang stem; hence *gong* is called "major" when it stands for the yang stem *jia. Ji* is a yin stem; hence *gong* is called minor when it stands for the yin stem *ji*. The five tones and the annual periods they represent are depicted in table 5.

The period associated with each year is an important indicator of the climatic conditions to be expected in that year. It was called "central period" (zhong~yun~ 中運) in the apocryphal treatises 72 and 73, possibly because it permeates the entire year, regardless of which of the six qi (see below, sec. 3) is active "above," that is, in the first half of the year, or "below," that is, in the second half of the year. Because the qi associated with the annual period exerts an exceptional impact on the climate for the entire year, it was also called "annual period" (sui~yun~ 歲運) <sup>13</sup> and "major period" (da~yun~ 大運) in later times; the latter term, however, does not appear yet in the Su~wen.

The annual period may be "greatly excessive" ( $tai\ guo\$ 太過) or "inadequate" ( $bu\ ji\$ 不及). All annual periods associated with yang stems (i.e., jia, bing, wu, geng, and ren) are by definition "greatly excessive"; all annual periods associated with yin stems (i.e., yi, ding, ji, xin, and gui) are "inadequate." Although this appears to indicate that any year's climate is either "greatly excessive" or "inadequate," specific constellations may very well result in situations of "balanced qi" ( $ping\ qi\$ 平氣).

## 2.3. The Three Arrangements

Years of unequal period association are marked by different climatic situations. As the Su wen states: "The five periods recur and diminish. They differ in weakness and abundance. Harm and benefit follow each other." In the doctrine of the five periods and six qi, weakness and abundance, harm and benefit, serve to express notions of greatly excessive, inadequate, and balanced qi. These three conditions are called "the three arrangements" (san ji = £). Because each of the five periods may appear in a specific constellation in any of these three arrangements, a total of fifteen arrangements are possible. Each of these fifteen arrangements has a specific designation:

[A year of the] wood [period with balanced qi] is called "extended harmony." [A year of the] fire [period with balanced qi] is called "ascending brilliance." [A year of the] soil [period with balanced qi] is called "perfect transformation." [A year of the] metal [period with balanced qi] is called "secured balance." [A year of the] water [period with balanced qi] is called "quiet adaptation." [A year of the] water [period with balanced qi] is called "quiet adaptation."

[A year of the] wood [period with inadequate qi] is called "discarded harmony." [A year of the] fire [period with inadequate qi] is called "hidden brilliance." [A year of the] soil [period with inadequate qi] is called "inferior supervision." [A year of the] metal [period with inadequate qi] is called "accepted change." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow." [A year of the] water [period with inadequate qi] is called "dried-up flow."

[A year of the] wood [period with excessive qi] is called "effusive growth." [A year of the] fire [period with excessive qi] is called "fire-red sunlight." [A year of the] soil [period with excessive qi] is called "prominent mound." [A year of the] metal [period with excessive qi] is called "firm completion." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [period with excessive qi] is called "inundating flow." [A year of the] water [Period with excessive qi] is called "inundating flow." [A year of the] water [Period with excessive qi] is called "inundating flow." [A year of the] water [Period with excessive qi] is called "inundating flow." [A year of the] water [Period with excessive qi] is called "inundating flow." [A year of the] water [Period with excessive qi] is called "inundating flow." [A year of the] wat

Within these three arrangements, each year's "virtue, qi, nature, operation, transformation, related [items], policy, [climatic] manifestation, [seasonal] order, corresponding [season], grain, fruit, depot, creature, livestock, color, nourished [part of the body], illness, flavor, musical tone, [material] objects, and number" are listed.

"Greatly excessive" means that, in a particular year, the corresponding annual qi (i.e., the qi associated with its period) manifests itself rather violently in the climatic changes. For example, when in a year associated with the annual period soil, soil period qi is greatly excessive, then the overall climate of that year is "prevalence of rain and dampness," because the climate corresponding to soil is dampness. The illnesses brought forth are mainly those associated with water and dampness or with the spleen and the stomach.

On the other hand, when the soil period qi is inadequate in a year associated with soil, not only are the climatic characteristics such that the qi of water and dampness is diminished; even more important, because the soil qi is inadequate, wood overcomes the soil. Hence the climate during that

year exhibits the characteristics of a wood period qi; that is, "wind prevails excessively."

Su wen 69 lists the relationships between the climatic changes in years of inadequate and greatly excessive periods, on the one hand, and the emergence of illnesses, on the other. For example:

If in a year [associated with wood] there is great excess [of the qi] of wood, wind qi spreads [everywhere].

The spleen, [which is] soil, receives evil.

People suffer from

outflow of [undigested] meals and they eat less.

Their bodies are heavy.

[They suffer from] vexation and grievance, intestinal sounds, and propping fullness in the abdomen.

Jupiter corresponds above. 18

When [the excess of the qi of wood] is severe, then

[the patients] are confused and they tend to become angry.

Vertigo and peak illness occur.

The policy of the qi of transformation (i.e., the qi of soil) is not enacted; the qi of generation (i.e., the qi of wood) governs alone.

[As a result,] cloudy things fly by.

Herbs and trees are kept in constant motion.

In severe cases, they are shaken and fall down.

[Illnesses] contrary [to normal are]:

pain in the flanks and severe vomiting.

If [in such cases the movement in the vessels at the] Surging Yang [hole] is interrupted, [the patient] will die and cannot be treated.

Venus corresponds above.<sup>19</sup>

The statements on all the other greatly excessive and inadequate annual periods follow this pattern.

2.4. Host (zhu  $\pm$ ) Periods, Visitor (ke  $\otimes$ ) Periods, and the Five Steps (bu  $\oplus$ ) The seven comprehensive discourses refer to "hosts" and "visitors" only. The complete designations zhu yun and ke yun do not appear in the Su wen.

The underlying metaphor of host and visitor is that a host is the regular occupant of a residence, whereas visitors come and go at irregular intervals and may not be expected. In the doctrine of the five periods and six qi, each year is seen as marked by a procession of five "steps" of equal length. Each step, in turn, is associated with a specific "host." This host is responsible for the regular climatic condition for the entire time it is in charge. The sequence of the hosts responsible for the climate during each step is identical year af-

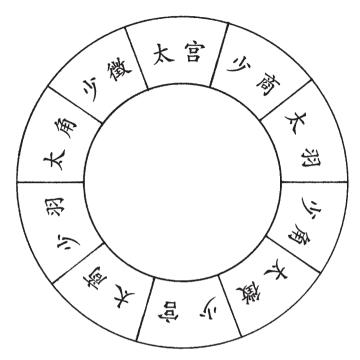


Diagram 9. The Sequence of the "Major" and "Minor" Tones

ter year. The initial host is the period wood, the second is fire, the third is soil, the fourth is metal, and the fifth is water.

However, hosts (and visitors) are not named after the five agents; they, like the annual periods in *Su wen* 71, are named after the five musical tones. Hence the initial period is designated as *jue*, followed by *zhi* (fire), *gong* (soil), *shang* (metal), and *yu* (water).

Each individual step in the course of the year is associated not only with a host but also with a visitor. Visitors are identified as being responsible for abnormal changes in the climate of the five seasons of each year. In contrast to the hosts, the arrival of the visitors differs from year to year.

The initial visitor period, that is, the period associated with the first of the total of five steps, is always identical to the annual period. For example, in the first year of the cycle of sixty years, that is, in a *jia zi* year, the annual period is yang and soil because the celestial stem of that year is *jia*, and *jia* is yang. In this year the initial visitor period is yang soil too. A yang-soil visitor is designated as "major *gong*." The remaining four visitors follow the generation sequence of the five agents.

Ji si and ji hai years, too, are associated with soil periods. Ji, however, is a

yin stem. Hence these two years are years of inadequacy; they are designated as "minor gong," and so is their initial visitor period. Because of their association with the ten celestial stems, the sequence of visitor periods repeats itself after ten years.

The sequence of the five tones is identical to that of their corresponding five periods. The combination of the five tones with "major" and "minor" follows the rule that major and minor generate each other (see diagram 9). Hence in the circular sequence of the five tones, "major" and "minor" arrive alternately: major jue—minor zhi—major gong—minor shang—major yu—minor jue—major zhi—minor gong—major shang—minor yu—major jue—and so on.

# 2.5. The Determination of the Host Periods

To determine whether the first of the host periods of a given year is "major" or "minor," the following procedure is applied.

- 1. Write out the five-tone sequence of the five steps as they correspond to the host periods.
- 2. Determine from its association with a yang or yin stem whether the respective year's annual period is "major" or "minor." Then determine which of the five tones is associated with the respective year's stem, locate this tone in the five-tone sequence of the five steps, and add the "major" or "minor" of the annual period to it.
- 3. From the "major" or "minor" nature of that step move backward, according to the principle "major and minor generate each other," to determine the major or minor nature of the first step, which is always *jue*.

For example, to determine the sequence of host periods in terms of "major" and "minor" in a *jia zi* year, this procedure leads to the following results.

- 1. Because the beginning and the sequence of the host periods is the same year after year, this sequence is jue-zhi-gong-shang-yu.
- 2. The annual stem of *jia zi* years, *jia*, is associated with soil. The corresponding tone is *gong*. Also, because *jia* is a yang stem, this *gong* should be major *gong*. Major *gong*, then, is the annual period of *jia zi* years. Also, in such a year the host period of the third step, *gong*, is major *gong* too.
- 3. Following the principle "major and minor generate each other," one moves backward from the third step, that is, from major *gong*, to the beginning of the sequence: the second step is identified as minor *zhi* and the initial step as major *jue*. Hence the complete sequence of host periods in a *jia zi* year is major *jue*—minor *zhi*—major *gong*—minor *shang*—major *yu*.

# 2.6. The Determination of the Visitor Periods

Once the annual period and the host periods are determined, the sequence of the visitor periods can be found out easily. Because the annual period is the initial period of the visitor periods, all the steps in the sequence jue-zhi-gong-shang-yu preceding the period identified as the initial period are moved to the very end of that sequence. The resulting new sequence is that of the visitor periods in that year.

Again, taking a *jia zi* year as an example, the annual period is major *gong*. The host periods are major *jue*—minor *zhi*—major *gong*—minor *shang*—major *yu*. Accordingly, the major *gong* step among the host periods is the initial period of the visitor periods. Hence the major *jue* and the minor *zhi* periods, preceding in the sequence of the host periods the major *gong* period, are moved to the end of the sequence. Hence the five steps of the sequence of visitor periods in a *jia zi* year are major *gong*—minor *shang*—major *yu*—major *jue*—minor *zhi*.

In Su wen 71, each year's sequence of visitor periods is listed in one line as a sequence of major and minor variants of the five tones. In this same line, a commentary in small characters of unknown origin and authorship indicates the beginning and the end of the host periods, enabling a reader to deduce the sequence of host periods. For example:

```
major jue initial [step] and proper [start of the sequence of host periods] minor zhi major gong minor shang major yu end [of the sequence of host periods] or major zhi
```

minor *gong*major *shang*minor *yu* end [of the sequence of host periods]
minor *jue* initial [step of the sequence of host periods]

Because the sequence of the host periods and the visitor periods is identical each year, with only the onset of the sequence of the visitor periods differing from that of the sequence of the host periods, the first small character comment "initial" (chu  $\overline{w}$ ) indicates the initial period of the host periods of a given year. Hence this character "initial" is always added after the character jue. The small character comment "end" (zhong  $\cancel{k}$ ) always follows the character yu, as the period yu in the sequence of the host periods is always the final period.

Whenever the sequences of the host periods and the visitor periods overlap entirely, the Su wen adds a small character comment "proper" (zheng  $\mathbb{E}$ ) to the character jue to indicate that in such years it is the initial period of the sequence of both the host periods and the visitor periods. However, this designation of a jue period as "proper" must not be confused with the designation of jue, zhi, shang, and so on, periods as "proper" in Su wen zhi0.

#### 3. THE SIX QI

We now turn to the six qi ( $liu\ qi \ \dot{\sim} \ \chi$ ), the second conceptual segment of the doctrine of the five periods and six qi. Similar to the way the five periods supply three conceptual levels—the annual period, the host periods, and the visitor periods—the six qi appear on three conceptual levels—the "qi controlling heaven" ( $si\ tian\ \exists\ \chi$ ), the host qi, and the visitor qi. However, the qi controlling heaven is a more complex concept than the annual period; it refers, first, to a qi characterizing an entire year; second, to a qi characterizing the first half of a year; and third, to the six visitor qi.

# 3.1. The Yin and Yang Associations of the Six Qi

For the most part, when the *Su wen* speaks of "six qi" apart from the context of the doctrine of the five periods and six qi, it refers to cold, summer heat, dryness, dampness, wind, and fire as causes of illness. The sequence of these six qi as causes of illness is not related to the sequence of climatic changes in the course of any given year. As is stated in *Su wen* 67:

When dryness dominates, then the earth is dry. When summer heat dominates, then the earth is hot. When wind dominates, then the earth moves. When dampness dominates, then the earth turns muddy. When cold dominates, then the earth cracks. When fire dominates, then the earth hardens.<sup>20</sup>

In contrast, the "six qi" mentioned in *Su wen* 66 through 74 serve to characterize climatic changes in the course of one year, with these changes differing from one year to the next. They include major yang qi, cold and water; yang brilliance qi, dryness and metal; minor yang qi, minister fire; major yin qi, dampness and soil; minor yin qi, heat; and ceasing yin qi, wind and wood.

What is above in ceasing yin 厥陰 [years], the wind qi rules it. What is above in minor yin 夕陰 [years], the heat qi rules it. What is above in major yin 太陰 [years], the dampness qi rules it. What is above in minor yang 夕陽 [years], the minister fire rules it. What is above in yang brilliance 陽明 [years], the dryness qi rules it. What is above in major yang 太陽 [years], the cold qi rules it.  $^{21}$ 

The earliest known appearance of this kind of sixfold subcategorization of yin and yang is in the context of the description and categorization of vessels in the medical Mawangdui texts of the early second century B.C.

It is noteworthy that the strongest yang category, major yang, is associated with cold, while the weakest yang category, minor yang, is associated with fire. No explanation so far has been offered to explain these unusual correspondences.

In associations of the six qi with the three yin and three yang, the term "summer heat" (shu 暑) is always replaced by "heat" (re 熱).

The pattern in which *Su wen* 68 combines the six qi with the three yin and yang is the following:

The upper [half] of minor yang [years] is governed by the fire qi. At midterm, the ceasing yin [qi] appears.

The upper [half] of yang brilliance [years] is governed by the dryness qi. At midterm, the major yin [qi] appears.

The upper [half] of major yang [years] is governed by the cold qi. At midterm, the minor yin [qi] appears.

The upper [half] of ceasing yin [years] is governed by the wind qi. At midterm, the minor yang [qi] appears.

The upper [half] of minor yin [years] is governed by the heat qi. At midterm, the major yang [qi] appears.

The upper [half] of major yin [years] is governed by the dampness qi. At midterm, the yang brilliance [qi] appears.<sup>22</sup>

The association of minor yang with fire instead of minister fire is the one most frequently employed in the seven comprehensive discourses; it also appears in *Su wen* 70 and 74. An example of further minor modifications occasionally encountered in the seven comprehensive discourses is the following; it combines minor yin with fire rather than heat and minor yang with heat rather than fire.

Where the ceasing yin [qi] arrives, there is the wind palace. . . .

Where the minor yin [qi] arrives, there is the fire palace. . . .

Where the major yin [qi] arrives, there is the rain palace. . . .

Where the minor yang [qi] arrives, there is the heat palace. . . .

Where the yang brilliance [qi] arrives, there is the palace that controls the killing.

Where the major yin [qi] arrives, there is the cold palace.<sup>23</sup>

The yin and yang categorization of the six qi includes a direct reference to different quantities of the respective yin and yang dimensions. For example, in discussing the policies of the six yin and yang qi, *Su wen* 71 proceeds from yang to yin and from larger to smaller quantities:

major yang, yang brilliance, minor yang, major yin, minor yin, ceasing yin<sup>24</sup>

However, in the same treatise, in the course of a discussion of the twelve changes, the sequence is exactly reversed:

ceasing yin, minor yin, major yin, minor yang, yang brilliance, major yang<sup>25</sup>

This latter pattern can also be seen in *Su wen* 66-369-5, 74-503-6, and 68-387-10.

The meaning of the larger and smaller quantities of the six yin and yang qi is as follows: in their consecutive passage, the six qi must keep a circular movement following a fixed direction based on a sequence in terms of larger and smaller quantities of yin and yang. This movement is probably meant by the phrase "Left and right are the passageways of yin and yang" (左右者陰陽之道路) in the  $Su\ wen.^{26}$ 

# 3.2. The Six Qi and the Five Agents, Ruling Fire, and Minister Fire

The relationships among the six qi and the five agents are close. The ceasing yin qi, wind, corresponds to the wood of the five agents. The major yin qi, dampness, corresponds to soil, and so on. However, the six qi constitute an even number; the five agents, an uneven number. A combination of the two may result in a discrepancy because they do not completely overlap.

The seven comprehensive discourses of the *Su wen* tackle this discrepancy by two methods. One is to disregard one qi; the other is to divide one of the five agents into two.

The method of disregarding one qi appears in Su wen 66 as follows:

Heaven has the five agents;

they control the five positions.

Thereby [the five agents] generate cold, summer heat, dryness, dampness, and wind. 27

#### and

The spirit, in heaven it is wind . . . it is heat . . . it is dampness . . . it is dryness . . . it is cold.<sup>28</sup>

Su wen 71, in introducing the operations of the six qi, also speaks only of five qi:

The transformations of the major yin [qi, that is,] rain, are applied to major yang [qi];

the transformations of the major yang [qi, that is,] cold, are applied to minor yin [qi];

the transformations of the minor yin [qi, that is,] heat, are applied to yang brilliance [qi];

the transformations of the yang brilliance [qi, that is,] dryness, are applied to ceasing yin [qi];

the transformations of the ceasing yin [qi, that is,] wind, are applied to major yin [qi]. $^{29}$ 

However, in the majority of the treatises, the fire among the five agents is divided in two to create a number that can be matched with the six qi. For example, in *Su wen* 71, the six yin and yang qi are combined with the five agents in such a way that fire appears twice, as fire and as minister fire:

ceasing yin = wood minor yin = fire major yin = soil minor yang = minis

minor yang = minister fire yang brilliance = metal

yang brilliance = metal major yang = water $^{30}$ 

Su wen 68, though, in addition to offering a different sequence, breaks the fire agent into "ruling fire" and "minister fire":

To the right of obvious brilliance,

that is the position of the ruling fire.

To the right of the ruling fire,

retreating one step,

that is the [position] governed by the minister fire.

Moving one step further,

that is the [position] governed by the soil qi.

Moving one step further,

that is the [position] governed by the metal qi.

Moving one step further,

that is the [position] governed by the water qi.

Moving one step further,

that is the [position] governed by the wood qi.

Moving one step further,

that is the [position] governed by the ruling fire.<sup>31</sup>

This is the pattern followed by most authors in subsequent centuries.

# 3.3. The Host Qi and the Six Steps (bu 步)

Within the course of one year, regular climatic changes that are supposed to occur concomitant with the so-called six steps are attributed to the six host qi. That is, each of the six host qi is associated with one of the six steps. The sequence of the six host qi in the course of the six steps is fixed and

does not change; it starts with the qi of wood and follows the mutual generation order of the five agents:

initial qi: ceasing yin, wind and wood second qi: minor yin, ruling fire third qi: minor yang, minister fire fourth qi: major yin, dampness and soil fifth qi: yang brilliance, dryness and metal final qi: major yang, cold and water

Hence the climates represented by the host qi are identical to the regular climatic changes in the course of the four seasons, spring, summer, autumn, and winter.

Su wen 68 clearly outlines the lengths of the six steps, also called "the six seasonal positions" (liu jie wei 六節位):

A so-called step covers 60 degrees (i.e., days of a solar year) and some odd parts [of a degree/day].<sup>32</sup>

By "some odd parts," the *Su wen* refers to a period somewhat shorter than a full day. *Su wen* 68 defines it as 87.5 clepsydra marks (in ancient China a bronze vessel, clepsydra, was employed to calculate the length of one day; over the time of one day and one night, the water in the clepsydra descended by one hundred marks):

In a jia zi year,

the first qi [term] begins with the water [in the clepsydra] sinking from the first mark and it ends after [60 days and]  $87^{\frac{1}{2}}$  marks.

The second qi [term] begins at the 87th mark and six parts and it ends after [a further 61 days and] 75 marks.

The third qi [term] begins at the 76th mark and it ends after [a further 61 days and]  $62^{\frac{1}{2}}$  marks.

The fourth qi [term] begins at the 62d mark and six parts and it ends after [a further 61 days and] 50 marks.

The fifth qi [term] begins at the 51st mark and it ends after [a further 61 days and]  $37^{\frac{1}{2}}$  marks.

The sixth qi [term] begins at the 37th mark and six parts and it ends after [a further 61 days and] 25 marks.  $^{33}$ 

This paragraph can be illustrated graphically as in diagram 10.

The lengths of each step of the host qi are identical. However, the *Su wen* does not clearly outline which day in a year an initial qi commences. Fang Yaozhong and Xu Jiasong assume that it is the "great cold" term of the previous and of the present year that serves as standard and that calculations should start from that date.<sup>34</sup>

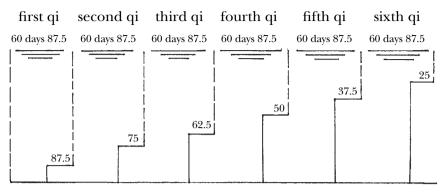


Diagram 10. The Length of the Six Steps in the Course of a Year

The beginnings of the six steps differ in each of the following three years; only after four years have passed does the same cycle begin anew:

When the sun passes through the first cycle, the heavenly qi begins with the first mark.

When the sun passes through the next cycle, the heavenly qi begins [after 365 days and 25 marks] at the 26th mark.

When the sun passes through the third cycle, the heavenly qi begins [after the next 365 days and 25 marks] at the 51st mark.

When the sun passes through the fourth cycle, the heavenly qi begins [after the next 365 days and 25 marks] at the 76th mark.

When the sun passes through the fifth cycle, the heavenly qi [after the next 365 days and 25 marks] once again begins at the first mark.

{That is what is called "one arrangement."}<sup>35</sup>

The statement "the sun passes through one cycle" shows that the solar year was adopted in the doctrine of the five periods and six qi. One normal day in a solar year lasts 365.2422 days, that is, 365 days, 5 hours, 48 minutes, and 46 seconds. Hence in the doctrine of the five periods and six qi, the length of the six qi of one year should approach this figure.

Over one day and one night, the water in the clepsydra descended by one hundred marks. Hence in one solar year, in addition to the 365 times 100 marks, the water in the clepsydra should descend by an additional odd number of marks. This additional number of marks amounts to roughly one quarter of a day, about six hours.

Su wen 68 refers to this additional number of marks rather correctly: "when the sun passes through the next cycle, the heavenly qi begins [after 365 days and 25 marks] at 26 marks." In other words, each year lasts for an additional 25 marks, which amounts to a quarter of a full day. This way, after four years

One arrangement extends over four years. Hence within twelve years, that is, within one cycle of twelve branches, there are three arrangements, namely:

zi, chou, yin, mao: first arrangement chen, si, wu, wei: second arrangement shen, you, xu, hai: third arrangement

At the beginning of the three years associated with the earth branches *zi*, *chen*, and *shen*, the descent of the water in the clepsydra starts at the same mark. Hence *chou*, *si*, and *you* years have identical beginnings, as have *yin*, *wu*, and *xu* as well as *mao*, *wei*, and *hai* years. As the *Su wen* states:

The convergences of qi in *yin*, *wu*, and *xu* years are identical. The convergences of qi in *mao*, *wei*, and *hai* years are identical. The convergences of qi in *chen*, *shen*, and *zi* years are identical. The convergences of qi in *si*, *you*, and *chou* years are identical. When [a cycle] has reached its end, it begins anew.<sup>36</sup>

## 3.4. The Visitor Qi

The six visitor qi, too, extend over six steps of equal length. The cyclical sequence of these six steps, though, is not identical to that of the host qi. They are arranged in accordance with the larger and smaller quantities of the three yin and yang qi:

first yin: ceasing yin, wind and wood second yin: minor yin, ruling fire third yin: major yin, dampness and soil first yang: minor yang, minister fire second yang: yang brilliance, dryness and metal third yang: major yang, cold and water

This is applied in Su wen 68 and 71 either in the sequence of decreasing yin and yang qi<sup>37</sup> or in the sequence of increasing yin and yang qi, as quoted above.<sup>38</sup>

As with the five visitor periods, the initial visitor qi changes from year to year. It is identified as starting from the annual branch associated with each year. Once the annual branch associated with a given year is known, it is possible to determine the "qi controlling heaven" corresponding to this branch (see below, p. 423) and then to calculate the sequence of the six visitor qi of that year. Hence it is important to understand the relationships among the annual branches and the six yin and yang qi.

yin mao 寅 卯				shen you 申 酉			_
更 が 	Ж			T []	尺	× 7	丑
wood	soil	fire	soil	metal	soil	water	soil

TABLE 6. The Association of the Earth Branches with the Five Agents (Linear)

## 3.5. The Association of the Twelve Branches with the Qi

In the *Su wen* doctrine of the five periods and six qi, as in the association of the ten stems with the periods, the association of the twelve branches with the qi follows its own characteristic rules. Hence to establish the relationships among the ten celestial stems and the twelve earth branches, on the one hand, and the periods and the qi, on the other, one cannot mechanistically employ the contents of the system of the doctrine of the five agents. In the latter, the associations among the twelve branches, the six qi, and the four seasons are as shown in table 6 and diagram 11.

Diagram 11 shows that the twelve branches are matched with the months of a year, beginning with the eleventh month of the preceding year. That is, the twelve branches do not correspond to the twelve months within one year. According to one model in the doctrine of the five agents, soil flourishes in the final, that is, third, month of each of the four seasons. Hence the third, the sixth, the ninth, and the twelfth months are associated with major yin qi, that is, with dampness and soil. The remaining eight months are associated with the remaining four of the five agents.

However, in the doctrine of the five periods and six qi, the relationships between the six qi and the twelve branches manifest themselves in the association of years, not months.

In *Su wen* 67 the result of the association of the twelve branches with the qi is listed in the context of an identification of the qi ruling the "above" of a year as follows:

What is above in *zi* and *wu* [years], minor yin rules it. What is above in *chou* and *wei* [years], major yin rules it. What is above in *yin* and *shen* [years], minor yang rules it. What is above in *mao* and *you* [years], yang brilliance rules it. What is above in *chen* and *xu* [years], major yang rules it. What is above in *si* and *hai* [years], ceasing yin rules it.<sup>39</sup>

Elsewhere, in *Su wen* 66, the relationships between the annual branches and the six qi are outlined even more clearly:

In zi and wu years, the minor yin [qi] appears above. In *chou* and *wei* years, the major yin [qi] appears above.

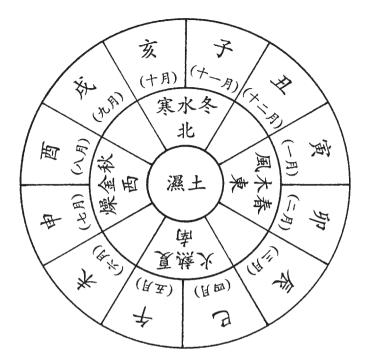


Diagram 11. The Association of the Earth Branches with the Five Agents and the Twelve Months (Circular)

In *yin* and *shen* years, the minor yang [qi] appears above. In *mao* and *you* years, the yang brilliance [qi] appears above. In *chen* and *xu* years, the major yang [qi] appears above. In *si* and *hai* years, the ceasing yin [qi] appears above.

Also, *Su wen* 71 outlines each year's annual stem and branch under the names of the six groups of qi controlling heaven in the course of sixty years.

If the text quoted above from the *Su wen* is transformed into a circular graph (see diagram 12), it is obvious that the association of the twelve branches with the qi is rather different from the corresponding contents of the doctrine of the five agents.

In the case of the association of the ten stems with the periods, the ten stems have been divided into two sequences of one through five and six through ten respectively. Each of these two sequences is associated with the five periods. (See above, diagram 1.)

The association of the twelve branches with the qi follows the same pat-

zi	chou	yin	mao	chen	si
wu	wei	shen	you	xi	hai
minor	major	minor	yang	major	ceasing
yin	yin	yang	brilliance	yang	yin
ruling fire	soil	minister fire	metal	water	wood
	dampness		dryness	cold	wind

TABLE 7. The Association of the Twelve Branches with the Qi (Linear)

tern. The twelve branches are divided into two sequences—branches one through six and branches seven through twelve (see table 7). Each of these two sequences is associated with the six qi. In a circular illustration, this results in a pattern in which the two branches associated with the same qi are represented opposite each other (see diagram 12).

The origins of this deviation of the association of the twelve branches with the five agents from the usual associations in the five-agents doctrine are not known yet. The *Su wen* author(s) may have employed the statement from the *Tai shi tian yuan ce*, quoted above, to elucidate via the associations of certain stellar divisions not only the association of the ten stems but also the association of the twelve branches with the five agents. Most conspicuous in the *Tai shi tian yuan ce* quotation is the association of two opposite pairs of stellar divisions with one identical qi, possibly paralleling the association of one identical agent with branches (and stems) placed opposite each other in a circular representation.

On the basis of these diagrams, it is quite simple to calculate the qi controlling heaven that should appear in a given year. For example, in *jia zi* years, the annual branch is *zi*. "In *zi* and *wu* years, the minor yin [qi] appears above"; that is, the qi controlling heaven in these years is minor yin, ruling fire. In a sixty-year cycle, there are ten years whose annual stems are *zi* or *wu*: *jia zi*, *jia wu*, *geng zi*, *geng wu*, *bing zi*, *bing wu*, *ren zi*, *ren wu*, *wu zi*, and *wu wu*. In these ten years, the qi controlling heaven is always minor yin, that is, ruling fire.

Once the ten stems are transformed into periods and once the twelve branches are transformed into qi, the circular sequence of the five periods and of the six qi is determined on the basis of the first position of the stems and branches respectively. That is, among the celestial stems, jia is the first. Jia (and also the sixth stem ji) is associated with soil. Hence the five periods start with the soil period. Among the twelve branches, zi is the first. Zi (and also the seventh branch wu) is minor yin, that is, ruling fire. Hence minor yin qi is the first among the six qi.



Diagram 12. The Association of the Twelve Branches with the Qi (Circular)

## 3.6. The Qi Controlling Heaven and the Qi at the Fountain

The yin or yang qi associated with the annual branch of each year is the qi controlling heaven. In the *Su wen*, the qi controlling heaven encompasses three different levels of meaning.

# 3.6.1. The Qi Controlling Heaven Rules the Climate in the First Half of a Year Su wen 71 divides a year into two parts:

The [time period] before the middle of a year, that is the [time period] ruled by the qi of heaven. The [time period] following the middle of a year, that is the [time period] ruled by the qi of the earth.<sup>41</sup>

#### Su wen 74 states:

[From] the first qi and ending with the third qi, that is the [term] ruled by the qi of heaven . . . . [From] the fourth qi and ending with the final qi, that is the [term] ruled by the qi of the earth. 42

The "qi of heaven" is not explicitly defined as "qi controlling heaven" in the *Su wen*. However, such a meaning can be inferred from several passages associated with the doctrine of the five periods and six qi, the most obvious one being found in *Su wen* 74:

Huang Di:

What about the changes [caused by] the qi of heaven?

Qi Bo:

When the ceasing yin [qi] controls heaven, wind encroaches upon what it dominates. . . . When the minor yin [qi] controls heaven, heat encroaches upon what it dominates. . . . When the major yin [qi] controls heaven, dampness encroaches upon what it dominates. . . . When the minor yang [qi] controls heaven, fire encroaches upon what it dominates. . . . When the yang brilliance [qi] controls heaven, dryness encroaches upon what it dominates. . . . When the major yang [qi] controls heaven, cold encroaches upon what it dominates. . . .

Also, in *Su wen* 70, Qi Bo explains the meaning of his statement "the qi of heaven restrains it" by referring to "the [qi] controlling heaven."<sup>44</sup>

In the same way as the "qi of heaven" ruling the first half of a year refers to the "qi controlling heaven," the "qi of the earth," when ruling the second half of a year, refers to the "qi at the fountain" (zai quan 在泉). "Fountain" symbolizes the earth. These designations may have been derived from ancient Chinese notions of nine heavens above and nine fountains below.

3.6.2. The Qi Controlling Heaven Rules an Entire Year An examination of the notions "policy of major yang," "policy of yang brilliance," and so on, as listed in Su wen 71, shows that all these "policies" refer to the climate of an entire year. However, the designations of these policies are identical to those used for naming the qi controlling heaven in the first half of a year. For example:

[Huang] Di:

The policy of major yang [qi], what is it like?

Qi Bo:

These are the arrangements including *chen* and *xu* [earth branches].

[The first two arrangements include the years when] major yang [controls heaven], major *jue* [is the annual period], major yin [is at the fountain]. [They are designated] *ren chen* and *ren xu.* <sup>45</sup>

Further on, "policy" and "control of heaven" are referred to as identical:

Whenever there is such a policy of major yang [qi] controlling heaven, the transformations of the [six] qi and the movement of the [five] periods precede heaven.

The qi of heaven is stern; the qi of the earth is quiet.<sup>46</sup>

Hence the name of the qi controlling heaven in the first half of a year can also be the name of the annual qi ruling an entire year. This does not apply to the qi at the fountain.

3.6.3. The Qi Controlling Heaven Rules the Third among the Six Visitor Qi Su wen 71 offers a listing of rules underlying the sequence of the six visitor qi in the course of a year. In the context of the third qi, the text states:

The policy of heaven is widespread. Cold qi prevails. Hence rain falls.<sup>47</sup>

That is to say, during the term of the third visitor qi, the climatic situation is identical to that characteristic of the entire year. In the present case, the qi ruling the entire year is major yang, that is, cold, and this is also the visitor qi responsible for the climate during the third step. As this is the "qi controlling heaven," it is also the basic qi responsible for the first half of that year. Parallel to this, during the final step, at the time of the sixth qi, "the qi of the earth occupies its proper position." That is, at this time, the climatic situation is particularly formed by the qi of the earth, by the qi at the fountain ruling the second half of that year.

Even though in the *Su wen* the third of the visitor qi is not explicitly named "qi controlling heaven," just as the sixth of the visitor qi is not explicitly named "qi at the fountain," it may be concluded from the paragraphs cited above that the third and the sixth qi are at least identical to the qi controlling heaven and the qi at the fountain respectively.

Further evidence to the effect that the third qi was considered the qi controlling heaven may be found in the context of the concept of the "intervening qi" ( *jian qi* 間氣).

3.6.4. The Intervening Qi 間氣 Su wen 74 has the following dialogue.

[Huang] Di:

What about the transformations of the earth [qi]?

Qi Bo:

[Their] manifestations are identical to those resulting from the [qi] controlling heaven. The [manifestations of the] intervening qi are all identical, [too].

[Huang] Di:

"Intervening qi," what does that mean?



Diagram 13. The Qi controlling Heaven, the Qi at the Fountain, and the Intervening Qi

#### Oi Bo:

Those to the left and to the right of the [qi] controlling [heaven and earth], they are called intervening qi.

#### [Huang] Di:

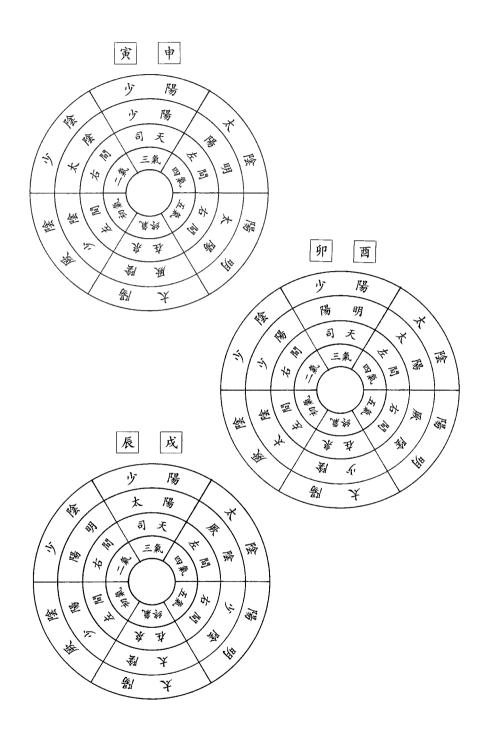
How can they be distinguished?

#### Qi Bo:

Those [qi] ruling over an [entire] year, they [are responsible for] arranging that year.

As for the intervening qi, they [are responsible for] arranging the [seasonal] steps [within a year]. 49

In this paragraph, "transformations on the earth" (*di hua* 地化) refers to the qi at the fountain. When Huang Di asks what the transformations on the earth are like, he wants to know about the regular climatic changes generated by the qi at the fountain. Qi Bo responds that they are identical to the regular climatic changes generated by the qi controlling heaven and by the intervening qi. Obviously, Huang Di is not familiar with the term "intervening qi." So Qi Bo explains "intervening qi" as those "to the left and to the right



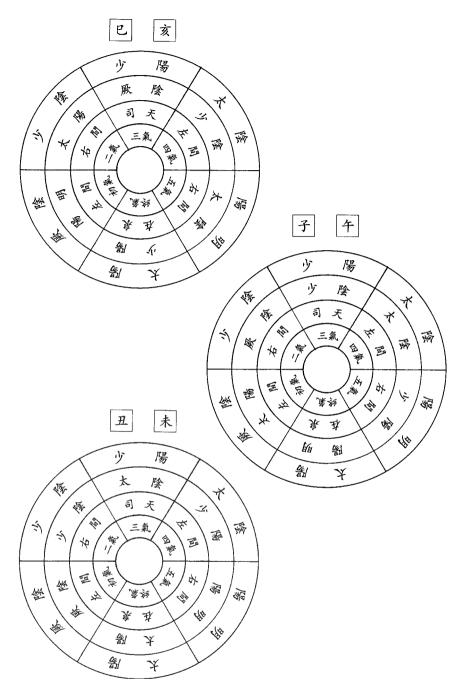


Diagram 14. The Six Constellations of Associations of Annual Branches with the Qi Controlling Heaven, the Qi at the Fountain, the Intervening Qi, and the Six Steps of a Year.

of the [qi] controlling [heaven and earth]." Drawn as a diagram, the positions occupied by the qi controlling heaven and earth and the intervening qi may be represented as shown in diagram 13. All six possible constellations of qi controlling heaven, qi at the fountain, and intervening qi to the left and right appear in diagram 14a–f.

Qi Bo's definition does not answer the question of what differences exist among the qi controlling heaven and earth and the intervening qi. When Huang Di requests a further explanation of this point, Qi Bo tells him that the qi controlling heaven is the qi ruling an entire year and reflects the climate of the entire year. The intervening qi, though, rule the climate of only one step each out of a total of six.

3.6.5. The Issue of Determining the Position of the Six Qi Relative to an Observer (the Meaning of "Left" and "Right," "North" and "South") At least four viewpoints of an observer relative to the positions of the six qi are reflected in the Su wen.

## 1. Su wen 67 states:

As for the so-called above and below,

these are the locations where yin and yang are seen in the upper and lower [halves] of a year.

As for the [so-called] left and right, [the following applies]:

Whenever the ceasing yin appears above,

the minor yin is to the left and the major yang is to the right.

[Whenever] the minor yin appears [above],

the major yin is to the left and the ceasing yin is to the right.

[Whenever] the major yin appears [above],

the minor yang is to the left and the minor yin is to the right.

[Whenever] the minor yang appears [above],

the yang brilliance is to the left and the major yin is to the right.

[Whenever] the yang brilliance appears [above],

the major yang is to the left and the minor yang is to the right.

[Whenever] the major yang appears [above],

the ceasing yin is to the left and the yang brilliance is to the right.

{When it is said "face the north and name their position," [then] this is to state how it is perceived} . . .

When the ceasing yin is present above,

then the minor yang is present below,

the yang brilliance is to the left, and the major vin is to the right.

When the minor yin is present above,

then the yang brilliance is present below,

the major yang is to the left, and the minor yang is to the right.

When the major yin is present above,

then the major yang is present below,

the ceasing yin is to the left, and the yang brilliance is to the right.

When the minor yang is present above,

then the ceasing yin is present below,

the minor yin is to the left, and the major yang is to the right.

When the yang brilliance is present above,

then the minor yin is present below,

the major yin is to the left, and the ceasing yin is to the right.

When the major yang is present above,

then the major yin is present below,

the minor yang is to the left, and the minor yin is to the right.

{When it is said "face the south and name their positions," [then] this is to state how it is perceived.} $^{50}$ 

The text quoted above, together with the commentary, might be understood in the following way:

An observer who places himself at the position of the qi controlling heaven (i.e., the position of the third of the six steps or annual qi, associated with summer and the south; see above) and faces the north will see the intervening qi in the way described by the first part of the text. As for the second part, the observer has to place himself at the position of the qi at the fountain (i.e., the sixth of the annual qi) and face the south.

Hence the observer changes his position with regard to the respective half of the year (see diagrams 13 and 14 above).

2. Su wen 70 has the following statement referring to directions:

Heaven is insufficient in the northwest.

Cold is to the left and coolness to the right.

The earth is incomplete in the southeast.

Heat is to the right and warmth is to the left.<sup>51</sup>

Apparently this viewpoint implies a fixed position of the observer in the north, which traditionally is the normal position for a Chinese in a topographical context.

On ancient Chinese maps the south was above and the north below, the east was to the left and the west to the right. (See diagram 15.)

Accordingly, in terms of west and north, the north is left, and the west is right. Hence the north is cold, and the west is cool. In terms of east and south, the south is on the right and is hot, and the east is on the left and is warm.

Su wen 71, too, has a reference to directions:

The qi of spring moves to the west.

The qi of summer moves to the north.

The gi of autumn moves to the east.

The qi of winter moves to the south. . . .

The qi of spring starts from the left.

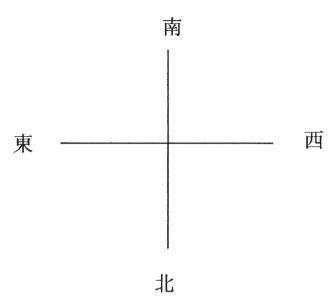


Diagram 15. The Cardinal Points

The qi of autumn starts from the right. The qi of winter starts from behind. The qi of summer starts from in front.<sup>52</sup>

Here, "in front" refers to the south, "behind" refers to the north, "left" refers to the east, and "right" refers to the west.

3. Another viewpoint might be reflected in the following statements of *Su wen* 68:

Above and below have [their fixed] positions; left and right are [firmly] arranged.

Hence, the [term] to the right of minor yang [qi], it is governed by the yang brilliance [qi]. The [term] to the right of yang brilliance [qi], it is governed by the major yang [qi]. The [term] to the right of major yang [qi], it is governed by the ceasing yin [qi]. The [term] to the right of ceasing yin [qi], it is governed by the minor yin [qi]. The [term] to the right of minor yin [qi], it is governed by the major yin [qi]. The [term] to the right of major yin [qi], it is governed by the minor yang [qi]. <sup>53</sup>

To the right of obvious brilliance, that is the position of the ruler fire.

To the right of the ruler fire, retreating one step, that is the [position] governed by the minister fire. Moving one step further, that is the [position] governed by the soil qi. Moving one step further, that is the [position] governed by the metal qi. Moving one step further, that is the [position] governed by the water qi. Moving one step further, that is the [position] governed by the wood qi. Moving one step further, that is the [position] governed by the ruler fire. 54

The first passage refers to the sequence of the visitor qi, the second one to the sequence of the host qi.

Here the observer might be conceived as standing in the center of the circle, turning around to look at the different qi of a year (see diagrams 13 and 14).

4. Su wen 67 states:

Those above, they pass to the right. Those below, they pass to the left.

On the left and to the right, they complete one circle around heaven.

When [they enter the] next [circle], they meet a new [with the original starting point].  $^{55}$ 

Here, "above" probably refers to the visitor qi, "below" to the host qi, and "movement" to the changing qi constellations in subsequent years.

According to this interpretation, a fixed position of the observer in the south, at the place of the qi controlling heaven, and facing north, would fit best with the text.

## 3.7. The Qi Controlling Heaven, the Qi at the Fountain, and Climatic Changes

The seven comprehensive discourses on the doctrine of the five periods and six qi devote considerable attention to the qi controlling heaven and to the qi at the fountain because they are assumed to exert a decisive influence on the climate, on the generation and growth of plants and animals, and on the illnesses of the human body. In this regard, the qi controlling heaven may even supersede the influence of the annual period to a certain degree.

For example, it was observed that humans suffered from illnesses even in

years when the annual period was considered one of balanced qi. This was attributed to the qi controlling heaven by the statement: "The qi of heaven restrains the [annual qi]."<sup>56</sup>

The beginning of the respective dialogue in Su wen 70 reads as follows:

[Huang] Di:

If in a specific year [the arrangement is such that there should] be no illness, and yet the qi in the depots does not correspond. [The qi of that year] does not operate, why is that?

Qi Bo:

The qi of heaven restrains it. The qi have something they follow.

[Huang] Di:

I should like to hear this comprehensively.

Qi Bo:

When the minor yang [qi] controls heaven, and

when fire qi comes down, [then]

the lung qi rises to follow.

White [qi] rises and metal operates.

[Hence] herbs and trees are met by disasters.

(These are the climatic characteristics of the first half of that year.)

Burning heat appears;

it alters metal. It even makes it vanish.

(Fire overcomes metal)

Hence massive summer heat prevails.

(The appearance of the climate)

[People suffer from] cough, sneezing, stuffy nose, nosebleed, nasal congestion, oral ulcers, cold and heat, as well as *fu*-swelling.

(The resulting illnesses)

Wind prevails on the earth;

(The qi at the fountain in the second half of the year is wind.)

Dust and sand fly whirling up.

(The appearance of the climate)

[People suffer from] heartache and stomach duct pain, from recession and countermovement, from blockage and impassability.

(The resulting illnesses)

Its rule is violent and fast

(The nature of the qi at the fountain).<sup>57</sup>

The same qi may have different influences on different beings, depending on whether it is controlling heaven or at the fountain. This is outlined especially in another passage in *Su wen* 70:

Hence,

when ceasing yin [qi; that is, wood] controls heaven,

hairy creatures (i.e., the creatures associated with wood) rest;

feathered creatures (i.e., the creatures associated with fire) are born; armored creatures (i.e., the creatures associated with metal) do not reach completion (because minor yang qi, i.e., the qi of minister fire, is at the fountain).

[When ceasing yin qi, that is, the qi of wood, is] at the fountain, hairy creatures (i.e., the creatures associated with wood) are born; naked creatures (i.e., the creatures associated with soil) are diminished; feathered creatures (i.e., the creatures associated with fire) are not born (because minor yang qi, i.e., the qi of minister fire, controls heaven and is not in power in the second half of the year).<sup>58</sup>

It is of interest that the qi controlling heaven does not use its power in the first half of the year to create creatures of its kind. This may be a metaphorical reflection of the idea that the supreme sovereign does not necessarily employ his own force to manage the affairs of the state but has underlings who act for him.

The qi at the fountain is a transformation of the qi of the earth; it exerts a direct influence on the maturity, generation, and transformation of plants. *Su wen* 70 states:

Hence.

when the minor yang [qi] is at the fountain, cold poison is not generated.

Its flavor is acrid.

It governs bitter and sour [flavor].

Its grain are greenish and vermilion.

When the yang brilliance [qi] is at the fountain, dampness poison is not generated.

Its flavor is sour.

<Its qi is dampness>
It governs acrid, bitter, and sweet [flavor].

Its grain is vermilion and white.<sup>59</sup>

The policies of the six qi outlined in *Su wen* 71 primarily discuss the influence of different qi controlling heaven and at the fountain as well as of the changes of the six steps of the visitor qi in the natural world. These listings are the core of the doctrine of the periods and qi.

Su wen 71 and 74 offer detailed data on the illnesses of the human body concomitant with the influence of the qi controlling heaven and of the qi at the fountain on the first and second half of any year. For example, following the question, "When the qi of heaven or of the earth encroach upon the interior [of the human body] and [cause an] illness, how is that?" the influence of the qi at the fountain and of the qi controlling heaven is outlined as follows:

Qi Bo:

When, in a year when the ceasing yin [qi] is at the fountain, wind encroaches upon what it dominates,

then the qi [above the] earth is not clear, the plain fields are dark and the herbs flourish early.

People suffer from shivering and shaking with cold.

They tend to stretch and yawn frequently.

The heart aches, and the [chest has a feeling of] propping fullness.

The two flanks have internal tightness.

Beverages and food do not move down.

The throat is blocked and impassable.

Eating results in vomiting.

The abdomen is distended and one tends to belch.

If one can [relieve nature] behind and [passes] qi, [this] causes a comfortable feeling as if [that abdominal distension] had diminished.

Body and limbs are all heavy.<sup>61</sup>

When the ceasing yin [qi] controls heaven, wind encroaches upon what it dominates. As a result, the Great Void is darkened by dust. Cloudy things are disturbed.

When the cold generates the qi of spring,

People suffer from pain in the stomach region. {Exactly at the heart}

Above, there is propping fullness in the flanks.

flowing waters do not freeze [any longer].

The diaphragm and the gullet are impassable;

[hence] beverages and food do not move downward.

The base of the tongue is stiff.

What is eaten is thrown up again.

[Patients suffer from] cold diarrhea, distended abdomen,

semiliquid [stools], conglomerations, and strangury.

<The hibernating insects do not leave.>

These diseases originate in the spleen.

If the [movement at the] surging yang is interrupted, [the patient] dies and is not treated. $^{62}$ 

#### 4. THE FIVE PERIODS, THE SIX QI, AND THE CLIMATIC CHANGES

In the preceding sections of this survey of the doctrine of the five periods and six qi as it underlies the seven comprehensive discourses in the *Su wen*, we have outlined some basic concepts associated with the five periods and six qi. We have distinguished among the five periods the annual period, the host periods, and the visitor periods, and we have distinguished among the six qi the host qi and the visitor qi, with the visitor qi including the qi controlling heaven, the qi at the fountain, and the intervening qi. Together the five periods and the six qi form a theoretical system to explain laws presumably ruling the generation of climate, of living beings, and of illnesses.

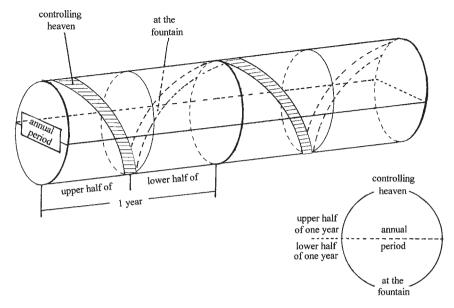


Diagram 16. A Three-Dimensional Model of the Qi Controlling Heaven, the Qi at the Fountain, and the Annual Period

From the discussions in the seven comprehensive discourses of the *Su wen*, it is obvious that the most important factors influencing any given year's climate and illnesses are the annual period and the visitor qi. In the context of the five periods, the *Su wen* repeatedly speaks of the relationships between the annual period and the climate; the host periods and the visitor periods are of less importance.

The relationships between the six qi and the climatic changes are very close. The visitor qi are the key factors in an understanding of the climate. The general characteristics of the climate within each year are formed by the qi controlling heaven of the visitor qi; the climatic changes in the course of any given year are closely associated with the six steps of the visitor qi, that is, with the qi controlling heaven, the qi at the fountain, and the four intervening qi.

The interaction of the six visitor qi with the five periods as outlined in the seven comprehensive discourses can be illustrated by the three-dimensional model in diagram 16: the qi controlling heaven is designated as being situated "above" ( $shang \pm$ ); it occupies the "upper" ( $shang \pm$ ) half of a year. It is also called "qi of heaven." The qi at the fountain is designated as being situated "below" ( $xia \mp$ ); it occupies the "lower" ( $xia \mp$ ) half of a year. It is also called "qi of the earth." The qi associated with the annual period penetrates the entire year in its center.

The most important statements concerning the relationships among the five periods, the six qi, and the climate are found in *Su wen* 71. This discourse is largely characterized by two comprehensive textual sections listing in a quasi-tabular structure the annual periods and the visitor qi associated with each year in the cycle of altogether sixty years. These two textual sections offer the most explicit data for an examination of the actual functions of the five periods and six qi.

In the following, these two textual sections of *Su wen* 71 are surveyed first; then we turn to some technical terms and special issues that appear in these sections.

## 4.1. The Table of the Six Qi Controlling Heaven

This textual section is long; it occupies about one-sixth of the seven comprehensive discourses. Most of it is a detailed table, the structure and contents of which can be understood quite easily once its data are gathered under appropriate headings.

This table has the six qi controlling heaven as its underlying ordering principle. It outlines the annual period and the visitor qi for each year. Each of the six qi is outlined in two different textual sections. The first section, structured along the five possible annual periods, describes all years of a given qi. The second section does not emphasize periods but lists and describes the characteristics of the years of a given qi in terms of the six qi.

4.1.1. The Table of Periods In the first part of Su wen 71, under each qi controlling heaven and following the sequence of the five periods, the conditions of the periods and the qi, of the climate, and of the illnesses of different annual periods within a cycle of ten years are listed, with each period ruling the two years associated with an identical stem.

A detailed analysis of the table of periods makes it clear that years associated with major yang qi, minor yang qi, and minor yin qi as their qi controlling heaven are years of a "greatly excessive annual period" (in these years the qi transformations and the prevalence of a period precede their regular calendrical onsets) because their annual stems and annual branches are both yang. In contrast, years associated with yang brilliance qi, major yin qi, and ceasing yin qi as their qi controlling heaven are years of "insufficient annual period" (in these years the qi transformations and the prevalence of a period set in later than their regular calendrical term). The items listed in the table of periods for greatly excessive annual periods and insufficient annual periods are not entirely identical. Hence, in table 8, below, these items appear in two separate columns.

With respect to years of a greatly excessive annual period, the table lists

TABLE 8. The Table of Periods

Number of Item	Greatly Excessive Annual Period (stem and branch: yang)	Insufficient Annual Period (stem and branch: yin)
Introduct	ion to all periods	
1	name of qi controlling heaven	(identical to left column)
2	ruling a year the two annual branches associated with the qi controlling heaven	(identical to left column)
The india	vidual periods (each item repeated five times)	
3	qi controlling heaven in the first half of a year	(identical to left column)
4	annual period, named after the five musical tones, major or minor	(identical to left column)
5	qi at the fountain in the second half of a year	(identical to left column)
6		climate able to dominate the climate associated with the annual period climate able to dominate the former "domination and revenge" (sometimes) statement: "identical to proper x [musical tone]"
7	stem and branch combinations of two different years, (sometimes) statement about a year's being "heavenly com- plements," "the year meets," "Taiyi heavenly complements," etc.	(identical to left column)
8	(sometimes) statement: "identical to proper x [musical tone]"	
9	climatic characteristics of the annual period	(identical to left column)
10	1	climate able to dominate the climate associated with the annual period climate able to dominate the former
11	"transformations" paralleling the annual period	
12	"changes" paralleling the annual period	
13	illnesses going along with the annual period	
14	sequence of visitor periods with commen- taries specifying the beginning and the end of the corresponding host periods	(identical to left column)

the climatic characteristics of entire years, as well as regular transformations, irregular changes, and illnesses easily contracted.

In years of an insufficient annual period, the dominant influence on the climate is exerted by the relationships of dominance and revenge among the visitor periods. Hence the column on the right does not give any data on the transformations, changes, and illnesses.

4.1.2. The Table of Qi This is the second part of the discussion of each of the six qi controlling heaven. Because its contents focus on the visitor qi, not on the periods, it is here termed "table of qi." Within the sixty years of a  $jia\ zi$  cycle, each of the six qi controlling heaven rules ten times over one year. Hence the climatic conditions in these ten years are rather similar.

The tabularization of the original text in *Su wen* 71 shows that it contains numerous corruptions; that is, what once may have been a rather systematic listing of parallel sets of data has over the years lost its perfect symmetry through transpositions and through the insertion of elements that may not have originally been part of the "table."

The contents of this table of qi can be divided into three sections (see table 9). Section 1 is the most corrupt. Section 2 appears to have retained its original systematic structure best.

## 4.2. The Table of the Annual Arrangements of the Five Periods and Six Qi

This table, too, appears in *Su wen* 71. It differs from the table of the six qi controlling heaven in that its major structure is an arrangement of years by stems and branches and, on the basis of this sequence, it lists the major conditions of the five periods and six qi in the course of a full cycle of sixty years. The table consists of a total of thirty entries of two years each with identical climatic characteristics.

The contents of this table follow two lines. The first specifies the conditions of years associated with yang stems, that is, with a greatly excessive annual period. The second specifies the conditions of years associated with yin stems, that is, with an insufficient annual period. For each year, up to a total of fourteen items are listed.

The examples shown in table 10 comprise the first four years, that is, one listing from each line, to illustrate the general nature of this comprehensive table.  $^{63}$ 

In most contemporary books on the doctrine of the five periods and six qi, the authors spend long paragraphs teaching their readers how to calculate the period and qi associated with each year so that they may understand whether it is a year of balanced qi, of greatly excessive qi, or of insufficient qi. In contrast, *Su wen* 71, with its tables of the six qi controlling heaven and of the movement of the five periods and six qi, offers a complete and detailed

## TABLE 9. The Table of Qi

SECTION 1: The respective qi controlling heaven and at the fountain and how they influence climate and illness

- 1. the name of the qi controlling heaven
- 2. the earlier or belated activity of qi and period
- 3. general characteristics of the qi controlling heaven and at the fountain
- 4. general summary of the climate as influenced by the qi controlling heaven and at the fountain
- 5. "combination of virtues" of the agents corresponding to the qi controlling heaven and at the fountain
- 6. the stars "corresponding above" to the qi controlling heaven and at the fountain
- 7. specific "policies" and "orders"
- 8. specific grains
- 9. climatic changes
- 10. illnesses

SECTION 2: The climate and the illnesses ruled by each step of the six qi

- 1. initial qi: climate, illnesses
- 2. second qi: climate, illnesses
- 3. third qi: climate, illnesses
- 4. fourth qi: climate, illnesses
- 5. fifth qi: climate, illnesses
- 6. final qi: climate, illnesses

#### SECTION 3: Therapeutic principles and patterns

- 1. general therapeutic principles
- 2. food, grain
- 3. appropriate flavors of drugs and food, therapeutic patterns
- 4. determination of a therapy on the basis of qi
- 5. the nature of drugs and the seasons of their use
- 6. issues to be considered

survey of the changing periods and qi in a cycle of sixty years. All a reader has to know is a given year's stem and branches. He or she may then check these tables for this year's period and qi, for its climatic condition and illnesses.

## 5. THEORETICAL ISSUES FROM THE SU WEN DOCTRINE OF THE FIVE PERIODS AND SIX QI

5.1. The Qi Controlling Heaven "Comes Down," the Qi at the Fountain "Joins" from Below

The doctrine of the five periods and six qi employs a visual model of three levels. "Above" is the qi controlling heaven; "below" is the qi at the fountain.

TABLE 10. The Table of the Annual Arrangements of the Five Periods and Six Qi

		O	~
		Greatly Excessive Annual Period (stem and branch association: yang)	Inadequate Annual Period (stem and branch association: yin)
1	annual stem and branches	jia zi, jia wu	yi chou, yi wei
2	qi controlling heaven above	minor yin, fire	major yin, soil
3	annual period in the center	major <i>gong</i> , soil	minor <i>shang</i> , metal
4	qi at the fountain below	yang brilliance, metal	major yang, water
5	activities of the climate able to dominate the climate of the period and of the climate able to dominate the former,		heat and cold transformation
	domination and revenge		domination and revenge equal
	commentary:		these are so-called days of transforma- tion of evil qi
6	catastrophe in which mansion		catastrophe in the seventh
7	transformation of the qi controlling heaven and number	heat transformation two	dampness transformation five
8	transformation of central period and number	rain transformation five	coolness transformation four
9	transformation of the qi at the fountain and number	dryness transformation four	cold transformation six
10	commentary:	these are so- called days of transformation of proper (qi)	(identical to left column)
11	nature and flavor "transforming the above"	salty, cold	bitter, heat
12	nature and flavor "transforming the center"	bitter, heat	sour, harmonious
13	nature and flavor "transforming the below"	sour, heat	sweet, heat
14	commentary:	these are so-called appropriate drugs and food	(identical to left column)

Both are visitor qi. In the "center" is the annual period. In another context, the central position is also the position of human existence between heaven "above" and the earth "below." Seen from this central position, the arrival of the qi controlling heaven from "above" can be termed 上篇, *shang lin*, "coming down from above."

Lin 臨 is occasionally used in the Su wen in the meaning of lai lin 來臨, "to arrive," "to come," "to attend," or mian lin 面臨 "to be faced with." In this context, the encounter indicated is meant to occur between two parties occupying different hierarchical levels. For example:

I wish to attend a patient . . .  $^{64}$ 

As if one looked down into a deep abyss . . .  $^{65}$ 

Or:

When the wood period comes down on *mao*, when the fire period comes down on wu, . . .  $^{66}$ 

Hence, the dominant usage of the term *lin* 臨 occurs in the context of something higher coming down to meet or join or inspect something lower. For example:

Huang Di . . . looked down and observed ( $lin\ guan$  臨 觀) the eight farthest [regions].  $^{67}$ 

In the doctrine of the five periods and six qi, the term lin is is used primarily as a metaphor to indicate the hierarchical position of the qi controlling heaven, which is situated "above" man in the center and "above" the qi at the fountain "below." The qi controlling heaven is considered a ruler who "comes down" from an unspecified background in the Great Void to assume the position "above" or to affect that which is below. For example:

The minor yang [qi] comes down [to take the position] above ( $lin\,shang$  臨 上). The rain has a limit.  $^{68}$ 

Or:

When in a wu zi [year] or a wu wu [year, that is, a] major zhi [year], minor yin [qi] comes down in the upper [half of the year] (shang lin 上臨), . . .  $^{69}$ 

Or

When the minor yang [qi] controls heaven, and when fire qi comes down . . . ( $xia\ lin\$ 下 臨).  $^{70}$ 

An exception to this rule is a statement in *Su wen* 71 in which another visitor qi is said to "come down":

The fourth qi: frightening fire comes down.<sup>71</sup>

Occasionally, the metaphor of a sovereign coming down to "rule" the world is made explicit by the term yu  $\mathfrak{P}$ , literally, "to control horses." For example:

The transformations resulting from the coming down, and assuming control (lin yu 臨 御), of cold, summer heat, dryness, dampness, wind, and fire.<sup>72</sup>

Or:

The massive transformations in heaven and earth, the [time] terms of the progression [of the five periods], the arrangements of [the qi] coming down and assuming control, . . .  $^{73}$ 

Obviously, the term lin cannot be employed to indicate the arrival of or impact exerted by someone situated "below." Hence Su wen 71 speaks of jia m, "to join," when it refers to the arrival of the qi at the fountain.<sup>74</sup>

## 5.2. Domination and Revenge

The concept of domination, *sheng* B, and revenge, fu b, is another social metaphor that plays an important role in the doctrine of the five periods and six qi. Hence Su wen 74 at one point states:

[If someone is] familiar with domination and revenge, he will establish a model for all mankind.<sup>75</sup>

Generally, a climate that is present in excessive intensity during its time of rule will be followed by its opposite climate in equal intensity, as if the latter were to carry out a "revenge" against the former. As the *Su wen* states:

The qi of domination and revenge are present in regular [sequence].<sup>76</sup>

Among the seven comprehensive discourses, the issue of domination and revenge is discussed openly in at least five treatises, with *Su wen* 69, 71, and 74 devoting the most space to this concept.

5.2.1. Domination and Revenge in Relation to the Annual Period In discussing the greatly excessive and the insufficient manifestations of the "transformations of the five periods," Su wen 69 lists the climate, the illnesses, and the stars corresponding to each annual period. However, explicit reference to domination and revenge is found only for years associated with an inadequate annual period. The text reads as follows:

If in a year [associated with wood the qi of] wood is inadequate, dryness prevails everywhere.... When it comes to revenge, then there is flaming summer heat [as if there were] fire flowing.... If in a year [associated with fire the qi of] fire is inadequate, cold prevails everywhere. . . . When it comes to revenge, then dust [causes] pressure. Also, massive rain arrives. . . . If in a year [associated with soil the qi of] soil is inadequate, wind prevails everywhere. . . . When it comes to revenge, then the policy of gathering is harsh and violent. . . . If in a year [associated with metal the qi of] metal is inadequate, flaming fire is active. . . . When it comes to revenge, then cold rain arrives all of a sudden. . . . If in a year [associated with water the qi of] water is inadequate, dampness prevails everywhere. . . . When it comes to revenge, then strong wind emerges suddenly.

The herbs are bent down, and the [leaves of the] trees fall.<sup>77</sup>

When the annual period is inadequate, the period dominating it in terms of the mutual domination order among the five agents comes to dominate it. The resulting climate is that associated with the period that has come to dominate the inadequate annual period. When the term of the dominating period has reached its end, a period able to take revenge arrives. In the order of mutual generation among the five agents, the revenge period is associated with the agent generated by the agent associated with the inadequate annual period; it is also the period that, in terms of the mutual domination order among the five agents, is able to dominate the period that had taken advantage of the inadequacy of the annual period. For example, if the annual period is associated with the agent wood, its inadequacy will entice a visitor period associated with the agent metal to take advantage of this inadequacy. Metal is able to overcome wood. Hence the period of dryness prevails. Eventually, a period associated with fire will arrive to take revenge. Fire is the son of wood; it takes revenge for what happened to its mother. Fire is able to subdue metal. Hence flames and summer heat succeed the period of dryness.

The subsequent section of *Su wen* 69 outlines additional details on the seasonal regularities to be expected under conditions of domination and revenge:

[In a year] when the [qi of] wood is inadequate,

if in spring there is transformation [resulting in] twigs sounding as if [they produced] pleasant tones,

then in autumn there is a policy of fog and dew and coolness.

If in spring there is a domination of chilliness, which injures and destroys, then in summer there is a revenge [resulting in] flaming summer heat, burning and melting. . . .

[In a year] when the fire [qi] is inadequate,

if in summer transformation [results in] lucidity and

brilliance, luminosity and clearness,

then in winter there is a policy of harsh sternness and frost and cold.

If in summer there is a domination of chilliness and of piercing frost,

then there is a revenge [resulting in] darkness caused by dust and massive rain that may occur when it is not their time. . . .

[In a year] when the soil [qi] is inadequate,

if at the [ends of the] four ropes<sup>78</sup> transformation [results in] clouds of dust and moisture,

then in spring there is a policy of twigs sounding as [if there were] drumming and breaking open.

If at the [ends of] the four ropes there appears a change to shaking and pulling, whirling and surging,

then in autumn there is a revenge [resulting in] sternness and killing and in long-lasting rain. . . .

[In a year] when the metal [qi] is inadequate,

if in summer there is a command of luminosity and clearness, pressure and steam,

then in winter there is a response of harsh freezing, correction, and sternness. If in summer there is a change to flaming, melting, burning, and blazing, then in autumn there is a revenge [resulting in] ice, hail, frost, and snow. . . .

[In a year] when the water [qi] is inadequate,

if at the [ends of the] four ropes transformation [results in] whirling and moisture and in clouds of dust,

then there is a correspondence of mild wind, of generation and development that may occur when it is not their time.

If at the [ends of the] four ropes there appears a change to darkness because of dust and to flooding because of rainstorms,

then there is a revenge [resulting in] whirling and moving here and there, in shaking and pulling that may occur when it is not their time.  $^{79}$ 

If, in a year associated with an inadequate annual period, no dominating qi takes advantage of this inadequacy and arises, then no revenge is possible subsequently. A normal situation is referred to by the terms "transformation," *hua* 化, and "command," *zheng* 政. Only if the climate associated with the agent able to dominate the annual period manifests itself strongly, then there

will be a revenge. The case of a year with an inadequate annual period of wood serves as an example. Spring is the season associated with wood. If in spring a climate appears indicating that metal subdues wood (metal is associated with the qi of dryness that should prevail only in autumn), a situation manifesting itself as bitter cold that injures and destroys, then fire comes next to subdue the metal. Hence in summer the qi of fire arrives to take revenge. This summer will be even hotter than a regular summer.

Once these basic rules of domination and revenge are understood, some unclear passages in the section on the "three arrangements" in *Su wen* 70 immediately become clear:

An arrangement of "discarded harmony" (i.e., a year with an inadequate annual period of wood), . . .

If there is whistling of cold winds, sternness and killing, then flames and redness of fire, boiling and bubbling [appear in revenge].... {This is so-called revenge....

An arrangement of "hidden brilliance" (i.e., a year with an inadequate annual period of fire), . . .

If there is freezing and piercing cold, then violent and long-lasting rain [appear in revenge]....

An arrangement of "inferior supervision" (i.e., a year with an inadequate annual period of soil), . . .

If there is shaking and pulling, [wind] whirling and surging, then aging and drying, dispersion and falling to the ground [appear in revenge]....

An arrangement of "accepted change" (i.e., a year with an inadequate annual period of metal), . . .

If there is flaming light and fiery redness, then ice, snow, frost, and hail [appear in revenge]....

An arrangement of "dried-up flow" (i.e., a year with an inadequate annual period of water), . . .

If there is darkness because of dust, and if there are squalls of rain, then shaking and pulling, breaking and plucking [appear in revenge].<sup>80</sup>

Similarly, in the "tables" of the periods and of the qi in Su wen 71, the conditions of domination and revenge are addressed clearly for all years of annual period inadequacy. To take an arrangement of yang brilliance, that is, of an inadequate annual period, as an example:

[The first two arrangements include the years when] yang brilliance [controls heaven], minor *jue* [is the annual period], and minor yin [is at the fountain]. Coolness domination and heat revenge is the same [in both minor *jue* years]....

[The second two arrangements include the years when] yang brilliance [controls heaven], minor *zhi* [is the annual period], and minor yin [is at the foun-

tain]. Cold domination and rain revenge is the same [in both minor *zhi* years]....

[The third two arrangements include the years when] yang brilliance [controls heaven], minor *gong* [is the annual period], and minor yin [is at the fountain]. Wind domination and coolness revenge is the same [in both minor *gong* years]....

[The fourth two arrangements include the years when] yang brilliance [controls heaven], minor *shang* [is the annual period], and minor yin [is at the fountain]. Heat domination and cold revenge is the same [in both minor *shang* years]....

[The fifth two arrangements include the years when] yang brilliance [controls heaven], minor yu [is the annual period], and minor yin [is at the fountain]. Rain domination and wind revenge is the same [in both minor yu years].<sup>81</sup>

Coolness domination and heat revenge are the same in both minor *jue* years because of the following calculation. Minor *jue* stands for an indequate wood period. Metal comes to subdue the wood. Hence cool qi associated with metal dominates. Fire comes to subdue the metal; that is, heat qi comes to take revenge. Hence in both minor *jue* years, "coolness domination and heat revenge is the same."

The same concept is employed in the listing of "the table of the annual arrangements of the five periods and six qi" in *Su wen* 71. To take the second entry as an example,

Yi chou and yi wei years:

In the upper [half of the year]: major yin, soil.

In the center: minor shang, metal period.

In the lower [half of the year]: major yang, water.

Heat transformation, cold transformation; domination and revenge are identical [in these two years].  $^{82}$ 

Minor *shang* stands for a year associated with an inadequate metal period. Fire comes to subdue the metal. Hence the dominating qi is "heat transformation." When the term of the dominating qi has reached its end, the revenge qi arrives. Water subdues fire. These, then, are the "cold transformations."

The fourth entry is

Ding mao and ding you years:

In the upper [half of the year]: yang brilliance, metal.

In the center: minor *jiao*, wood period.

In the lower [half of the year]: minor yin, fire.

Coolness transformation, heat transformation; domination and revenge are identical [in these two years].  $^{83}$ 

The same idea is expressed in Su wen 69:

[In a year] when the [qi of] wood is inadequate,

if in spring there is transformation [resulting in] twigs sounding as if [they produced] pleasant tones,

then in autumn there is a policy of fog and dew and coolness.

If in spring there is a dominance of chilliness, which injures and destroys, then in summer there is a revenge [resulting in] flaming summer heat, burning and melting. $^{84}$ 

What has been outlined so far is the relationship between domination and revenge, on the one hand, and inadequate annual periods, on the other. However, domination and revenge may occur in years associated with a greatly excessive annual period too. Hence in the listing of the three arrangements in *Su wen* 70 we read the following statements:

An arrangement of effusive growth (i.e., an annual period of excessive wood), . . .

If it fails to live up to its virtue, then the qi of gathering (i.e., the qi of metal) takes revenge.  $^{85}$ 

An arrangement of fire-red sunlight (i.e., an annual period of excessive fire),  $\dots$  If its policy [brings about] violence and fieriness, then the qi of storing (i.e., the qi of water) will [come up] as revenge.<sup>86</sup>

This type of domination and revenge refers to an excessive intensity of an already greatly excessive dominating qi. As a result, the qi able to subdue it comes for revenge. This is very different from the structure of domination and revenge in years associated with an inadequate annual period.

But regardless of whether it is in years associated with greatly excessive or inadequate annual periods, the manifestations of domination and revenge always follow the patterns of generation and subduing among the five agents. Domination and revenge among the six qi follow a different pattern.

5.2.2. The Onset of Revenge among Periods An examination of the data offered by Su wen 69 and 70 suggests that the onset of revenge among periods can be determined by two criteria. First, it corresponds to the season when that qi reaches domination that is able to take revenge against a qi dominating an inadequate annual period.

For example, in *Su wen* 69, when the annual period of soil is inadequate, the qi of wood will exploit this situation and come to dominate (i.e., it causes "shaking and pulling"). Once the season of autumn begins, the qi associated with autumn, metal, which is also the son of soil, will take revenge and subdue wood (i.e., by "sternness and killing"):

[In a year] when the soil [qi] is inadequate, if at the [ends of the] four ropes transformation [results in] clouds of dust and moisture,

then in spring there is a policy of twigs sounding as [if there were] drumming and breaking open.

If at the [ends of] the four ropes there appears a change to shaking and pulling, whirling and surging,

then in autumn there is a revenge [resulting in] sternness and killing, and in long-lasting rain.  $^{87}\,$ 

Second, the time of revenge is the season immediately following that season whose qi dominates an inadequate annual period. The five-agents association of the season taking revenge is irrelevant in this case.

For example, in *Su wen* 69, when the annual period of metal is inadequate, the qi of summer, fire, will exploit this situation and come to dominate (i.e., there is a "change to flaming, melting, burning, and blazing"). The subsequent season, autumn, carries out a revenge with water (i.e., "ice, hail, frost, and snow"), even though autumn is associated not with water but with metal, which usually is unable to dominate fire.

[In a year] when the metal [qi] is inadequate,

if in summer there is a command of luminosity and clearness, pressure and steam,

then in winter there is a response of harsh freezing, correction, and sternness. If in summer there is a change to flaming, melting, burning, and blazing, then in autumn there is a revenge [resulting in] ice, hail, frost, and snow.<sup>88</sup>

5.2.3. Domination and Revenge among the Six Visitor Qi While situations of domination and revenge among the five periods can be calculated in advance and hence are predictable, this system appears not to have sufficed to explain satisfactorily all cases of domination and revenge observed in nature. Hence Su wen 71 and 74 contain additional concepts possibly designed to cover unexpected climatic conditions manifesting themselves as a dramatic response to a previous excess. The reader is told only the signs in nature indicating an imminent outbreak of such responses and also the illnesses that are to be expected to accompany these responses. These illnesses themselves, in turn, serve to identify the nature of these responses.

Su wen 74 has a long list of all the consequences of a domination of the six visitor qi, followed by a list of all the consequences of a revenge taken by the six qi. Two examples may serve for comparison.

When the minor yang dominates,

heat settles in the stomach.

The heart is vexed and has pain.

The eyes are red. [Patients] wish to vomit.

What is vomited has a sour [flavor]. [Patients] tend to be hungry.

The ears have pain; the urine is red.

[Patients] tend to be frightened and to make incoherent and absurd speeches.

Violent heat [causes] wasting away [as if] melting.

The herbs wither and the water dries up.

The armored creatures crouch.

The lower abdomen has pain; the downpour is red and white.<sup>89</sup>

When the minor yang takes revenge,

massive heat will arrive,

[causing] withering, dryness, and blazing.

The armored creatures vanish.

[People suffer from] fright, spasms, coughing, and nosebleed;

their hearts are hot, vexed, and overexcited.

They frequently relieve themselves and they dislike wind.

Receding qi moves upward.

The face looks as if covered by dust.

The eyes have twitching and spasms.

Fire qi effuses internally and

causes oral putrescence above because of vomiting and [qi] moving contrary [to its regular course].

[Patients suffer from] blood overflow and blood outflow.

When [the fire qi] effuses it causes malaria.

[Patients have] an aversion to cold. Their teeth chatter and [the body] shivers.

When the cold has reached its peak, heat returns.

The throat and the network [vessels] burn and dry out.

[Patients are] thirsty and long for water and broth.

The color changes to yellow and red.

They are short of qi and the vessels decay.

[The heat] may transform into a water [disease];

transmission may generate fu-swelling.

In severe cases it enters the lung,

leading to coughing and blood outflow.

If the [movement at the] foot marsh is interrupted,

[the patient] dies and is not treated.<sup>90</sup>

A comparison of the conditions concomitant with the presence of minor yang qi as a dominating qi and as a qi taking revenge shows that the climates are similar but not identical. Fire and heat going along with a minister fire that dominates or takes revenge are excessive in both cases. Armored creatures suffer under both terms. In terms of illnesses, there are parallels as well as differences. Generally, though, these illnesses are pathological changes mostly affecting the gall conduit. Minor yang is fire; fire subdues metal. Hence, among the organs, the lung is harmed. If the movement in the vessels at "the foot marsh is interrupted," then the movement in the lung vessels is interrupted.

Even though the list of dominating visitor qi begins with the question "The six qi dominate each other. How is that?" the subsequent survey offers no clues as to when or why a specific visitor qi appears to dominate or to take revenge. Obviously, domination and revenge among the visitor qi are unrelated to inadequacy or great excess of the annual periods.

Only a short-term prediction is possible on the basis of mostly meteorological indicators:

[Huang] Di:

The domination of [any of] the six qi, how can it be examined?

Oi Bo

Take advantage of their arrival.

When cool qi arrives massively, that is a domination of dryness [qi]. Wind and wood receive evil [qi]. Liver diseases emerge from this.

When heat qi arrives massively, that is a domination of fire [qi]. Metal and dryness receive evil [qi]. Lung diseases emerge from this.

When cold qi arrives massively, that is a domination of water [qi]. Fire and heat receive evil [qi]. Heart diseases emerge from this.

When dampness qi arrives massively, that is a domination of soil [qi]. Cold and water receive evil [qi]. Kidney diseases emerge from this.

When wind qi arrives massively, that is a domination of wood [qi]. Soil and dampness receive evil [qi]. Spleen diseases emerge from this.<sup>91</sup>

Although domination and revenge among the six visitor qi, like the domination and revenge during inadequate annual periods, can thus be explained on the basis of mutual subduing and domination among the five agents, it remains unclear which condition stimulates the domination of a visitor qi.

5.2.4. The Times of Domination and Revenge among the Six Qi A definition of the times of domination and revenge among the six visitor qi is offered by Su wen 74:

[Huang] Di:

The movement of the dominating [qi] and of [the qi of] revenge,

do the times [when they occur] have any regularity? Is the [arrival of these] qi a must?

## Qi Bo:

The times [of their movement] occupy regular positions, but the qi do not necessarily [move].

## [Huang] Di:

I should like to hear the Way of this.

#### Qi Bo:

[From] the first qi and ending with the third qi, that is the [term] ruled by the qi of heaven. This is the regular [time of the] dominating [qi].

[From] the fourth qi and ending with the final qi, that is the [term] ruled by the qi of the earth. This is the regular [time of the] revenge [qi].

Where there is domination, there will be revenge; where there is no domination, there will be no [revenge].<sup>92</sup>

The meaning is that within the course of one year, the time periods of the appearance of domination and revenge among visitor qi are fixed. That is, domination always develops in the first half of the year, which is ruled by the qi controlling heaven (initial qi through third qi). The revenge always develops in the second half of the year, which is ruled by the qi at the fountain (fourth qi through final qi). This is what is meant by "the times when the dominating [qi] and [the qi of] revenge become active follow a regularity."

While the statements quoted above suggest that domination and revenge among visitor qi occurs in the first and second half of a year respectively, *Su wen* 74 contains an alternative implying that domination is followed by revenge immediately, regardless of whether it is in the first or the second half of a given year.

At the time when the dominating qi is right in its abundance, the sprouts of the revenge qi already emerge. When the dominating qi comes to an end, the revenge qi rises immediately. The strength of the domination and the strength of the revenge correspond to each other. The stronger the dominating qi, the stronger the revenge qi. That is what is meant by *Su wen* 74:

#### [Huang] Di:

The changes [resulting from] domination and revenge, they may be early or late; how is that?

#### Qi Bo:

Now, as for the dominating [qi], the dominating [qi] arrives and already disease sets in. While the disease gains in strength, the revenge [qi] already sprouts. Now, as for the revenge [qi],

when the dominating [qi] is exhausted, it rises.

When it has assumed its position [the commands it issues] are severe.

Domination may be slight or severe;

the revenge [qi may respond] in small or large quantities.

When the dominating [qi] is harmonious,  $[the\ revenge\ qi]$  will be harmonious [too].

When the dominating [qi] is depleted, [the revenge qi] will be depleted [too].

That is the regularity of heaven.<sup>93</sup>

*5.2.5. The Conclusion of Domination and Revenge among the Six Qi* In general, domination qi comes first and the qi of revenge follows:

When there is a dominating qi, there will be revenge. 94

The question that remains is whether one incidence of revenge suffices to end a cycle of domination and revenge. Hence Huang Di asks:

When a revenge is completed and [another] domination [occurs], how is that?

Qi Bo:

When dominating [qi] has arrived, then a revenge [qi will follow].

There is no regularity as to how frequently [this repeats itself].

When [the dominating qi and the qi taking revenge have] weakened, the [cycle of domination and revenge] will come to an end.

When, after the revenge is completed, there is domination [again] which is not followed by revenge, this will cause harm. 95

The above quotation suggests that domination and revenge among the six qi can continue to alternate without end. When an initial revenge has come to an end, another dominating qi develops; when the dominating qi has arrived, there will be another revenge qi. There is no fixed time limit. Only after the dominating and the revenge qi have successively weakened does this succession come to an end. If a revenge qi has come to an end and another dominating qi emerges that is not then followed by a revenge qi, that means the revenge qi has weakened already; it has no strength to return once more. Such an ending may result in catastrophes and will harm life.

Also in Su wen 74 we read the following:

[Huang] Di:

If there is revenge and if contrary [to the rule], a disease [emerges nevertheless], how is that?

Qi Bo:

It occupies a position which is not its own.

[The qi and the position it occupies] do not agree with each other.

If massive revenge is taken against a domination, then the host [qi] will dominate the [qi taking revenge].

Hence, contrary [to the rule], a disease [emerges].

{This applies to fire, dryness, and heat.}<sup>96</sup>

Revenge originally is a type of regulation by nature of a dominating qi. If at the time of the presence of a revenge qi problems develop nevertheless, that means the position occupied by the revenge qi is not good; it does not fit the host qi. For example, the revenge qi is minor yin or minor yang, that is, the qi of fire and heat. However, when it occupies the position at the fountain (sixth qi) and when it meets with the sixth host qi, which is cold, that is, water, this will lead to irregular phenomena. When fire-heat qi takes massive revenge against the dominating qi of the first half of the year, the qi of cold-water of the host qi will set out to subdue it. Hence the revenge qi itself will have a problem, in contrast to its normal effect. That may be what is meant by the phrase 主勝逆,客勝從,which translates as

When the host dominates, this is opposition; when the visitor dominates, this is compliance. 97

If one has understood that there are two types of domination and revenge, one among the periods and another among the six qi, then it is possible to understand some seemingly contradictory discourses. *Su wen* 71 states:

All these

arrangements of definite time periods, [all] domination and revenge, as well as the proper transformations, they all have [their] regular numbers.<sup>98</sup>

5.2.6. Domination without Revenge among Visitor and Host Above we read a basic principle, possibly a later commentary inserted into the main text:

Where there is domination, there will be revenge; where there is no domination, there will be no [revenge].<sup>99</sup>

However, Su wen 74 also has the following dialogue:

[Huang] Di:

What about domination and revenge [in the relationship] between visitor [qi] and host [qi]?

Qi Bo:

The visitor qi and the host qi,

they dominate [when it is their time], but such [domination] is not [followed by] revenge. $^{100}$ 

The reason why there cannot be any sequence of domination and revenge between host qi and visitor qi is easily understandable. In the words of Zhang Jiebin, because the host qi are fixed while the visitor qi change year after year, "when a qi is strong, it dominates. When its time has passed, then it ends." There is no opportunity for revenge.

Su wen 74 does not explain the circumstances under which the visitor dominates and those under which the host dominates. It simply proceeds to ask, "How does this [influence the] generation of disease?" Then Qi Bo lists all the ailments that are generated under conditions of a domination of the visitor qi controlling heaven and at the fountain and of a domination of the host qi.

### Qi Bo:

When the ceasing yin [qi] controls heaven,

in case the visitor [qi] dominates,

then [people suffer from] ringing [sounds] in the ears, and from swaying and dizziness.

When [the domination is] severe, then [the patients] cough.

In case the host [qi] dominates,

then there is pain in the chest and in the flanks, and

the tongue has difficulties in speaking. . . . <sup>102</sup>

When the ceasing yin [qi] is at the fountain,

in case the visitor [qi] dominates,

then the large joints do not move freely;

internally this causes tetany and stiffness, cramps and spasms.

Externally, [the sinews] do not move comfortably.

In case the host [qi] dominates,

then the sinews and bones shake or are cramped.

Lower back and abdomen have frequent pain. 103

From these passages and from the types of ailments listed, it is obvious that the "visitor domination" and "host domination" mentioned here do not refer to a mutual domination or mutual subduing among the six qi; rather, it is a mutual domination and mutual subduing among the six visitor qi, on the one hand, and the six host qi, on the other.

5.2.7. Domination Contrary to Normal "Domination contrary [to normal]," fan sheng 反勝, refers to a situation when the qi that "transforms in heaven" (i.e., the qi controlling heaven) and the qi that "controls on the earth" (i.e., the qi at the fountain) should dominate but are unable to do so. Rather, they are subdued by yet another qi. Because the qi controlling heaven and the qi at the fountain are the proper qi of heaven and earth, each ruling one-half of a year, if they are not sufficiently strong, so that another qi takes advantage of this depletion and assumes domination, then this

latter qi will be viewed as "evil qi," exerting "domination contrary to normal." Examples of such situations, entailing irregular climatic conditions, are listed only in *Su wen* 74:

When wind controls on the earth and coolness contrary [to normal] dominates it, . . .

When heat controls on the earth and cold contrary [to normal] dominates it, . . .

When dampness controls on the earth and heat contrary [to normal] dominates it, . . .

When fire controls on the earth and cold contrary [to normal] dominates it, . . .

When dryness controls on the earth and heat contrary [to normal] dominates it, . . .

When cold controls on the earth and heat contrary [to normal] dominates it, . . .

When wind transforms in heaven and coolness contrary [to normal] dominates it, . . .

When heat transforms in heaven and cold contrary [to normal] dominates it, . . .

When dampness transforms in heaven and heat contrary [to normal] dominates it, . . .

When fire transforms in heaven and cold contrary [to normal] dominates it, . . .

When dryness transforms in heaven and heat contrary [to normal] dominates it, . . .

When cold transforms in heaven and heat contrary [to normal] dominates it, . . . <sup>104</sup>

5.2.8. Therapeutic Patterns of Domination and Revenge The therapeutic patterns required to respond to pathological effects resulting from domination and revenge among the six qi are outlined in detail in *Su wen* 74, following the listing of the dominations of the six qi and of the revenges taken by the six qi. For example:

When the ceasing yin dominates, this is treated with sweet [flavor] and coolness. To assist use bitter [flavor] and acrid [flavor]. Use sour [flavor] to discharge it.... 105

When the ceasing yin takes revenge, this is treated with sour [flavor] and cold.

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To assist use sweet [flavor] and acrid [flavor].

Use sour [flavor] to discharge it;
use sweet [flavor] to relax it. . . . . <sup>106</sup>

The treatment of all [conditions of] domination or revenge is [as follows]: what is cold, heat it;
what is hot, make it cold;
what is warm, cool it;
what is cool, warm it; . . .

Always pacify the respective qi.
It must be cleared and it must be calmed.
As a result, the disease qi will weaken and leave and return to its origin.
This is the entire complex of treatment. <sup>107</sup>
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In the listing of the arrangements of the five periods and of the movements of the six qi as they rule a year in *Su wen* 71, following years of identical heavenly stems there is always the phrasing

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These transformations in the upper [half of the year require] \dots, in the center [require] \dots, in the lower [half of the year require] \dots.

These are the so-called requirements of drugs and food. 108
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For example, in *jia zi* and *jia wu* years:

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These transformations in the upper [half of the year require] salty [flavor] and cold, in the center [require] bitter [flavor] and heat, in the lower [half of the year require] sour [flavor] and heat. These are so-called requirements of drugs and food. 109
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However, these temperature qualities and flavors refer to qualities and flavors that need to be applied in treatments corresponding to the qi controlling heaven, the central period, and the qi at the fountain. They do not serve specifically to treat the qi of domination and revenge.

In contrast, earlier in *Su wen* 71, in the "table of the six qi controlling heaven," following each season a specific therapeutic pattern is recommended. Generally, in years of a greatly excessive annual period, the therapeutic pattern required is "to restrain the period qi; to support that which does not dominate it." In years of an inadequate annual period, the therapy required is to "increase the period qi; do not let the evil dominate." However, regardless of whether the annual period is greatly excessive or inadequate, one always wants to "break the qi oppressing it and to assist the origin of its transformation first."

Seen from the preceding and from the subsequent text, "oppressing qi"

refers to a qi that causes another qi to be oppressed. For example, in years of a greatly excessive wood period, wood subdues soil. Hence soil is oppressed. In this case, the oppressing qi is the greatly excessive qi of the wood period. In years of an inadequate wood period, metal subdues wood. Wood is oppressed. Hence metal is the oppressing qi. For treatment, it is essential to "break the oppressing qi" and see to it that it is no longer greatly excessive. Also, one wants to assist the origin or source of regular transformations and see to it that it reaches a balance.

In the final analysis, the "perfect treatment" as referred to in Su wen 71 is as follows:

"Not to lose the trust of heaven, and not to oppose the requirements of the qi, so as not to give wings to the dominating [qi], and not to support revenge," this is what is called perfect treatment.<sup>110</sup>

In other words, at the time of dominating qi or revenge qi, one must not use drugs that have the same nature as these qi, and one must eliminate those qi that might support the qi of domination and revenge.

# 5.3. Oppression and Effusion

Although the principle of domination and revenge pervades the seven comprehensive treatises, we have already encountered one notable exception: the relationship between visitor qi and host qi. Obviously, the social metaphor implied here acknowledges that there are some relationships in which temporary domination is justified and does not necessarily provoke revenge.

In Su wen 71, a further model is introduced, explaining a reaction to domination that differs from the revenge model. Domination, in this model, is termed "oppression," yu  $\clubsuit$ , and "harassment," fu  $\nexists$ , and the reaction is called "effusion" or "outbreak," fa  $\clubsuit$ . In the domination-revenge model, the dominated party itself does not react; a third party closely related to it must arrive to take revenge. In contrast, in the oppression/harassment-effusion/outbreak model, the oppressed party itself is able to react. "Pressure generates counterpressure" appears to be the law underlying this model.

The following is a comparison of the domination-revenge model and the oppression-effusion model in a year associated with an inadequate annual period of wood.

a. The course of domination and revenge:

Metal subdues/dominates wood. Metal is the dominating qi. Fire is the son of wood and subdues metal. Fire is the revenge qi.

b. The course of oppression and effusion:

Metal oppresses wood. Metal is the oppressor. Eventually wood will effuse. Wood is the effusing qi.

The corresponding section in *Su wen* 71 is opened by a somewhat enigmatic question voiced by Huang Di, preceding a dialogue on the oppressioneffusion model that reads as follows:

[Huang] Di:
The qi of the five periods,
will they, too, be followed by revenge years?
Qi Bo:
What is under utmost pressure will break out;
wait for its time, and it will become active.
[Huang] Di:
I should like to ask what this is to say.<sup>111</sup>

The subsequent explanations offered by Qi Bo leave open which kind of periods (host or visitor) are "oppressed" and why the oppressed periods effuse at times identified in terms of the six host qi. Nor does the *Su wen* offer any clues on how to calculate in advance the moment a oppression has reached its peak. As the text states:

[First] there are [phenomena] corresponding to the harassed [qi], then comes the retribution.

It is always such that when one observes the peak of the [pressure], [then] the outbreak occurs. 112

Hence an impending effusion can be predicted by observing specific signs in nature rather than by long-term calculations. For example, in the case of oppressed wood qi:

When the herbs [on the banks] of long rivers are bent down, when soft leaves display their yin (i.e., their lower side), when the pines moan in the high mountains, and when tigers roar on the mountain canyons, then these are the first signs of a harassed [qi of wood ready to break out]. 113

The timetable of an eventual outbreak of oppressed qi differs significantly from the foreseeable onset of a revenge.

The outbreak of oppressed soil . . . at the [time of the] fourth qi. The outbreak of oppressed metal . . . its qi is the fifth. The outbreak of oppressed water . . . before or after the two fires. The outbreak of oppressed wood . . . its qi is irregular. The outbreak of oppressed fire . . . its qi is the fourth.  $^{114}$ 

Oppressed Period	Time of Effusion	Corresponding Season
soil metal water wood	fourth qi fifth qi before/after the two fires irregular	late summer, dampness and soil autumn, dryness and metal end of spring to late summer each season
fire	fourth qi	late summer, dampness and soil

TABLE 11. The Effusion of an Oppressed Period

The "qi" referred to here is the host qi. The fourth host qi is major yin, dampness and soil. The fifth host qi is yang brilliance, dryness and metal. "Before or after the two fires" refers to the minister fire of minor yang and to the ruling fire of minor yin. The system underlying the statements quoted above is illustrated in table 11.

Both oppressed soil qi and suppressed fire qi will break out in late summer. The reason for this dual association is not clear. Why the effusion of water qi occurs before the term of minor yang or after minor yin, that is, before the second qi or following the third qi, remains unclear too. Wood qi can break out at any time; hence strong winds may blow in all four seasons. Winter does not have any specific outbreaks of oppressed qi assigned to it; only wood qi may break out in winter because it is able to break out in any season.

Once an outbreak occurs, a climate appears whose nature is closely associated with the nature of the formerly oppressed and now effusing qi. For example:

The outbreak of oppressed wood [qi is as follows]:

The Great Void is darkened by dust;

cloudy things are disturbed.

Strong winds arrive.

They tear open houses and break trees.

The wood undergoes changes.

Hence the people suffer from

pain in the stomach duct. {exactly in the heart [region]}

Above there is propping [fullness in] the two flanks.

The gullet is blocked [to such a degree that it is] impassable;

food and beverages do not move down.

In severe cases,

[patients hear] a ringing sound in the ears and [they experience] dizziness and vertigo.

Their eyes fail to recognize other persons.

They tend to suddenly fall to the ground.

When the Great Void [is filled with] greenish dust, when heaven and the mountains have one color alike.

when the qi is turbid with a yellow or black color, when it is oppressed like a cloud stretched and failing to produce rain, then the outbreak is [imminent].<sup>115</sup>

The effusion of harassed qi may be mild or violent. This is expressed as follows:

The quantities of the [harassed] qi differ, and [hence] their outbreak is slight or severe.

In case of a slight [outbreak] only the respective qi itself [will appear]; in case of severe [outbreaks, the respective qi will appear] together with the subsequent [qi]. <sup>116</sup>

While the doctrine of the five periods and six qi, in general, is designed to calculate the climate of any given year and season in advance, the concept of effusion of the harassed qi is able to explain sudden climatic changes from a perspective shortly before or amid such unexpected events. Hence the concept of oppression and effusion plays an important role. In a natural environment where all processes are supposed to follow certain laws, there must be no surprise. The concept of oppression and effusion interprets seemingly irregular climatic phenomena as outcomes of plausible principles; that is, it restores notions of order where such notions are jeopardized.

# 5.4. The Cumulative Effect of Period and Qi

5.4.1. Heavenly Complements, tian fu 天符 Whenever the annual period and the qi controlling heaven of a particular year are identical in their associations with the five agents, this is called "heavenly complements." The association of the stems and branches with the five agents applied here is that characteristic of the doctrine of the five periods and six qi (see above, Appendix 1.3).

Su wen 68 states:

[Huang] Di:

If in a year of a soil period, one sees major yin [qi] in the upper [half of that year],

if in a year of a fire period, one sees minor yang [qi] and minor yin [qi] in the upper [half of that year],

if in a year of a metal period, one sees yang brilliance [qi] in the upper [half of that year],

if in a year of a wood period, one sees ceasing yin [qi] in the upper [half of that year],

if in a year of a water period, one sees major yang [qi] in the upper [half of that year],

how is that?

### Oi Bo:

[In these cases, the qi controlling] heaven meets with the [first half of a year]. Hence the *Book on the Heavenly Origin* calls this "heavenly complements." <sup>117</sup>

### Su wen 71 states:

When in a wu zi [year] or a wu wu [year], [that is, a] major zhi [year], minor yin [qi] comes down in the upper [half of the year]; when in a wu yin [year] or a wu shen [year], [that is, a] major zhi [year], minor yang [qi] comes down in the upper [half of the year]; when in a bing chen [year] or a bing xu [year], [that is, a] major yu [year], major yang [qi] comes down in the upper [half of the year]. There are three of this [type].

When in a *ding si* [year] or a *ding hai* [year], [that is, a] minor *jue* [year], ceasing yin [qi] comes down in the upper [half of the year]; when in a *yi mao* [year] or a *yi you* [year], [that is, a] minor *shang* [year], yang brilliance [qi] comes clown in the upper [half of the year]; when in a *ji chou* [year] or a *ji wei* [year], [that is, a] minor *gong* [year], major yin [qi] comes down in the upper [half of the year]. There are three of this [type]. 118

The meaning of these paragraphs can be explained by two examples. In a  $wu\ zi\ \not\subset \mathcal{F}$  year and in a  $wu\ wu\ \not\subset \mathcal{F}$  year, the celestial stem is  $wu\ \not\subset \mathcal{F}$ . The two celestial stems  $wu\ \not\subset \mathcal{F}$  and  $gui\ \not\cong \mathcal{F}$  correspond to fire. Hence the annual period of  $wu\ zi$  and  $wu\ wu$  years is fire. The earth branch of a  $wu\ zi$  year is  $zi\ \not\subset \mathcal{F}$ ; the earth branch of a  $wu\ wu$  year is  $wu\ \not\subset \mathcal{F}$ . The two earth branches  $zi\ \not\subset \mathcal{F}$  and  $wu\ \not\subset \mathcal{F}$  are associated with minor yin, that is, ruling fire. Hence in a  $wu\ zi$  year and a  $wu\ wu$  year both the annual period and the qi controlling heaven are associated with fire; that is, their five-agents associations are identical.

In a  $ding si \ T \ E$  year and a  $ding hai \ T \ \Xi$  year, the celestial stem is  $ding \ T$ . The two celestial stems  $ding \ T$  and  $ren \ E$  correspond to wood. Hence the annual period of ding si and ding hai years is wood. The earth branch of a ding si year is  $si \ E$ ; the earth branch of a ding hai year is  $hai \ \Xi$ . The two earth branches  $si \ E$  and  $hai \ \Xi$  are associated with ceasing yin, that is, wind and wood. Hence in a ding si year and a ding hai year both the annual period and the qi controlling heaven are associated with wood; that is, their five-agents associations are identical. Such constellations are named "heavenly complements."

Because a yang stem can appear only in combination with a yang branch

TABLE 12. "Heavenly Complements"

years of heavenly complements:	ji chou, wu yin, wu zi, yi mao, ding si, bing chen, ji wei, wu shen, wu wu, yi you, ding hai, bing xu					
annual stems:	ji	wu	wu	yi	ding	bing
yin-yang association of the stem:	yin	yang	yang	yin	yin	yang
name of the annual period (five tones, major, minor):	minor gong	major <i>zhi</i>	major zhi	minor shang	minor <i>jue</i>	major yu
five-agents association of the period:	soil	fire	fire	metal	wood	water
annual branches:	chou wei	yin shen	$zi \\ wu$	mao you	si hai	chen xu
yin-yang association of the branch:	yin	yang	yang	yin	yin	yang
qi controlling heaven:	major yin	minor yang	minor yin	yang brill.	ceasing yin	major yang
five-agents association of the qi control-						
ling heaven:	soil	fire	fire	metal	wood	water

and because likewise a yin stem can appear only in combination with a yin branch, altogether twelve different constellations in a cycle of sixty years may constitute a "heavenly complements" constellation; these are the years *ji chou* 己丑, ji wei 己未, wu yin 戊寅, wu shen 戊申, wu zi 戊子, wu wu 戊午, yi mao 乙 卯, yi you 乙酉, ding si 丁巳, ding hai 丁亥, bing chen 丙辰, and bing xu 丙戌. A summary of the two paragraphs just quoted results in table 12.

5.4.2. The Year Meets, sui hui 歲會 Whenever the five-agents association of the annual period of a particular year and of the annual branch of that year are identical, this is a constellation named "the year meets"; it is also called "the year occupying a correct position," sui zhi 歲直. In this case, the five-agents association of the stems (annual periods) follows that characteristic of the doctrine of the five periods and six qi, while the association of the branches with the five agents is the usual one outside the doctrine of the five periods and six qi.

Su wen 68 states:

When the period [qi] of wood comes down on mao, when the period [qi] of fire comes down on wu,

Agents	Wood	Fire	Soil	Metal	Water
corresponding annual stems (WYLQ correspondences)					
yang stems:	(ren)	wu	jia	(geng)	bing
yin stems:	ding	(gui)	ji	yi	(xin)
corresponding annual					
branches (normal					
correspondences)					
yang branches:	(yin)	wu	chen, xu	(shen)	zi
yin branches:	mao	(si)	chou, wei	you	(hai)
year meets years:	ding mao	wu wu	jia chen jia xu	yi you	bing zi

TABLE 13. "The Year Meets" Years

NOTE: Stems and branches in parentheses represent combinations not listed explicitly as "the year meets" in *Su wen* 69 and 71. They are inferred here on the basis of *Su wen* 68.

ji chou ji wei

when the period [qi] of soil comes down in the final thirds of all the four seasons,

when the period [qi] of metal comes down on you,

when the period [qi] of water comes down on zi.

{This is what is called "the year meets." This is a balance of the qi.}<sup>119</sup>

An example of a calculation of a constellation named "the year meets" is as follows.

In a  $ding\ mao\ T\ \mathfrak{P}$  year, the celestial stem is  $ding\ T$ . In the five-agents association characteristic of the doctrine of the five periods and six qi, the stem ding is associated with wood. The earth branch of that year is  $mao\ \mathfrak{P}$ . Mao is associated in the usual five-agents association with wood too (whereas in the five-agents association characteristic of the doctrine of the five periods and six qi, it is associated with metal). That is, the specific associations of both the annual period and the earth branch associated with a  $ding\ mao\ year$  are identical. Such a constellation is a "the year meets" year.

Given the definition formulated above, altogether twelve different constellations in a cycle of sixty years may constitute a "the year meets" constellation; these are the years  $ding\ mao$  丁 卯, $ren\ yin$  壬寅(i.e., wood), $wu\ wu\$ 戊午, $gui\ si$  癸巳(i.e., fire), $ji\ chou\$ 己 丑, $ji\ wei\$ 己未, $jia\ chen\$ 甲 辰, $jia\ xu\$ 甲 戌(i.e., soil), $yi\ you\$ 乙 酉, $geng\ shen\$ 庚申(i.e., metal),and  $bing\ zi\$ 丙子 as well as  $xin\ hai\$ 辛亥(i.e., water).

However, of these twelve possible constellations, only eight are suggested

by Su wen 68 and are mentioned explicitly in those entries in the table in Su wen 71, which most likely constitute a later commentary based on Su wen 68. The four constellations left out are ren  $yin <math>\pm$  寅, gui si 癸巳, geng shen 庚申, and xin hai 辛亥. We can only speculate about the reasons for the exclusion of these four constellations.

Because four of these years (wu wu 戊午, ji chou 己丑, ji wei 己未, yi you 乙酉) are also counted among the "heavenly complements" constellations, only four years have pure "the year meets" constellations. This is shown in table 13.

5.4.3. [Constellations] Identical to Heavenly Complements [Constellations], tong tian fu 同天符 Whenever the stem of a particular year and the branch of that year belong to yang in the original yin-yang association and when at the same time the annual period in charge of that year and the qi at the fountain of the same year are identical in their five-agents association, then this is a constellation "identical to the 'heavenly complements'" [constellation]. In this case, the five-agents association is that of the doctrine of the five periods and six qi.

Su wen 71 states:

When a *jia chen* [year] or a *jia xu* [year], [that is, a] major *gong* [year], is joined from below by major yin [qi] in the lower [half of the year];

when a *ren yin* [year] or a *ren shen* [year], [that is, a] major *jue* [year], is joined from below by ceasing yin [qi] in the lower [half of the year];

when a *geng zi* [year] or a *geng wu* [year], [that is, a] major *shang* [year], is joined from below by yang brilliance [qi] in the lower [half of the year].

There are three of this [type]....

When great excess is joined from below [by the qi at the fountain, that is] "identical to heavenly complements."  $^{120}$ 

To take a geng zi 庚子 year as an example. The stem of a geng zi year is geng 庚; geng is an odd number and belongs to the yang stems. The branch of that year is zi 子; zi is an odd number too and belongs to the yang branches. Both the branch and the stem of that year are categorized as yang. Hence a geng zi year belongs to the yang years. The stem of a geng zi 庚子 year is geng; yi 乙 and geng 庚 correspond to metal. Hence the annual period of a geng zi year is metal. The branch of that year is zi 子. In zi 子 and wu 午 years, minor yin, ruling fire, "controls heaven"; and yang brilliance, dryness, metal is "at the fountain." Hence the qi "at the fountain" in a geng zi 庚子 year is yang brilliance, dryness, metal. The stem of that year belongs to yang, and the branch of that year belongs to yang too. The annual period belongs to metal, and the qi "at the fountain" belongs to metal too. Hence a geng zi 庚子 year is a year "identical to the heavenly complements" [constellation].

Within a cycle of sixty years, the following six years are years "identical to 'the heavenly complements'" [constellation]: *jia chen* 甲辰, *jia xu* 甲戌, *geng zi* 

1	/ 1	L	-
years "identical to	jia chen,	ren yin,	geng zi,
heavenly complements":	jia xu	ren shen	geng wu
annual stems:	jia	ren	geng
yin-yang association of the stem:	yang	yang	yang
name of the annual period (five tones, major):	major gong	major <i>jue</i>	major shang
five-agents association (WYLQ) of the annual period:	soil	wood	metal
annual branches:	chen, xu	yin, shen	zi , wu
yin-yang association of the branch:	yang	yang	yang
qi controlling heaven:	major yang	minor yang	minor yin
flanked below by the qi at the fountain:	major yin	ceasing yin	yang brilliance
five-agents association (WYLQ) of the qi at the fountain:	soil	wood	metal

TABLE 14. Years of "Identical to Heavenly Complements" [Constellations]

庚子, geng wu 庚午, ren yin 壬寅, and ren shen 壬申. Among these, the two years jia chen 甲辰 and jia xu 甲戌 belong to the two constellations "identical to heavenly complements" [constellations] and "the year meets." Hence only four years are years "identical to heavenly complements" [constellations] alone.

Accordingly, the years of "identical to heavenly complements" [constellations] can be listed as in table 14.

5.4.4. [Constellations] Identical to the Year Meets [Constellations], tong sui hui 同歲會 Whenever the stem of a particular year and the branch of that year belong to yin in the original yin-yang association and when at the same time the annual period in charge of that year and the qi at the fountain of the same year are identical in their five-agents association, then this is a constellation "identical to 'the year meets'" [constellation].

### Su wen 71 states:

When a *gui si* [year] or a *gui hai* [year], [that is, a] minor *zhi* [year], is joined from below by minor yang [qi] in the lower [half of the year];

when a *xin chou* [year] or a *xin wei* [year], [that is, a] minor yu [year], is joined from below by major yang [qi] in the lower [half of the year];

when a *gui mao* [year] or a *gui you* [year], [that is, a] minor *zhi* [year], is joined from below by minor yin [qi] in the lower [half of the year].

There are three of this [type]....

TABLE 15. Years of "Identical to the Year Meets" [Constellations]

years "identical to the year meets":	xin chou, xin wei	gui si, gui hai	gui mao, gui you
annual stems:	xin	gui	gui
yin-yang association of the stem:	yin	yin	yin
name of the annual period (five tones, minor):	minor yu	minor zhi	minor zhi
five-agents association (WYLQ) of the annual period:	water	fire	fire
annual branches:	chou, wei	si, hai	mao, you
yin-yang association of the branch:	yin	yin	yin
qi controlling heaven:	major yin	ceasing yin	yang brilliance
flanked below by the qi at the fountain:	major yang	minor yang	minor yin
five-agents association (WYLQ) of the qi at the fountain:	water	fire	fire

When inadequacy is joined from below [by the qi at the fountain], that is "identical to the year meets."121

To take a xin chou 辛丑 year as an example. The stem of a xin chou 辛丑 year is  $xin \neq xin = xin \neq xi$ branch of that year is *chou*  $\pm$ ; *chou*  $\pm$  is an even number too and belongs to the yin branches. Both the branch and the stem of that year are categorized as yin. Hence a  $xin\ chou \neq \exists$  year belongs to the yin years. The stem of a xinchou 辛丑 year is xin 辛; bing 丙 and xin 辛 correspond to water. Hence the annual period of a  $xin chou \neq \exists year is water.$  The branch of that year is chou丑. In *chou* 丑 and *wei* 未 years major yin, dampness, soil, "control heaven"; major yang, cold, water are "at the fountain." Hence the qi "at the fountain" in a xin chou ≠ ± year is major yang, cold, water. The stem of that year belongs to yin, and the branch of that year belongs to yin too. The annual period belongs to water, and the qi "at the fountain" belongs to water too. Hence a  $xin\ chou \neq \exists$  year is a year "identical to the year meets" [constellation]. Within a cycle of sixty years, the following six years are years "identical to 'the year meets'" [constellation]: xin wei 辛未, xin chou 辛丑, gui mao 癸卯, gui you 癸酉, gui si 癸巳, and gui hai 癸亥.

Accordingly, the years of "identical to 'the year meets'" [constellation] can be seen from table 15.

5.4.5. Taiyi Heavenly Complements [Constellations], tai yi tian fu 太乙天符 These are those years that are categorized both as "heavenly complements" and as "the year meets." That is, when the stem representing the central period and the branch representing the qi controlling heaven have an identical five-agents association, the latter including only those constellations where the five-agents association is identical in both the usual system and in that characteristic of the doctrine of the five periods and six qi.

Su wen 68 states:

[Huang Di:]

How about [a year which is both] "heavenly complements" and "the year meets"?

Qi Bo:

This is a convergence of the "Taiyi heavenly complements" type. 122

To take a wu wu 成 午 year as an example. The stem of a wu wu 成 午 year is wu 成; wu 成 corresponds to fire. Hence the annual period of a wu wu 成 午 year is fire. The branch of that year is wu 午. Wu 午 is minor yin, ruling fire, in the five-agents association characteristic of the doctrine of the five periods and six qi, and it is "fire" in the usual five-agents association. Hence a wu wu 成 午 year is a "Taiyi heavenly complements" year.

Within a cycle of sixty years, the following four years are "Taiyi heavenly complements" years: *ji chou* 己丑, *ji wei* 己未, *yi you* 乙酉, and *wu wu* 戊午.

5.4.6. Possible Climatic Implications Obviously, "heavenly complements," "the year meets," "identical to heavenly complements," "identical to the year meets," and "Taiyi heavenly complements" are designations of years whose constellations of period and qi deserve special attention.

However, neither the origin of these concepts as such nor the rationale of the names attached to them is known today. Also, it remains unclear why it was considered desirable to point out these five constellations as something special. It can only be surmised that the years associated with these constellations were considered marked by extraordinary climatic conditions and hence influences on life. The few hints in the *Su wen* at what these conditions and influences may have been like are the following.

Su wen 66 has the statement:

{Correspondence to heaven, this is "heavenly complements"; a year that succeeds, this is a "year occupying a correct position." When three come together, this is order.} $^{123}$ 

No explanation is offered as to the meaning of  $\Xi$   $\Leftrightarrow$ , "three come together." The only "triple coincidence" referred to in this context by the *Su wen* may be seen in the definition of Taiyi heavenly complements constellations. These are years with an identical five-agents association of, first, celestial stem (in

the system of the five periods and six qi doctrine), second, earth branch (in the system of the five periods and six qi doctrine), and third, earth branch again (in the common system of correspondences outside the five periods and six qi doctrine). A Taiyi heavenly complements constellation constitutes a coincidence of 夭符, heavenly complements, with 歲會, the year meets. Hence the term suizhi 歲重, "a year occupying a correct position," mentioned in the paragraph quoted above, could be either an alternative to or an error for  $sui\ hui$  歲會. If this were so, the statement "when the three come together, this is order" suggested that a Taiyi heavenly complements constellation was considered to guarantee a year with an "orderly," that is, balanced, climate.

In this regard, a metaphor offered by *Su wen* 68 is of interest. It suggests a certain hierarchy among the constellations of heavenly complements, the year meets, and Taiyi heavenly complements in their impact on man and climate and in their ability to generate illness.

[Huang] Di:

How about their hierarchy?

Qi Bo:

"Heavenly complements" upholds the law.

The "the year meets" carries out orders.

The "Taiyi heavenly complements" is the nobleman.

[Huang] Di:

To be struck by [their] evil, how is that?

Oi Bo:

If someone is struck by [the official] upholding the law, the [resulting] disease is fast and dangerous.

If someone is struck by [the official] carrying out orders, the disease is slow and protracted.

If someone is struck by a nobleman, the disease is violent and fatal. 124

We do not know whether the fact that "nobleman" years, that is, years with a Taiyi heavenly complements constellation, are responsible for particularly violent illnesses is in keeping with our equating them with the constellations of triple coincidence mentioned in *Su wen* 66. After all, strict "order" does not necessarily contradict severe punishment when necessary.

In contrast to this passage, a few lines earlier in  $Su\ wen\ 68$ , "the year meets" constellations are identified as associated with a balanced qi,  $\Re$   $\nearrow$   $\Re$ , that is, as responsible for a balanced climate:

{This is what is called "the year meets." This is a balance of the qi.} $^{125}$ 

However, the two sentences look like a commentary, and the last one might be a secondary commentary (a commentary on a commentary). A definition of years of "balanced qi" is given in Su wen 70:

When there is generation without killing, when there is growth without punishment, when there is transformation without restraint, when there is gathering without harm, when there is storage without repression, this is called "balanced qi." <sup>126</sup>

# 5.5. Proper, Upper, and Pan Tones

In what appears to be a systematic commentary, specific constellations in the table of periods in *Su wen* 71 are named "identical to the proper musical tone [*jue, zhi*, etc.]" (see 4.1.1., table 8, in this Appendix). The association of these tones with the five agents has been discussed in 2.4. A survey of the constellations concerned suggests that "proper" is another term used in the context of the five periods and six qi doctrine to refer to a year with a balanced climate.

Altogether four different constellations lead to a climate "identical to the proper [musical tone]." Three of them occur in years with an insufficient annual period:

- 1. Insufficient annual period and qi controlling heaven have an identical five-agents association. The climate is "identical to the proper" musical tone associated with the agent in question. For example, in *ding si* and *ding hai* years, the annual stem, *ding*, is associated with minor *jue*, wood. The annual branches, *si* and *hai*, are associated among the six qi with ceasing yin, which in turn is wind and wood. Hence the annual period and the qi of *ding si* and *ding hai* years are associated with an identical qi, that of wood. Hence in these two years the climate is categorized as "identical to proper *jue*." The six years in question (*ding si*, *ding hai*, *ji chou*, *ji wei*, *yi mao*, *yi you*) are at the same time years of "heavenly complements."
- 2. The qi controlling heaven is associated with an agent that is able to dominate the agent associated with the insufficient annual period. The climate is "identical to the proper" musical tone associated with the former. For example, in *ji si* and *ji hai* years, the annual period is minor *gong*, an insufficient soil period. The branches *si* and *hai* are associated with ceasing yin, wood, controlling heaven. Wood overcomes soil; hence the climate of these two years is categorized as "identical to proper *jue* (i.e., wood)." The six years in question are *ji si*, *ji hai*, *xin chou*, *xin wei*, *ding mao*, and *ding you*.
- 3. The qi controlling heaven is associated with an agent that is dominated by the agent associated with the insufficient annual period. The climate is "identical to the proper" musical tone associated with the former. For

example, in *yi si* and *yi hai* years, the annual period is minor *shang*, an insufficient metal period. Since the branches *si* and *hai* are associated with the agent wood, which can be overcome by metal, the climate of these two years is categorized as "identical to proper *shang* (i.e., metal)." The six years in question are *yi si*, *yi hai*, *ding chou*, *ding wei*, *gui mao*, and *gui you*.

4. The qi controlling heaven is associated with an agent that is able to dominate the agent associated with the greatly excessive annual period. The climate is "identical to the proper" musical tone associated with the latter. For example, in wu chen and wu xu years, the annual period is major zhi, an excessive fire period. The branches chen and xu are associated with major yang, water, controlling heaven. Water is able to dominate fire (or to restrain it if it is excessive). Hence these two years are categorized as years "identical to proper zhi (i.e., proper fire)." The six years in question are wu chen, wu xu, geng yin, geng shen, geng zi, and geng wu.

Obviously, all references to "upper," "proper," and "minor" musical tones in what is a systematic listing of annual periods in *Su wen* 70 are to be considered later commentaries.

When the character "upper" ( $shang \pm$ ) is placed in front of one of the five tones, this tone indicates the five-agents association of the qi controlling heaven. For example, "upper shang"  $\pm$   $\eth$  is to say: the qi controlling heaven in a given year is yang brilliance, that is, dryness and metal, because the musical tone shang stands for metal.

In Su wen 70, there is a single appearance of the term pan shang 判商.  $^{129}$  Most commentators have assumed that pan stands for ban 半, "half," interpreting pan shang as "half a metal period." However, the context of Su wen 70 suggests that this pan is a mistake for shao 少, "minor," as is apparent from the following comparison.

- a.) 委和之紀...從金化也.少角與判商同,上角與正角同,上商與正商同
- b.) 卑監之紀...從木化也.少宮與少角同,上宮與正宮同,上角與正角同
- a.) Arrangements of discarded harmony follow the transformations of metal. Minor *jue* is identical to *pan shang*. Upper *jue* is identical to proper *jue*. Upper *shang* is identical to proper *shang*.

The meaning of this statement is as follows:

In arrangements of "discarded harmony" (i.e., in years of an inadequate wood period) [the climate] follows the transformations of metal. [In years of] minor *jue* (i.e., in years of an inadequate wood period) [the climate] is identical to those of *pan shang* [years] (i.e., with years of . . . metal period). If [years of an inadequate wood period meet with] upper *jue* (i.e., if in such years the qi controlling heaven is ceasing yin, wind, and wood) [the climate] is identical to proper *jue* (i.e., balanced wood qi, because identical

qi add up to each other). If [years of an inadequate wood period meet with] upper *shang* (i.e., if in such years the qi controlling heaven is yang brilliance, dryness and metal) [the climate] is identical to proper *shang* (i.e., balanced metal qi, because that which takes advantage of the weakness of wood, i.e., metal, is further enforced by metal).

b.) Arrangements of inferior supervision follow the transformations of wood. Minor *gong* is identical to minor *jue*. Upper *gong* is identical to proper *gong*. Upper *jue* is identical to proper *jue*.

The meaning of this statement is as follows:

In arrangements of "inferior supervision" (i.e., in years of an inadequate soil period) [the climate] follows the transformations of wood. [In years of] minor *gong* (i.e., in years of an inadequate soil period) [the climate] is identical to those of minor *jue* [years] (i.e., with years of . . . wood period). If [years of an inadequate soil period meet with] upper *gong* (i.e., if in such years the qi controlling heaven is major yin, dampness, and soil) [the climate] is identical to proper *gong* (i.e., balanced soil qi, because identical qi add up to each other). If [years of an inadequate soil period meet with] upper *jue* (i.e., if in such years the qi controlling heaven is ceasing yin, wind and wood) [the climate] is identical to proper *jue* (i.e., balanced wood qi, because that which takes advantage of the weakness of soil, i.e., wood, is further enforced by wood).

From this comparison it is obvious that the meaning expressed by the character *pan* in *pan shang* and by *shao* in *shao jue* is entirely the same. *Pan shang*, therefore, is an error for *shao shang*, "minor shang," and refers to a climate partially influenced by dryness and metal, similar to early autumn.

5.6. Years of Balanced Climate (ping qi 平氣, zheng sui 正歲)

a. In Su wen 70, Huang Di asks:

I should like to hear: what are the names, what is the arrangement of [years of] balanced qi?<sup>130</sup>

In his response Qi Bo listed all those "arrangements," that is, constellations, that are defined as neither "inadequacy" nor "excess."

Because none of the arrangements characterized as "balanced qi," "inadequacy," or "excess" are explicitly equated in *Su wen* 70 with specific years identifiable by heavenly stems and earth branches, it may well be that we encounter here an early stage in the conceptualization of the doctrine of the five periods and six qi, before its definite association with the sixty-year cycle. That is, the conceptualization of this doctrine may have started from descriptions of specific climatic conditions as normal, excessive, and inadequate. Perhaps it was only in a second step that these conditions were

understood as calculable and hence foreseeable events integrated in the regularity of an all-encompassing natural law.

The concept of balanced qi is repeated nowhere in other sections of what we consider the basic text of the seven comprehensive discourses. The only statement pointedly identifying years of balanced qi is the one in *Su wen* 68 quoted above under 5.4.2 and 5.4.6, where *sui hui* constellations are said to be those of "balanced qi." But this may have been a commentary added by a later author to a dialogue in the basic text contrasting what are to be considered "evil" qi with their opposite, that is, "proper" qi, and introducing the concept of qi that do or do not *dang wei* 當位, that is, "occupy their correct positions."

### Qi Bo:

When they are not at their positions, then they are evil.
When they occupy their correct positions, then they are proper.
[When the qi are] evil, then changes are severe.
[When the qi are] proper, then [changes are] slight.

### [Huang] Di:

What is it to say, "occupy their correct positions"?

#### Oi Bo

When the wood period comes down on *mao*, when the fire period comes down on *wu*, when the soil period comes down in the [final thirds of the] four seasons, when the metal period comes down on *you*, when the water period comes down on *zi*.

{This is what is called "the year meets." This is a balance of the qi.} $^{132}$ 

b. This dialogue provides a clear-cut equation of the concepts of proper and balanced qi, and it is not unreasonable to assume that wherever in *Su* wen 70 and 71 a constellation, or year, is defined as "proper," this is meant to designate a balanced climate.

As we have seen above (1.3), in the association of years with yin and yang celestial stems and earth branches, yin stems must be combined with yin branches and yang stems must be combined with yang branches. The five periods and six qi doctrine does not envisage an association of a yin stem with a yang branch or vice versa to characterize any given year.

Hence all years are by nature either strongly yang or strongly yin, the former being identified as "greatly excessive," tai~guo~ 太 過, and the latter as "inadequate," bu~ji~ 不及. Both these natures are considered to exert negative effects on a given year's climate. That is, at first glance the system appears not to acknowledge a possibility of years having a balanced qi and hence a balanced climate. Such years could only be understood as deviations from the rule; hence they are special. We encounter such deviations in regard to

certain five-agents associations of celestial stem and earth branch neutralizing their respective negative effects.

If we look again at the four constellations mentioned earlier under 5.5 that *Su wen* 71 called "proper" (in relationship with a specific tone representing one of the five agents), we may well be faced with a plausible and complete system of such deviations. That is, either an agent that is too strong is neutralized by an agent able to dominate it (the fourth constellation), or an agent that is too weak is supported by an identical agent (the first constellation), or an agent that is too weak is changed by another agent into a dominating or a dominated agent (constellations two and three). The twenty-four years covered by these constellations appear to have been systematically categorized as "proper" because the excessive or inadequate impact of a yin or yang qi on the climate was neutralized in these years, resulting in a balanced climate.

All five-agents associations used here are those within the five periods and six qi doctrine; only two of the twenty-four years categorized in *Su wen* 71 as "proper" are at the same time *sui hui* years, the *ding mao* and *yi you* years. <sup>133</sup> These overlappings, however, may be purely coincidental. The categorization of *sui hui* years as years of balanced qi, and hence of balanced climate, in the commentary to *Su wen* 68 appears to constitute an approach different from the one underlying a categorization of years as "proper" as expressed in *Su wen* 71.

The same system, albeit incomplete, appears in  $Su\ wen\ 70$  in a commentary (see 5.5).

c. In another part of Su wen 71 the text speaks of zheng sui 正歲, "proper years."

#### Qi Bo:

Now, the six qi  $\dots$  are always observed in the first month, in the early morning of the first day.  $\dots$ 

When a period has a surplus, it arrives early;

when a period is insufficient, it arrives late.

That is the Way of heaven and the regularity of the qi.

When a period neither has a surplus, nor is insufficient, that is called a proper year.

This period arrives exactly in time. 134

This concept of proper year is not identical to the concept of proper qi. In fact, the concept of *zheng sui* may once again be a relic of an earlier stage in the conceptualization of the five periods and six qi doctrine. To go out in the early morning of the first day of the first month, that is, on New Year's dawn, to determine whether this new year's qi has arrived early, is belated, or is on time, is to determine the quality of the entire year's climate through observation here and now, not through calculation possibly years in advance.

# 6. FURTHER CONCEPTS ASSOCIATED WITH THE DOCTRINE OF THE FIVE PERIODS AND SIX QI IN THE SUWEN

6.1. Generation Numbers, sheng shu 生數, and Completion Numbers, cheng shu 成數

In the listing of years of balanced qi among the three arrangements in *Su* wen 70, the last characteristic added to the description of these years is a number:

```
In an arrangement of extended harmony,
the virtue of wood reaches everywhere. . . .
Its number is eight. 135
In an arrangement of ascending brilliance, . . .
The virtue [of fire] is applied ubiquitously. . . .
Its number is seven. 136
In an arrangement of perfect transformation, . . .
The virtue [of soil] flows into the four policies. . . .
Its number is five. 137
In an arrangement of secured balance, . . .
its kind is metal; . . .
its depot is the lung. . . .
Its number is nine. 138
In an arrangement of quiet adaptation, . . .
its kind is water; . . .
its depot are the kidneys. . . .
Its number is six.<sup>139</sup>
```

The association of specific numbers with the five agents mentioned in the above quotation is identical to that introduced in the "monthly commands" ( $yue \, ling$  月令) found in various texts of the late Zhou, such as Liji,  $Guan \, zi$ ,  $Huai \, nan \, zi$ , and  $L\ddot{u} \, shi \, chun \, qiu$ . Outside of the seven comprehensive treatises and the doctrine of the five periods and six qi, this association appears in the fourth treatise of the  $Su \, wen$ . The origin of this association remains unclear. However, Han commentators have suggested that it was part of a comprehensive numerical system including the numbers one through four as well. Thus Zheng Xuan 鄭玄 (ca. A.D. 127–200), in his comment on the Liji 禮記, suggested that the sequence from six through nine was derived from additions of the numbers one through five associated with the five agents. These associations had been outlined in the "Hong fan" 洪 範.

Shang shu 尚書, "Hong fan":

One is water. Two is fire. Three is wood. Four is metal. Five is soil. 140

Kong Anguo 孔安國 of the early Han era is credited with a possibly apocryphal commentary on this sequence:

All these are generation numbers.<sup>141</sup>

Zheng's  $Li\,ji$  commentary to the number eight, associated with the three months of spring, draws on the  $Xi\,ci$  Rightarrow Rightarrow commentary to the  $Yi\,jing$  Rightarrow Rightarrow explain an association of the five agents with numbers ranging from one through ten. (However, this argument appears far-fetched, because the  $Yi\,jing$  commentary did not include any reference to the five agents. Also, the  $Su\,wen$  system and the "monthly orders" never mention the number ten but associate soil only with the number five.)

These numbers constitute a sequence of the five agents starting from the generation and completion of things by heaven and earth. The Yi [jing] (i.e., the Xi ci  $\Re$   $\Re$  commentary to the Yi jing) states:

Heaven is one, earth is two. Heaven is three, earth is four. Heaven is five, earth is six. Heaven is seven, earth is eight. Heaven is nine, earth is ten. 142

The five agents begin with water, followed by fire, which is followed by wood, which is followed by metal, with soil being the last. In the case of wood, the generation number is three and the completion number is eight. If only the number eight is mentioned, this is to emphasize the completion number. 143

In a commentary on the number five, associated with the "central" season (between summer and autumn), Zheng Xuan wrote:

The generation number of soil is five; its completion number is ten. One speaks of five only [and never refers to ten, though,] because generation is considered the basic function of soil.  $^{144}$ 

The use of the terms "generation numbers" and "completion numbers" without any explanation of their meaning in these Han commentaries and in the *Su wen* (see below) suggests that they were part of a terminology familiar to Han authors.

This familiarity may have been lost in subsequent centuries. Hence the Tang author Kong Yingda 孔穎達, in his commentary on the "Hong fan," offered the following explanation:

Heaven at one generates water. The earth at two generates fire. Heaven at three generates wood. The earth at four generates metal. Heaven at five generates soil.

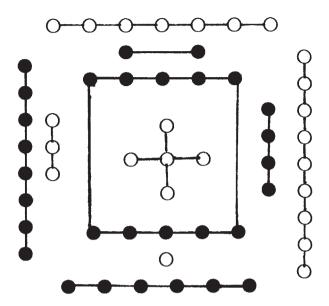


Diagram 17. The [Yellow] River Chart (He tu)

These are the generation numbers of this [sequence]. If it were [only] like this, yang and yin would never have a partner. Hence

the earth at six completes water.

Heaven at seven completes fire.

The earth at eight completes wood.

Heaven at nine completes metal.

The earth at ten completes soil.

This way, yin and yang both have a partner and [all] things are completed. Hence these [latter numbers] are called completion numbers. 145

The so-called [Yellow] River Chart ( $he tu \not \exists \exists$ ), a diagram associated with the term he tu appearing in the Shang shu but attestable only to the Song era, reflects identical pairings of numbers and agents (see diagram 17).  $^{146}$ 

While *Su wen* 70 continues the association system found in the various "monthly command" texts, referring only to a sequence of five through nine, it is in *Su wen* 71 that we encounter the complete system, with both halves brought together for the first time. It is not known whether the *Su wen* 71 system itself was built on an earlier source.

The complete system is employed in Su wen 71 to designate excess and inadequacy of the qi of the five periods:

[Huang] Di:

Great excess and inadequacy, what are their numbers?

Qi Bo:

When they are greatly excessive, their numbers are completion [numbers]; when they are inadequate, their numbers are generation [numbers]. The soil is always [associated] with a generation number. 147

For example, in *geng chen* and *geng xu* years, which are years of an excessive metal period, *Su wen* 71 lists the following constellation:

In the upper [half of the year]: major yang, water. In the center: major *shang*, metal period. In the lower [half of the year]: major yin, soil. Cold transformation: one. Coolness transformation: nine.

Rain transformation: five. 148

And in *ding mao* and *ding you* years, which are years of an inadequate wood period, *Su wen* 71 lists the following constellation:

In the upper [half of the year]: yang brilliance, metal. In the center: minor *jue*, wood period. In the lower [half of the year]: minor yin, fire. . . . Dryness transformation: nine. Wind transformation: three. Heat transformation: seven. 149

The system introduced above applies only to the periods mentioned in the middle of the two examples quoted. Although the numbers one through nine associated with the qi controlling heaven and with the qi at the fountain comply with generation or completion numbers of their respective fiveagents associations, the reason for choosing a generation or a completion number remains unclear.

# 6.2. Mansions of Catastrophe, zai gong 災宮

In listing the years associated with insufficient periods, *Su wen* 71 has the following, at first glance rather enigmatic, statements:

Yi chou and yi wei years: . . .

Catastrophes occur in the seventh mansion . . .

Ding mao and ding you years: . . .

Catastrophes occur in the third mansion . . .

Ji si and ji hai years: . . .

Catastrophes occur in the fifth mansion . . .

Xin wei and xin chou years: . . .

Catastrophes occur in the first mansion . . .

```
Gui you and gui mao years: . . . Catastrophes occur in the ninth mansion . . . <sup>150</sup>
```

"Mansion," *gong* 官, refers to the "nine mansions," a pattern used in the Han dynasty period to designate the four cardinal points (south, north, east, west), the four corners (southeast, southwest, northwest, northeast), and the center.

The term "nine mansions" (*jiu gong* 九宮) is attestable to the *Hou Han shu* 後漢書, *juan* 59, where it appears in Zhang Heng's 張衡 biography. Zhang Heng used it in a petition criticizing what appeared to him an excessive use of unorthodox divination practices:

I have heard the Sages were familiar with pitchpipes and with the calendar to identify auspicious and inauspicious signs. They strengthened [their findings] by means of turtle and milfoil oracles, and they further [verified them] through the nine mansions. It was through heaven that they recognized the Way. Originally, the [attempts at] divination were exhausted with these [methods]. <sup>151</sup>

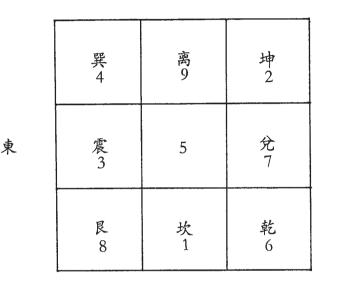
The Tang commentary on the *Hou Han shu* relied on Zheng Xuan's commentary on a Han text named *Yi qian zuo du* 易乾鑿度 to explain the concept of nine mansions:

Given the usual correspondences of the eight trigrams with the cardinal directions (i.e., the so-called Wen wang pattern), the numerical sequence of Taiyi's movement is depicted graphically in diagram 18. The nine mansions diagram represents a magic square; its numbers always form a sum of 15, regardless of whether they are summed horizontally, vertically, or diagonally.

The *Da dai Li ji*, chapter 66, of the first century A.D. is a parallel source for this pattern. It describes the *ming tang* 明堂 rites of the emperor in terms

西

南



北

Diagram 18. The Nine Mansions

similar to the movement of Taiyi. A virtually identical pattern appears in *Ling shu* 77 describing the movement of the wind spirit. The entire system may be a result of the *Yi jing* exegesis of the Han time.

The so-called *luo shu* 溶書, a diagram attestable to the Song era but attributed to ancient times by Chinese tradition (as in the case of the *he tu*), reflects the same pattern (see diagram 19).  $^{153}$ 

As the nine mansions diagram shows, the first mansion is north, the third mansion is east, the fifth mansion is center, the seventh mansion is west, and the ninth mansion is south. Hence the statement in *Su wen* 71 "In *xin wei* and *xin chou* years . . . the catastrophes occur in the first mansion" indicates that there will be a catastrophe in the first mansion, that is, in the north. The earth branches *wei* and *chou* correspond to water and hence north. The same applies to the remaining statements.

Su wen 71 helps to clarify statements such as "catastrophe at three," "catastrophe at nine," "catastrophe at seven," and "catastrophe at one" in the listing of "insufficient" arrangements among the "three arrangements" in

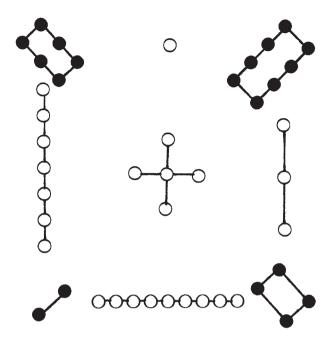


Diagram 19. The Luo shu

 $Su\ wen\ 70.^{154}$  The numbers "three," "nine," "seven," and "one" refer to the nine mansions, that is, to geographic regions in the east, south, west, and north, respectively.

# 6.3. Southern Policies and Northern Policies

In  $Su\ wen\ 74$ , a pattern of distinguishing between years of northern or southern policy is alluded to:

[Huang] Di:

[You,] Sir, have said "investigate where yin and yang are present, and regulate them" . . .

Where yin [qi] is present, how [can this be felt] at the inch opening?

Oi Bo:

Find out whether a year [is governed by the policy of the] south or of the north and this can be known.

[Huang] Di:

I should like to hear about this comprehensively.

Qi Bo:

In a year of northern policy,

when the minor yin is at the fountain,

then [the vessel movement at] the Inch Opening does not respond [to the physician's fingers].

When the ceasing yin is at the fountain,

then [the vessel movement on] the right does not respond.

When the major yin is at the fountain,

then [the vessel movement on] the left does not respond.

In a year of southern policy,

when the minor yin controls heaven,

then [the vessel movement at] the Inch Opening does not respond.

When the ceasing yin controls heaven,

then [the vessel movement on] the right does not respond.

When the major yin controls heaven,

then [the vessel movement on] the left does not respond. . . .

[Huang] Di:

How about the manifestations [of a disease] in the foot-long section?

Qi Bo:

In a year of northern policy,

when [any of] the three yin is below [at the fountain],

then the [movement in the vessels at the] Inch [Opening] does not respond [to the physician's fingers].

When [any of] the three yin is above [controlling heaven],

then the [movement in the vessels in the] foot [section] does not respond.

In a year of southern policy,

when [any of] the three yin is in heaven,

then the [movement in the vessels at the] Inch [Opening] does not respond [to the physician's fingers].

When [any of] the three yin is at the fountain,

then the [movement in the vessels in the] foot [section] does not respond.

This is the same for the left and the right [hand]. 155

The *Su wen* offers no clue as to the origin of the concepts of southern and northern policies, and it contains no hint as to which years are to be identified as those of southern or northern policies, respectively.

Wang Bing listed all years associated with the periods of wood, fire, metal, and water as years of northern policies, because in these years "one faces the north to receive the qi." Years associated with the period of soil are years of southern policy, because in these years "one faces the south and passes orders." The meaning of this comment is unclear. It was taken up indirectly,

though, by Zhang Jiebin, whose  $Lei\ jing$ ,  $juan\ 23$ , suggested that only years associated with the heavenly stems  $jia\ \mathbb{P}$  and  $ji\ \mathbb{Z}$  are years of southern policy, because jia and ji are associated with soil, and soil is the leading agent. In contrast, Zhang Zhicong assumed that only years associated with the heavenly stems  $wu\ \mathbb{R}$  and  $gui\ \mathbb{R}$  are years of southern policy, because these two stems are associated with fire, and fire is the agent associated with the south. Numerous comments by later authors are equally speculative and lack final proof.

# 6.4. Qi Interaction, qi jiao 氣交

"Qi interaction" is a technical term referring to the sphere between heaven and earth inhabited by man. *Su wen* 68 has the following definition:

### Oi Bo:

When talking of heaven, search for it at the roots. When talking of the earth, search for it at the positions. When talking of man, search for it at the qi interaction.

### [Huang] Di:

What is it to say, "qi interaction"?

### Oi Bo:

Amidst the interaction of the qi of the positions of above and below, that is where man resides.

### {Hence when it is said:

"What is above the heavenly axis, the heavenly qi rules it. What is below the heavenly axis, the qi of the earth rules it. The sphere of qi interaction, the human qi follows it, the myriad beings originate from it," then this is explained [by what was said above].}

Hence qi interaction refers to the sphere where the qi of heaven and of earth interact; it is the space where man resides. Wang Bing commented:

It is the section below heaven and above the earth, where the two qi [of heaven and earth] interact and unite. Man resides on the earth. Hence man resides in the [section] where the qi [of heaven and earth] interact and unite. Hence all transformations and generations, as well as changes, take place in the [sphere of the] qi interaction. 157

If we follow this interpretation to explain the term 氣交 in 埃昏氣交, "hence the qi of dust and darkness interact," 158 流于氣交,"wind and dryness move uncontrolled, and flow through [the sphere of] qi interaction," 159 持于氣交,"the qi of cold and dampness hold on to each other in [the sphere of] the qi interaction," 160 流行氣交,"yellow and black dust [cause] darkness and flows [in the section of] qi interaction," 160 and 雷殷氣交,"tremen-

dous thunder [occurs in the section of] qi interaction,"<sup>162</sup> then all these passages refer to a space, not, as some commentators have assumed, to a period of time.

There is only one passage in which "qi interaction" appears to refer to a time period:

The [time period] before the middle of a year, that is the [time period] ruled by the qi of heaven.

The [time period] following the middle of a year, that is the [time period] ruled by the qi of the earth.

[The time period] when the upper and the lower [halves of the year] interact and exchange [their qi] is ruled by the qi interaction.

[This way] the arrangement of a year is complete. 163

In general, the doctrine of the five periods and six qi divides a year into a first half—preceding the exact midpoint of a year—and a second half—following the exact midpoint of a year. The paragraph just quoted, though, appears to introduce a notion of a transitional period in the middle of the year. At least this is how Zhang Jiebin explained it:

"Qi interaction" is: the qi of heaven and the qi of the earth exert joint effects. "Ruled by the qi interaction" is: at the time of the third and fourth qi the qi of heaven and the qi of the earth interact. That is, the [time periods of the] third and fourth qi are the [time periods of] qi interaction of a given year. Hence whether a year has droughts or flooding, whether it is characterized by abundance or dearth, and the generation, growth, collection and maturing of things, [all these phenomena] are tied to these altogether four months or 120 days from the middle of the fourth month to the middle of the eighth month. 164

# 6.5. Images, xiang 象

*Xiang*, "image," is a term employed in the seven comprehensive discourses to denote tangible or at least visible phenomena providing evidence of abstract processes. For example, in *Su wen* 67, Huang Di wonders about what he perceives as an inconsistency in the yin-yang doctrine. <sup>165</sup> Qi Bo informs

him that there is a difference in the application of the yin-yang doctrine to the existence of man and to the phenomena in heaven and on earth. He states:

Of the numbers [of the pairings whith yin and yang], those which can be counted are [those of] the yin and yang in man....

[In contrast, the manifestations of] the yin and yang of heaven and earth cannot be counted and further extended [through enumerations]; they are referred to by images. 166

The Chinese term translated here as "counted," *tui* 推, implies the meaning "to expand." Although the final rationale underlying Qi Bo's argument is difficult to determine, it may well be that it includes a notion to the effect that the yin-yang dynamics in man are limited and hence can be counted by numbers, even if they add up to the tens of thousands:

Count their [associations] and [you] can [reach] ten; extend these [associations] further and [you] can reach one hundred. Count these [associations], and [you] can [reach] one thousand; expand them further and [you] can reach ten thousand. 167

In contrast, the dynamics of yin and yang qi in heaven and on the earth are so manifold that they escape any attempt at enumeration; at best they are revealed through "images."

Hence Su wen 68 states:

Root and tip are not identical; their qi correspond to different images. 168

Su wen 70 elucidates in more detail:

When the qi begins, there is generation and transformation. When the qi disperses, there is physical appearance. When the qi spreads, there is opulence and parturition. When the qi ends, the images change. <sup>169</sup>

What exactly are to be considered "images" in heaven and on the earth is indicated by various statements in the seven comprehensive discourses. For example, the entire appearance of a particular season is regarded as an image typifying specific constellations of qi. In its listing of arrangements of great excess, *Su wen* 70 identifies these arrangements with the image of certain seasons:

```
An arrangement of effusive growth, . . . its image is spring. . . . An arrangement of fire-red sunlight, . . . its image is summer. . . .
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An arrangement of prominent mound, . . . . its image is late summer. . . . An arrangement of firm completion, . . . its image is autumn. . . . An arrangement of inundating flow, . . . its image is winter. 170
```

In other words, all the phenomena and processes characterizing a particular season form an "image" characteristic of a specific constellation of periods and qi.

However, elsewhere the *Su wen* speaks of a very different type of images. *Su wen* 67 states:

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In the operations of change and transformation, heaven hangs the images, while the earth completes the physical appearances. . . . [You] look up to these images; even though they are far away, they can be recognized. <sup>171</sup>
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The images in heaven are the stars. They change their color and

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they may be joyful or angry, they may be anxious or mournful, they may be moist or dry.

These are the regular [appearances] of the [heavenly] images. They must be examined carefully.<sup>172</sup>
```

From the perspective of an observer on the earth, the movement of some of the stars in heaven appears somewhat erratic. The names given in *Su wen* 69 to different types of movements suggest that a metaphysical notion of stars as watching man on earth had here entered what was otherwise an entirely naturalistic doctrine.

When in pursuing their path they remain stationary [at one place] for a long time, or when they move contrary [to their regular course] and keep [their position for a while] and decrease in size, this is called "they inquire into what is below."

When in pursuing their paths they vanish, when after they have vanished they come [back] quickly, and when they pass through in curves, this is called "they inquire into neglect and transgressions."

When they remain stationary for a long time and then [return in] a circle, when they alternately leave and come close again, this is called "they deliberate catastrophes in relation to [the people's] virtue." <sup>173</sup>

Not surprisingly, therefore, in what may be a later commentary on this paragraph, the stars were seen as portents of imminent good or bad luck.

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When the rays [of the stars] are twice as big in size as normal, the transformations [they cause] will be severe;

when they are three times as big as normal, the disasters [they cause] are about to break out.

When they are half as small as normal, the transformations [they cause] will be diminished. . . .

{These are [reactions following] an inquiry into the transgressions and virtues of that below.}

{Those who display virtue, they are rewarded with good luck; those who commit transgressions, they are punished.}  $\dots$ 

{Hence,

when [the stars] are big, then joy and anger are close.

When they are small, then misery and luck are far away.}174

### NOTES

- 1. For an earlier comprehensive attempt to present and explain the doctrine of the five periods and six qi in the *Huang Di nei jing su wen*, see Fang Yaozhong 方藥中 and Xu Jiasong 許家松, *Huang Di nei jing su wen yun qi qi pian jiang jie* 黃帝內經素問運氣七篇講解 (Beijing: Jenming weisheng chubanshe 人民衛生出版社, 1984). For many of the cosmological systems discussed below, see also Kalinowski 1991.
- 2. Su wen 71-458-3. This reference and all subsequent references to the Su wen refer to Huang Di nei jing su wen 黄帝内經素問 (Beijing: Renmin weisheng chubanshe 北京人民衛生出版社, 1983), with the first number referring to the Su wen treatise, the second to the page of the 1983 edition, and the third to the line on that page.
- 3. Their first appearance is on oracle bones of the Shang dynasty (about 1500 B.C.), where they were already used in sixty possible combinations to count days. The practice of using these combinations for counting years is only attestable to the beginning of the first century A.D. (i.e., the end of the Former Han dynasty). See Needham 1986: 3:396.
- 4. Possibly these ten characters were names of the days of the ancient Chinese tenday "week," xun 旬. See Needham 1986: 3:397.
- 5. The twelve branches have been applied to the twelve months since ancient times; this seems to have been their primary usage. See Needham 1986: 3:398.
- 6. Su wen 68-393-4.
- 7. Su wen 67-374-5.
- 8. Su wen 66-368-13.
- 9. Su wen 67-370-4.
- 10. Su wen 67-370-12.
- 11. These correspondences can be derived from various sources, for example, the *Huai nan zi*. They appear also on the "cosmic board"; see below.
- 12. Harper 1978-79: 1-10.
- 13. Su wen 69-417-1.

- 14. Su wen 70-419-6.
- 15. Su wen 70-419-8.
- 16. Su wen 70-420-2.
- 17. Su wen 70-420-3.
- 18. Jupiter corresponds to wood; Venus (see end of quote) belongs to metal. Metal comes to subdue wood when the latter is present excessively.
- 19. Su wen 69-403-5.
- 20. Su wen 67-373-4.
- 21. Su wen 66-369-5.
- 22. Su wen 68-387-10.
- 23. Su wen 71-495-3.
- 24. Su wen 71-458-8.
- 25. Su wen 71-494-14.
- 26. Su wen 66-363-2, 67-371-5.
- 27. Su wen 66-361-2.
- 28. Su wen 66-362-3.
- 29. Su wen 71-499-9.
- 30. Su wen 71-478-1.
- 31. Su wen 68-389-5.
- 32. Su wen 68-392-9. 33. Su wen 68-393-7.
- 34. Fang Yaozhong and Xu Jiasong 1984: 24.
- 35. Su wen 68-396-7.
- 36. Su wen 68-397-1.
- 37. Su wen 71-458-8.
- 38. Su wen 71-494-14, 66-369-5, 68-387-10, 74-503-6.
- 39. Su wen 67-370-5.
- 40. Su wen 66-369-1.
- 41. Su wen 71-475-12.
- 42. Su wen 74-525-3.
- 43. Su wen 74-511-5.
- 44. Su wen 70-446-7.
- 45. Su wen 71-458-6.
- 46. Su wen 71-460-1.
- 47. Su wen 71-460-11.
- 48. Su wen 71-461-2.
- 49. Su wen 74-504-1.
- 50. Su wen 67-371-5.
- 51. Su wen 70-443-4.
- 52. Su wen 71-494-6.
- 53. Su wen 68-387-5.
- 54. Su wen 68-389-4.
- 55. Su wen 67-372-2.
- 56. Su wen 70-446-7.
- 57. Su wen 70-446-6.
- 58. Su wen 70-448-12.
- 59. Su wen 70-452-3.

- 60. Su wen 74-508-10.
- 61. Su wen 74-508-11.
- 62. Su wen 74-511-6.
- 63. Su wen 71-477-13 to 71-478-8.
- 64. Su wen 13-83-5.
- 65. Su wen 25-163-4.
- 66. Su wen 68-391-6.
- 67. Su wen 67-369-11, 79-561-2.
- 68. Su wen 71-467-5.
- 69. Su wen 71-476-14.
- 70. Su wen 70-446-8.
- 71. Su wen 71-470-1.
- 72. Su wen 71-458-4.
- 73. Su wen 71-502-5.
- 74. Su wen 71-476-11 ff.
- 75. Su wen 74-534-5.
- 76. Su wen 71-475-9.
- 77. Su wen 69-408-2 to 69-412-8.
- 78. The "four ropes" refer to the "four corner months," i.e., the final months of each season. In one model of five-agents correspondences, these months are regarded as the time when the agent soil rules.
- 79. Su wen 69-413-1 to 69-413-14.
- 80. Su wen 70-427-2 to 70-435-4.
- 81. Su wen 71-462-3.
- 82. Su wen 71-478-4.
- 83. Su wen 71-479-4.
- 84. Su wen 69-413-2.
- 85. Su wen 70-436-1.
- 86. Su wen 70-437-5.
- 87. Su wen 69-413-7.
- 88. Su wen 69-413-10.
- 89. Su wen 74-518-8.
- 90. Su wen 74-521-5.
- 91. Su wen 74-530-7.
- 92. Su wen 74-525-1.
- 93. Su wen 74-534-6.
- 94. Su wen 74-525-4.
- 95. Su wen 74-525-5.
- 96. Su wen 74-525-7.
- 97. Su wen 74-526-2.
- 98. Su wen 71-488-12.
- 99. Su wen 74-525-4.
- 100. Su wen 74-526-1.
- 101. Lei jing 27.30; Zhang shi lei jing, 636.
- 102. Su wen 74-526-4.
- 103. Su wen 74-526-14.
- 104. Su wen 74-516-5.

- 105. Su wen 74-519-5.
- 106. Su wen 74-522-8.
- 107. Su wen 74-523-4.
- 108. Su wen 71-478-2.
- 109. Su wen 71-478-2.
- 110. Su wen 71-477-9.
- 111. Su wen 71-488-15.
- 112. Su wen 71-492-9.
- 113. Su wen 71-491-11.
- 114. Su wen 71-489-6.
- 115. Su wen 71-491-6.
- 116. Su wen 71-493-3.
- 117. Su wen 68-391-8.
- 118. Su wen 71-476-14.
- 119. Su wen 65-391-5.
- 120. Su wen 71-476-10.
- 121. Su wen 71-476-12.
- 122. Su wen 68-392-2.
- 123. Su wen 66-365-6.
- 124. Su wen 68-392-2.
- 125. Su wen 68-391-6.
- 126. Su wen 70-426-4.
- 127. Su wen 71-473-12.
- 128. Su wen 71-458-11.
- 129. Su wen 70-428-2.
- 130. Su wen 70-419-7.
- 131. Su wen 68-391-6.
- 132. Su wen 68-391-5.
- 133. See Su wen 71-462-4, 462-13.
- 134. Su wen 71-475-5.
- 135. Su wen 70-420-6.
- 136. Su wen 70-422-1.
- 137. Su wen 70-423-2.
- 138. Su wen 70-424-3.
- 139. Su wen 70-425-4.
- 140. Shi san jing zhu shu, vol. 1, 188 center.
- 141. Ibid.
- 142. see Yi jing 易經, Xi ci-shang 繫辭上, Shi san jing zhu shu, vol. 1, 81 below.
- 143. Li ji 禮記 6, Yue ling 月令, Shi san jing zhu shu, vol. 1, 1354 above.
- 144. Ibid., 1372 center.
- 145. Shang shu 尚書, Hong fan 洪範, Shi san jing zhu shu, vol. 1, 188 center (正義).
- 146. See *Shang shu* 尚書, Gu ming 顧命, *Shi san jing zhu shu*, vol. 1, 239 above. The Xi ci 繫辭 commentary to the *Yi jing* 易經 has the following phrase: "河出圖," "a chart coming out of the [Yellow] River". See *Shi san jing zhu shu*, vol. 1, 82 center.
- 147. Su wen 71-489-4.
- 148. Su wen 71-484-3.

- 149. Su wen 71-479-5.
- 150. Su wen 71-478-4.
- 151. Hou Han shu 59, vol. 7, 1911.
- 152. Ibid., 1912, note 1.
- 153. The phrase 洛出書, "a writing coming out of the Luo River," appears in the Xi ci 繫辭 commentary to the *Yi jing* 易經, in the same context as 河出圖 (see above). See *Shi san jing zhu shu*, vol. 1, 82 center.
- 154. Su wen 70-428-5 to 435-3.
- 155. Su wen 74-507-7.
- 156. Su wen 68-397-3.
- 157. Su wen 68-397-3, note 67.
- 158. Su wen 70-443-1.
- 159. Su wen 71-463-7.
- 160. Su wen 71-460-6.
- 161. Su wen 71-469-7.
- 162. Su wen 71-489-6.
- 163. Su wen 71-475-12.
- 164. See commentary to *Su wen* 71-475-12.
- 165. Su wen 67-370-7.
- 166. Su wen 67-370-11.
- 167. Su wen 67-370-10.
- 168. Su wen 68-388-3.
- 169. Su wen 70-451-7.
- 170. Su wen 70-436-1.
- 171. Su wen 67-372-6.
- 172. Su wen 69-417-7.
- 173. Su wen 69-416-2.
- 174. Su wen 69-416-5.

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