

# https://doi.org/10.1017/9781108975834 Published online by Cambridge University Press

# Cambridge Elements =

Elements in Ancient East Asia
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# MEDICINE AND HEALING IN ANCIENT EAST ASIA

A View from Excavated Texts

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www.cambridge.org
Information on this title: www.cambridge.org/9781108972208

DOI: 10.1017/9781108975834

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When citing this work, please include a reference to the DOI 10.1017/9781108975834

First published 2023

A catalogue record for this publication is available from the British Library.

ISBN 978-1-108-97220-8 Paperback ISSN 2632-7325 (online) ISSN 2632-7317 (print)

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### Medicine and Healing in Ancient East Asia

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Abstract: This Element first discusses the creation of transmitted medical canons that are generally dated from early imperial times through to the medieval era and then, by way of contrast, provides translations and analyses of non-transmitted texts from the pre-imperial late Shang and Zhou eras and the early imperial Qin and Han eras, as well as a brief discussion covering the period through the eleventh-century ce. The Element focuses on the evolution of concepts, categories of illness, and diagnostic and treatment methodologies evident in the newly discovered material and reveals a side of medical practice not reflected in the canons. It is both traditions of healing – the canons and the currents of local practice revealed by these texts – that influenced the development of East Asian medicine more broadly. The local practices show there was no real evolution from magical to non-magical medicine. This title is also available as Open Access on Cambridge Core.

Keywords: ancient, China, medicine, magical, cosmic

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ISBNs: 9781108972208 (PB), 9781108975834 (OC) ISSNs: 2632-7325 (online), 2632-7317 (print)

# https://doi.org/10.1017/9781108975834 Published online by Cambridge University Press

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### 1 Introduction

This Element first discusses the creation of transmitted medical canons that are generally dated from early imperial times through to the medieval era and then, by way of contrast, provides translations and analyses of non-transmitted texts from the pre-imperial late Shang (ca. 1200 BCE–1045 BCE) and Zhou (1045 BCE–221 BCE) eras and the early imperial Qin (221 BCE–206 BCE) and Han (206 BCE–220 CE) eras, as well as a brief discussion covering the period through the eleventh century CE. The Element focuses on the evolution of concepts, categories of illness, and diagnostic and treatment methodologies evident in the newly discovered material and reveals a side of medical practice not reflected in the canons. It is both traditions of healing —the canons edited by literati and the currents of local practice revealed by these texts – that influenced the development of East Asian medicine more broadly.

The earliest texts, written on bones, originate from the Yellow River (Huang He) Valley. The next set, dated as early as the fourth century BCE and as late as the tenth century CE, and written on bamboo, silk, and eventually paper, were preserved in anaerobic tombs in the Yangzi River Valley and Sichuan Basin and the dry desert caves and sites in Gansu. The local practices reflected in these texts make evident that there was no real evolution from magical to non-magical medicine. The rational ur-scientific approach to the body as a system of meridians and viscera powered by "natural" forces such as the variant modes of qi 氣 ("breath, air, life energy") - yin and yang 陰陽 (dark and light, negative and positive) and wuxing 五行 (the Five Agents: Wood, Water, Metal, Fire, and Earth) – that were so basic to canonical knowledge was not universally applied. Only during the early imperial age (the second century BCE through to the fifth century CE) did a vision of the inner body as a system of channels pulsating with these modes of qi emerge. These mai 脈 ("vessels") or jingluo 經絡 ("channel network, conduits, meridians") were also only slowly connected to a set of inner spaces called the wuzang liufu 五臟六腑 (the Five Storage Depots or Viscera and the Six Cavities: Heart, Lungs, Liver, Spleen, Kidneys and Gall Bladder, Stomach, Large and Small Intestines, Bladder, and san jiao, or "the Triple Burners") (Lo, 2018b). Yet these spaces, largely unacknowledged in the earliest layers of the nontransmitted literature, became fundamental to later canon-based medical practice. Evidence for diagnostic methodologies such as pulse-taking and treatments such as moxibustion and acupuncture, which were key to the later system, is also scarce.

### 2 Transmitted Medical Knowledge and the Creation of Canons

The primary medical canon for East Asian medicine is the *Inner Classic of the Yellow Emperor (Huangdi Neijing* 黃帝內經, hereafter *HDNJ*), which according to tradition can be traced back to a prehistorical sage, though scholars now

suggest it was mostly Tang (618–907 cE) material edited by Song period literati (960–1279 cE) and may or may not preserve textual threads traceable back to the early imperial era (Keegan, 1988; Sivin, 1993; Harper, 1998). Two books exist – separately called Suwen 素問 (Plain Questions, focusing on cosmological theory) and Lingshu 靈樞 (Divine Pivot, focusing on acupuncture therapy). Two other books include one reconstructed text (Taisu 太素) and one lost text that is mentioned in later texts (Mingtang 明堂, short for Mingtang kongxue zhenjiu zhiyao 明堂孔穴鍼灸治要 or Huangdi mingtang jing). Transmitted medical literature, contingent so often on the whims of political sponsorship or teacher—student relationships, is by nature subject to the successive hands of editors and archivists.

Hints of the original diversity of archives and private libraries are appearing now in the counternarratives preserved in newly discovered texts. Dating from the second millennium BCE to the tenth century CE, fragmentary and complete manuscripts show both a long history of magical practices used for healing and the continued integration of evolved forms of these practices with the more cosmologically based medical ideologies advocated by *HDNJ* (Harper, 1998, 1999b, 2005; Strickmann, 2002; Cook, 2006, 2013b). That is, we can now read from a new perspective the medical classics that scholar-physicians had continued to edit, refine, and debate (Brown, 2015, 96; Lo, 2018, 590–591).

The classics tend to emphasize the role of natural cosmological agencies, the modes of *qi* that influenced both health and illness within the human body, and the outer layered world of geographical, social, and celestial spaces. Human emotion was an internally generated type of *qi* affecting and affected by the other modes of *qi* (Hsu, 2008–9). The movement of or change in these modes was regulated by the numerology of time: the seasons, the ritual sexagenary calendar, months, days, and hours (Lo, 2018, 590; Lo & Gu, in press). This medicine of systemic correspondence, as termed by Paul Unschuld (1985), is often distinguished by scholars from magical or demonic medicine, but in practice the two overlapped.

### Famous Men and Cosmic Medicine

The first half of the Han dynasty, known as the Western Han dynasty (206 BCE–9 CE), was a time of long-lived emperors, vast territorial claims, and the consolidation of philosophical and technical knowledge. There is a tendency during this era to link the development of medical knowledge to legendary sages, such as Huangdi (the Yellow Emperor) (Lo, 2018, 577–578, 587). In fact, most ancient medical works, transmitted or not, have no definite author or obvious context of compilation, a situation the *HDNJ* shares with the *Classic of Difficult* 

Issues (Nanjing 難經, also known as the Huangdi bashiyi nanjing 皇帝八十一難經), probably first compiled in the latter or Eastern Han period (206 BCE-220 CE) (Lo & Li, 2007; Unschuld, 2016b, 25-26). Non-transmitted materials rarely have titles, much less any known authorship. Most titles are assigned by modern scholars based on assumptions of textual classification.

Many canons were lost and exist only in reconstructed forms (Keegan 1988; Sivin, 1993; Unschuld, 2016a, 22–25). The Shanghan zabing lun 傷寒雜病論 written by Zhang Ji 張機 (142–220?; also known as Zhang Zhongjing 張仲景) had been lost but was later reconstructed by Wang Shuhe 王叔和 (210–85; also known as Wang Xi 熙) into two foundational texts: Cold Damage Treatise (Shanghan lun 傷寒論) and Essential Prescriptions of the Golden Cabinet (Jingui yaolüe 金櫃要略) (Zhang Ji, 2013, 2014). Notably, the key concepts of these early imperial texts, such as illness from external qi modes, known as "perverse qi" (xie qi 邪氣) in the canons, such as "wind" (feng 風), "heat" (re 熱), and "cold" (han 寒), only begin to appear in the non-transmitted texts – some even titled – from the Sichuan Basin, in a tomb dated to around 188 BCE in Laoguanshan 老官山 (Tianhui 天回, Chengdu, Sichuan) (not yet formally published; hereafter LGS). Even so, these elements of newer medicine were mixed with practices centuries old.

Early canons focused on treatments not evident in early non-transmitted literature, such as "acumoxa" (zhenjiu 鍼灸, the treatment of qi vessels at specific points on the body with needles or burning cones). An example, compiled out of earlier texts by Huangfu Mi 皇甫謐 (214-82), was published as the *Classic of A and B (Jiayi jing* 甲乙經, also known by various names such as Huangdi jiayi jing and Zhenjiu jiayi jing). The earliest version of this text is from the Ming dynasty (1368–1644). On the other hand, non-transmitted sources may attest to the influential Vessel Classic (Maijing 脈經) by Wang Shuhe, also compiled from earlier sources. These include a text self-titled the Vessel Document (Maishu 脈書) found in a 186 BCE tomb in Zhangjiashan 張家 Ш (ZJS) (Jiangling, Hubei) and the various vessel and cauterization texts discovered in a 168 BCE tomb at Mawangdui 馬王堆 (MWD) (Changsha, Hunan). An MWD text, which modern scholars call Model of the Vessels (Maifa 脈法), preserves parts of the earlier Vessel Document from ZJS (Harper, 1998, 22–24, 30–32). Notably, there is little to no evidence for acumoxa in either text.

When did the literati who compiled the canons begin to frame their healing methods as sourced from ancient sages? Non-transmitted texts reveal the device as early as the fourth century BCE, but records of lost texts in transmitted histories also reveal the trend, though with different sets of sages and a vast array of genres. The late Han historian Ban Gu 班固 (32–92 CE), incorporating

work by the Han physician Li Zhuguo 李柱國, listed books in the bibliographic section ("Yiwen zhi" 藝文志) of the Documents of Han (Han shu 漢書) according to thematic categories (Hunter, 2018, 763). Huangdi, a progenitor popularized in the Han dynasty, is associated with texts in a number of categories, such as Daoist practices and ideology, vin and vang, orally transmitted stories, astronomy (and astrology), wuxing (the Five Agents), calendars, various types of divination, medical classics (yi jing 醫經), canonized recipes (jingfang 經方, decoctions of herbs, minerals, insects, and other substances), sexual methods (fangzhong 房中), and techniques for spiritual transcendence (shenxian 神僊). Another popular Han sage, the Divine Husbandman (Shennong 神農), associated traditionally with herbal medicine, is linked to books in the categories of agriculture, vin and vang, wuxing, various divination methods, recipes, and spiritual transcendence. Just as the Huangdi tradition spurred the development of later classics focusing on vessel theory and acupuncture (such as the Jiayi jing), the Shennong tradition inspired collections of pharmaceutical recipes and led the occult alchemist Tao Hongjing 陶宏景 (456-536) to formalize the study of bencao 本草 or materia medica (Brown, 2015, 8; Bian, 2020, 6).

The roots of Han cosmic medicine and the framing devices are found in late Zhou manuscripts, mostly dating to the fourth century BCE. As in the HDNJ, knowledge transmission is through a question-and-answer format, with the senior authority figure guided by sage advisors. In the recently discovered bamboo texts presently preserved by Tsinghua University, we find that instead of the HDNJ paradigm of Huangdi as the avatar for political authority and Qi Bo 歧伯 (among others) as the technical expert, the paradigmatic pair were the mythical founder of the Shang dynasty, Tang 湯 (also known as Chengtang 成湯), and Yi Yin 伊尹, the wise minister. Both Tang and Yi Yin appear in a number of Tsinghua texts; they are well known in received literature (Tang goes by various names, [Feng Yicheng 2019, 74-75]; and Yi Yin is a sage advisor but also a magician, a shaman, and a cook, [Allan 2015]) and may appear in paleographical texts as early as the Shang oracle bones (Li, Ai, & Lü, 2019). Neither Tang nor Yi Yin feature in Ban Gu's list. According to commentators and later scholars, sages such as Huangdi and Shennong understood the cosmos and thus legitimized the authority of the text (Bian, 2020, 32, 81).

The range of topics linked by Ban Gu to healing reveals early literati approaches to cosmic medicine. *Wuxing* is explained as the five constant forms of qi (五行者, 五常之形氣也), which guide everything from human affairs to the movement of the stars. "Masters of recipes listed in canons" ( $jing\ fangzhe\ ext{ }$ 經方者) are defined as:

[Specialists who] relied on the cold and warm qualities of herbs and minerals [in concert with] the shallow and deep [pulse] measurements of illness to determine the density of herbal flavors appropriate to the *qi* reaction; [they] distinguished the five types of Bitter and six types of Pungent, providing the doses of Water and Fire [necessary] to penetrate the closed-off areas and release those knotted areas [in the bodies of the patients] in order to revert them back to normal.

本草石之寒溫,量疾病之淺深,假藥味之滋,因氣感之宜,辯五苦六辛,致 水火之齊,以通閉解結,反之於平.

If the recipes were inappropriate, causing too much heat or cold and resulting in "inner damage of the *jing* 精 (vital essence, spirit) and *qi*" (*jing qi neishang* 精 氣內傷), then, even though the damage was not outwardly apparent, a physician (*yi* 醫) had to be consulted. The section on "those proficient in the medical canon" (*vijingzhe* 醫經者) notes that:

[They] base the categorization of the 100 illnesses on the human indicators of blood vessels, the conduit system, bones and marrow, *yin* and *yang*; [they] separate the living from the dead and with the use of the [pulse] measurement, the needling stone, decoctions, and fire (cauterization), [they] determine the appropriately balanced blend of the 100 herbs.

原人血脈經絡骨髓陰陽表裏,以起百病之本,死生之分,而用度箴石湯火所施,調百藥齊和之所宜.

Here, we see from Ban Gu's perspective three levels of diagnosis and treatment. First, "illness" or the "ailment, disorder, disease" (bing 病) is determined by "indicators" (biao 表) revealed through pulse measurements of the yin-and-yang values in the vessels of blood (xue 血) and of qi, as well as indicators in the skeletal structure. Notably, the treatment involves a stone "needle" and cauterization rather than acupuncture and moxibustion, along with herbal recipes. The MWD manuscripts dating to the second century BCE attest to an early science of pulse-reading, cauterization, and decoctions but not to needling, although lancing stones (bian) existed earlier and metal needles, possibly medical, were found in slightly later tombs in Guangxi and Hebei (Harper, 1998, 5, 92; Lan Riyong, 1993; Zhongguo shehui kexueyuan kaogu yanjiusuo 1980, vol. 1, fig. 78).

Several centuries after Ban Gu, Huangfu Mi summarized his understanding of the creation of Chinese medicine and treatment methods in the *Classic of A and B* (translation adapted from Brown [2015, 98]; Huang-fu Mi, 1994, xix):

As for the rise of the Way of Medicine, it has been around for a long time. In High Antiquity, the Divine Husbandman (Shennong) first understood the 100 medicines by tasting plants. Huangdi consulted with followers, Qibo, Bogao

伯高, and Shaoyu 少亩, about how to evaluate the five viscera and six cavities (wuzang liufu) on the inside and to synthesize the symptoms of conduits of blood and qi from appearances on the outside. [They] triangulated [this information] with the [cosmic indicators] of the Sky and Earth and with the basic natures of what they examined in human and other [sensate] beings, [seeing that] when the spirit [of yang] was exhausted, [the qi] pivots and changes [to yin], so the Way of Needling arose thereby. Their treatises were miraculous; the Thunder Lord (Leigong 電公) received them and passed them on to talents like Yi Yin, who edited and made decoctions from Divine Husbandman's Materia Medica (Shenong bencao).

夫醫道所興,其來久矣. 上古神農始嘗草木而知百藥. 黃帝諮訪岐伯,伯高,少俞之徒,內考五臟六腑,外綜經絡血氣色候,參之天地,驗之人物,本性命,窮神極變,而針道生焉. 其論至妙,雷公受業傳之於後. 伊尹以亞聖之才,撰用"神農本草"以為湯液.

Interestingly, the Thunder Lord is mentioned instead of Tang in combination with Yi Yin. Rather than dialogues between sage kings and magical ministers, Huangfu categorizes the development of medical diagnostic and treatment methods by medical lineages. He lists later sage-like healers, such as the famed practitioners of pulse diagnostics and acumoxa therapy, the presumed late fifth-century BCE Bian Que 扁鵲 (Qin Yueren 秦越人) and the secondcentury BCE Cang Gong 倉公 (Chunyu Yi 淳于意), who are mentioned in Han sources but who left no written legacies (Brown, 2015, 41-86; Hsu, 2010, 3-4; although scholars link some of the LGS texts to Bian Que: Du Feng, 2014b). Methods linked to these healers, such as examining or palpating vessels (zhen mai 診脈 or gie mai 切), needling (ci 刺), cauterizing (jiu 灸), and decoctions (tang 湯), cannot be confirmed before the second century BCE (Hsu, 2010, 4, 10). Huangfu credits his predecessors, including those closer to his own time, such as Zhang Zhongjing (Zhang Ji), the author of the influential Cold Damage Treatise, and Hua Tuo 華佗 (d. 208 cE), a healer known for his early surgical techniques (Brown, 2015, 99, 101, 158–159). Manuscripts confirm that knowledge later consolidated by Zhong Ji and Huangfu Mi derived from numerous sources.

Early imperial manuscripts reveal a long tradition of treating the same ailments diagnosed by pulse-reading with recipes (fang 方). The ingredients were made into soups, pressed onto the body, ground up into warmed alcohol, or made into pills. They are often combined with magical formulas, prayers, invocations, and exorcistic choreographies. The blurring of materia medica with magic is reflected in the early pharmaceutical canon by the Daoist master Ge Hong 葛洪 (281–341), the author of the eponymous Master Who Embraces Simplicity (Baopuzi 抱朴子). Such chapters as "Transcendent Medicines"

("Xianyao" 仙藥) reflect the blending of "nurturing life" (yangsheng 養生) practices for achieving a long life with local healing practices (see the diagram showing the relationship of healing the sick and attaining transcendence through the modulated use of toxic drugs in Liu, 2021, 5). Medical canons attributed to Ge Hong include the Recipes from Behind the Elbow (in the Sleeve) to Rescue the Dying (Zhouhou qiuzu fang 肘後求卒方), which survives only in a version edited by the occult master Tao Hongjing: Recipes from Behind the Elbow for Every Emergency (Zhouhou beiji fang 肘後備急方). Quotes of earlier lost texts are preserved in it as well as curious facts such as the earliest mention of smallpox (tianhuabing 天花病). Ge Hong is also credited with preserving a work by Hua Tuo called the Golden Chest and the Green-Blue Satchel (Jinkui Lunang 金匱綠囊). But this had also been lost until it was reinvented during the Song era, with names such as Golden Chest Formulary (Jinkui fang 金匱方) and Jade Case Formulary (Yuhan fang 玉函方), and attributed to Zhang Ji, the Han physician known for cold damage theory (Hanson, 2020, 81–82).

### Materia medica, Magic, and Other Methods

Pharmaceutical literature was consolidated in the late medieval era throughout the Yuan era (1271–1368) and into early premodern times, incorporating ideas and materia medica from Inner Asia, South Asia, and the Middle East (Zheng et al., 2018, 13-18; Buell & Anderson, 2021, chap. 3). Some genuine early works (in contrast to forgeries of lost works) include one by the Tang official Wang Tao 王濤 (ca. 670–755). His Arcane Essential Recipes from the Outer Censorate (Waitai miyao 外臺秘要) incorporates discussions on the use of more than 6,000 recipes drawn from Tang and pre-Tang works. The first government-sponsored materia medica, called the Newly Revised Materia Medica (Xinxiu bencao 新修本草), produced by a team of Tang officials in 659, was based on Tao Hongjing's fifth-century work the Collected Annotations on the Classic of Materia Medica (Bencao jing jizhu 本草經記注) but was revised and updated with information collected from local regions in the Tang empire (Bian, 2020, 6–9; Liu, 2021, 30–1, 81–82, 92–94). Through these and other works, the use of many drugs still used in East Asian medicine today, such as aconite, can be traced back to the Han.

The importance of prayer, repentance, and timely behavior in Daoist healing is seen in the transmitted *Scripture on Great Peace (Taipingjing* 太平經). In response to epidemics in 171 ce, the leader of the Yellow Turban movement, Zhang Jue 張角, led followers to "confess their mistakes" before he administered talismans dissolved in water to them along with incantations

(Hendrischke, 2006, 19). Epidemics were believed to be caused by extravagant behavior or bad environmental *qi* (Hendrischke, 2006, 129, 144). Individual illnesses according to the *Scripture* could also be caused by people improperly "injuring the earth" (Hendrischke, 2006, 264). This concept is reflected in later geomancy practices and diagrams preserved in medieval manuscripts discovered in the northwestern desert cave complex of Dunhuang 敦煌 (Gansu). Some identify where the Earth Lord is residing on different days of the sexagenary calendar. This suggests that the body of the earth was viewed like the human body as being inhabited by different souls in different places at different times (Harper, 2005; Despeux, 2007). Not knowing the calendar could cause injury, illness, or even death if one performed acupuncture or dug a well at the wrong time or place.

General treatment approaches (not including the specificity of recipes) were consolidated by Chao Yuanfang 巢元方 (581-618) and others into the canon Discourse on the Origins of Disease (Bingyuan lun 病原論), also known as the Discourse on the Origins and Symptoms of All Diseases (Zhubing yuanhou lun 諸病源候論) (Zheng et al., 2018, 50). In 57 chapters, 1,739 disorders (bing) are named and discussed. In a late Qing edition (Zhou shi yixue congshu 周氏醫學 叢書, vol. 27), the illnesses are grouped into larger sections labeled as types of symptoms (bing zhuhou): "waist and back" (yaobei 腰背), "melting with thirst" (a symptom of diabetes) (xiaoxie 消瀉), "epidemics" (yili 疫癘), "all types of dripping" (zhulin 諸淋), and "moisture" (shi 濕) (Zhang & Unschuld, 2015, 567, 628, 692, 444). By far, the majority of ailments are classified as "moisture" syndromes. Dolly Yang has described the organization of the specific disorders as progressing from what was deemed most prevalent (such as "wind" or "deficiency" disorders), followed by disorders associated with meteorological factors, to those of the internal organs, parts of the head, visible injuries, and finally to specific disorders of women and children (Yang, 2018, 281–284).

Chao Yuanfang's canon frequently quotes from a lost text called *Nurturing Life Recipes* (*Yangsheng fang* 養生方), especially a chapter called "Guiding and Pulling Methods" ("Daoyin fa" 導引法), which may be linked in tradition to therapeutic exercise manuals discovered in Han tombs in Hunan and Hubei among manuscripts, including the self-titled *Pulling Book* (*Yinshu* 引書) from ZJS, about recipes, vessels, sex, and other topics (Harper, 1998, 110–119; Lo, 2014; Yang, 2018). The *Bingyuan lun* was first printed in the eleventh century from circulating manuscripts, and subsequent printed editions had an enormous impact on subsequent medical texts, including those of Japan and Korea (Yang, 2018, 263–269). This shows how difficult it is to determine the origin or date of a particular methodology and also how aspects of ancient practice persisted.

Chao Yuanfang's work no doubt influenced the Buddhist practitioner Sun Simiao's 孫思邈 (d. 682) encyclopedic canons of emergency medicine, Essential Recipes for Emergencies Worth a Thousand Pieces of Gold (Beiji qianjin yaofang 備急千金要方) and Supplement to the Recipes Worth a Thousand Pieces of Gold (Qianjin vifang 千金翼方). These included recipes as well as medical theory and discussions and treatments in the fields of pediatrics, gynecology, "seven openings" (of the body where external qi could penetrate) (qiqiao 七竅), wind ailments, "foot qi" (various ailments, some identified as beriberi) (jiaoqi 腳氣), cold damage, viscera, abscesses, "releasing toxins" (as required for fevers) (jiedu 解毒), dietetics, pulse-reading, and acumoxa. With more than 5,300 entries under 232 headings in 30 folios (juan), it is a massive text that is still being explored by modern scholars (Furth, 1999; Unschuld, 2000, 88–95; Engelhardt, 2001; Smith, 2008; Wilms, 2013, 2015; Sivin, 2017; Liu, 2021). We can find evidence of alchemy, spells, and hemerology as well as Daoist and Buddhist ideology mixed with more pragmatic medical approaches (Sivin, 2017; Lo, 2018, 592).

Early Chinese medical writings, including many no longer preserved in China, influenced the rise of medicine in Korea and Japan. Most notable is the collection of early texts preserved in the *Ishimp*ō 醫心方 (*Remedies at the Heart* of Medicine) by Tanba no Yasuyori 丹波康賴 (ca. 912-95). Comparison of theories, terminology, and illustrations in the seventy-four medical manuscripts discovered among thousands of other scriptures, manuscripts, codices, and records hidden in Dunhuang help to date the ancient materials in the *Ishimp*ō. Together, the *Ishimp*ō and Dunhuang texts likewise provide a seventh-century date for a block-printed Chinese acumoxa text preserved only in Japan, the Huangdi hamajing 皇帝蛤蟆經 (Toad Canon of Huangdi) (Lo, 2001). Some of the evidence includes illustrations of acumoxa points on naked or near-naked men, numbers and names of points that vary from those in the canons, and, most significantly, the theory that five different kinds of spirit rotated inside the body, occupying different sites according to the calendar and the age of the person – thus setting up prohibition standards for where on the body one could needle without causing harm. This practice can be traced back to an Eastern Han medical manuscript from a tomb in Hantanpo 旱灘坡, Wuwei 武威, Gansu.

## 3 Non-transmitted Texts: From the Twelfth Century BCE to the Eleventh Century CE

Texts written on bone, bamboo, silk, and paper preserve versions of original documents that were buried and lost to time and thus were not subject to later revision. Before the era of court-sponsored textual production and preservation

in the Han, medical information was embedded in technical and divination texts concerning a large array of personal or political topics. During the early imperial era, language concerning "ailments" (bing) began to be separated out from other topics. The mixed texts produced before then preserve ancient thought processes concerning illness and healing, much of which never made it into later canons and persisted in popular practice.

Pre-Han non-transmitted materials include divination records and manuals as well as narrative documents that are historical or philosophical in type. The earliest texts are divination records. Two sets of divination records are preserved: late Shang writing (twelfth-century BCE), most especially on turtle plastrons, and late Zhou bamboo records (fourth-century BCE). The Shang bones reflected the political and personal issues of the royal family and the fourth-century-BCE texts reflected the personal issues of politically connected elite men and their families. Generally, the primary mode of healing documented was exorcism and sacrifice directed at supernatural agencies, including human and nature spirits. Illness was understood as a symptom of "malign influence, catastrophe, curse" ( $sui \stackrel{\text{He}}{=} :$ ).

### Shang Bone Inscriptions: Ancestral Powers

The diviners that accompanied the late Shang kings around the metropolis that would later be named Yinxu 殷墟 (Anyang, Henan) used a range of animal bones to divine, most commonly the water buffalo scapula. By the time of King Wu Ding 武丁 (ca. 1254 BCE-1197 BCE), however, the use of turtle plastrons reflected prestige and perhaps a supernatural connection to the Four Quadrate (sifang 四方) Shang cosmos (Allan, 1991, 101, 106-107, 111-113, 121). Records of diviners negotiating with the ancestors on how to heal "affliction" (ji 疾) in the bodies of the king and his family, especially those of his wives and his sons (various  $zi \neq 1$ ), are inscribed on turtle plastrons. The oracle bone inscriptions (hereafter OBI) record afflictions in the body (shen 身) or in a body part, such as the bones, head, eyes, nose, ears, mouth, teeth, tongue, the neck or throat, the upper arms, elbows, abdomen, thighs or crotch, buttocks, legs, and possibly the knees, feet, and toes (there is some debate on how to decipher some of these terms; Hu Houxuan, 1942; Fan Yuzhou, 1998; Du Zhengsheng, 2005, 83–88; Huang Tianshu, 2006, 151, 356– 357). These all represent the outer visible body. There are a few cases that mention "heart" (xin 心), which in late Zhou records could refer either to the upper front torso of the outer body or to the inner self and source of emotion.

The diviners proposed questions (positive and negative alternatives) regarding the affliction. One question asked was to determine if "there is toxin" (you du 有ѣ〉毒) or not. The questions were directed through the OBI to the

ancestors, who were considered either the source of the affliction and/or an agent for protection and healing (Tsung-tung Chang, 1970, 34–45; Cook, in press). To deflect negative ancestral power, exorcism or a warding-off ritual ( $yu \not \cong$ ) was performed (Keightley, 2012, 356). Sacrifices were provided to persuade ancestral action. Critical to the performance was the choice of day and the number and types of animals to sacrifice. Answers to the questions were interpreted from the sounds and cracks the bones displayed when hot pokers were pressed into particular sites on the bones. These bones had been specially prepared with regular patterns of scraped notches on the back that connected to the points chosen to scorch on the front, suggesting a purposeful awareness of the bone, which, like the human body, was composed of a front and back that are connected by sensation or pain. Scholars suggest that the process linked, at least theoretically, to later cauterization or acumoxa practices (Hu Houxuan, 1984, 27–30; Harper, 1998, 96; Lewis, 2006b, 56, 72).

Just as later divination texts discussed medical issues in the context of other life concerns, the OBI embedded questions about the physical bodies of the king and his household with other concerns according to the sexagenary ritual calendar. The concept of "affliction" was not limited to the human body but could also be suffered by the social political body if, for example, outsiders invaded the Shang territory. We can envisage that, as Sivin noted for the individual medical body in early imperial times, the imagined king's body extended beyond his physical self (Sivin, 1995; Lloyd & Sivin, 2002, 214–226). Through the medium or proxy of the Four Quadrate—shaped plastron (representing the cosmos), diviners could diagnose issues within the larger social, political, and cosmic bodies of the king (Hanson, 2020). These OBI bones were specially prepared, a duty supervised by royal women. Once the bones were used, they were collected in a cache and buried. The conception of the bone as body and its burial in a mass grave is suggestive of its social agency as a body-servant to the king.

The relationship of the Four Quadrate—shaped plastron to the king's personal and extended body is difficult to untangle. One reason is the fragmented nature of the oracle bone evidence. But recently a cache of hundreds of relatively complete plastrons belonging to Wu Ding's sons was found in the eastern section of Huayuanzhuang 花園莊 burial ground: they provide clues (Huang Tianshu, 2006). An analysis of all the bones that mention "affliction" reveal first and foremost the primacy of time as an influential factor. The royal ancestral spirits were named according to the ten-day system, with male spirits occupying the beginning of the cycle and females (and possibly deceased elder brothers) at the end. There was definitely a correlation between the name of the day chosen for a sacrifice and that of the ancestor named to receive it. Over the course of

a ritual period that a single plastron was used, different sections of the bone were used on different days in patterns on both its front and back, along the edges, and in the center spaces. The diviners were extremely conscious of symmetry, suggesting an early attention to the balance of supernatural forces within the proxy body of the turtle.

One challenge with all newly discovered archaic texts is deciphering the meaning of many archaic graphs. For the oracle bones, the logographic nature of the graphs can sometimes provide hints to the larger concepts behind a word's meaning if the word has no descendant graph or word that appears in transmitted text. For example, the toxic state caused by an external supernatural agency was written as , a graph composed of a "foot" 上 on top of a "snake, worm, centipede, creature, bug" 虫. The word is understood as having no descendant graph and is read as a generalized "harm" (hai 害, Takashima, 2010, vol. 2, 150–153). In fact, it may represent an unrecognized variant for "toxic, poison" (du 毒) (Liu, 2021, 22; Cook, in press). This "bug" imagery appears in later paleographic contexts as a representation of outside supernatural influences; in medieval Daoist lore, bugs inside the body cause decay and death (Harper, 1998, 74–75; Strickmann, 2002, 36–37, 77–78; Unschuld, 2003, 180–189; Harper & Kalinowski, 2017, 129–133).

An ailment called  $gu ext{ im}$  is depicted by a graph with bugs or creatures inside a vessel to represent a kind of toxic potion but also a bodily affliction. In the Shang, it seems to be linked to bone and teeth pain; in later texts, it was associated with sexual behavior and intestinal parasites (Cook, 2016). While it was mostly identified as afflicting a single body, there is one OBI in which it afflicted an entire non-Shang people; a suggested cure was extermination of the people. This radical solution suggests a fear of contagion. In the MWD manuscripts, it was considered a demonic ailment. Various treatments are noted: (1) ingesting the burnt dust of a bat or of a menstrual cloth; (2) applying a tincture with charred rooster comb and snake; (3) applying a tincture with menstrual blood mixed with cinnamon (Harper, 1998, 151, 300–302). In medieval times, gu was not just the name of an affliction; it was itself a demonic power, one that could cause chronic or acute illnesses and that must be expunged with strong drugs, such as realgar, croton, aconite, or centipede (Liu, 2021, 71–72).

Another descriptive ancient graph is the one for "affliction," written in a variety of ways such as with a body on a planchette with a hand over it holding some sort of implement 誠, a body on a planchette surrounded by drops of liquid , or by many hands 執. The reclined body on the bed or table-like structure suggests the patient; the hand holding an implement, or the hovering drops and multiple hands, may suggest treatment methods. Interestingly, the variant graphs for a Zhou term for the vanquished Shang people, *yin* 殷, was

written as 愉, which in the rare OBI usage possibly refers to a medical technique. This graph also shows a hand with an implement over a body. The ancient graph for "body" (*shen*) also has many variants, some depicting an infant inside the rounded abdomen, suggesting that the graph represented both embodiment and reproduction (Cook & Luo, 2017, 95–96). Instruments mentioned in Han texts include lancing stones, hammers, sticks, reeds, and arrows (Harper, 1998, 161, 169). An oracle bone graph possibly of "bug" and a "hand holding something" (possibly the latter rare word meaning "to spread" 饮 or to dismember" (a human sacrificial victim) (Chen Guangyu et al., 2017, 189–190). The Shang people may have practiced a procedure, either exorcist or surgical, that the Zhou found barbaric and thus used as a disparaging reference for a vanquished people.

An ancient form of healing, involving binding the evil spirit, may be implied in this undeciphered OBI graph 人. It depicts two hands holding a knotted cord and may link to later exorcistic healing methods using knotted bound forms, twisted body postures, or other actions described by Donald Harper interpreting a third-century-BCE text called "spellbinding, accusing" (*jie* 清台) (Harper, 1985, 475–476). Binding harmful presences could involve oral pronouncements (*gao* 告), evident in both OBI and later texts that employ magical medicine. The OBI graph for "to ward off, exorcise" (*yu*) depicts a kneeling person with a knotted cord (simplified to ). Healing *sui* (malign supernatural influence) involving exorcism would persist for thousands of years, although the particular undeciphered OBI graph seems to have disappeared.

Like ancient graphs, material culture preserves a few hints. The appearance of tiny jade and bone knives and a variety of vessels and implements preserved in tombs may imply a role for superficial surgeries and herbal decoctions. However, unlike Qin and Han bamboo and silk texts, OBI only document exorcism and sacrifice rituals to counter the effect of external influences, natural and man-made, on the king's social and personal body (Allan, 1991; Keightley, 2000). We see the predominance of the royal body as subject until the fourth century BCE materials reveal a shift to concern with the individual bodies of elite males.

### Zhou Bronze Inscriptions and Bamboo Manuscripts: The Rise of Qi

From the mid-eleventh to the mid-third century BCE, the literate population expanded beyond the royal court into myriad regions along the Yellow and Yangzi river valleys. Regional diversity continued to increase due to trade, war, and migration. Three types of texts preserve Zhou-era writing: bronze inscriptions, bamboo manuscripts, and transmitted texts. Bamboo texts are the most

revealing of the three because they tend to be records buried with specific individuals. Some tales reflecting medical ideology are also found in bamboo books or in transmitted chronicles. The bronze inscriptions date from the late Shang up to the end of the Zhou; the bamboo manuscripts are from the fifth century BCE up through the Qin and Han periods; the relevant transmitted texts are believed to date from roughly the sixth to the third century BCE. We see a persistent use of magical medicine in these texts but a shift in concepts of the body and evidence of new concepts, such as qi.

Bronze inscriptions memorialize court rituals and the relationship of individuals to the king. Individuals' bodies are mentioned as extensions of their king's physical being. Parts of the body – the "heart" (xin), "abdomen-and-heart" (fuxin 腹心), and "(upper) arms and (upper) legs, limbs" (gongu 肱股) – are terms used to explain the extent of the individual's loyalty and dedication to the king's mission. They were expected "to exhaust" (jin 盡) their bodies while also "modeling" (xing 型) ancestral patterns of loyalty to their kings. In reward, their hearts (representing their inner selves) would be filled with "bright, luminous" (ming 明) "potency, virtue" (de 德) (Cook, 2017; Ke Heli, 2022). In later times, after the eighth century BCE, when the Zhou kings were chased out of their homeland by the Rong people and lost their legitimacy and connection to Heaven (the ultimate source of the power de), individuals tried to draw down de or yang qi directly from Heaven. By the fourth century BCE, the ruler was a symbol internalized in the body of the educated elite man (the junzi 君子); he was the "heart" or "center, inner" (zhong +) and the limbs symbolized his ministers (Chen Wei, in press). Later, in Han transmitted texts, the ministers were the inner "depots" of qi (viscera) with channels or mai as circuits of communication between them and their ruler, the heart.

The earliest graphic form of the word qi appears in fourth-century BCE bamboo strips preserved in Chu tombs, despite a transmitted textual tradition linking it to court-sponsored debates in the northeast (Harper, 1999a, 824–825; Needham, 2000, 43). Recent scholarship shows that the Han graph for qi, written with "cloud" or "vapor" = over "grain" +, was likely due to the Qin tendency to confuse qi with the word for  $xi \notin *qh(r)=[t]-s$ , "a gift of food." Chu bamboo texts write it with a phonetic  $*[k]=[t]-s \in$  over one of two semantic signifiers, representing either "fire" + or "heart" + (Cook, 2021; phonetic reconstructions from Baxter & Sagart, 2014; see also Lo & Stanley-Baker, 2022, 23–50). In later cosmic medicine, Fire is the element or Agency linked to the "heart."

Cook, 2019, 187–190; Guo, 2019, 225–23; Huang, 2019). Hot and cold *qi* was linked to geography and "blood" (*xue*) to kinship and to those parts of the body not defined by muscle and skin (Jingmenshi bowuguan, 1998, *Liu de* 六德 strip 15, *Tang Yu zhi dao* 唐虞之道 strip 11). Blood and *qi* were controlled by the heart (Hsu, 2008–9). Self-cultivation practices or "Techniques of the Heart" (*xinshu* 心術) allowed one to moderate affective types of *qi* (Jingmenshi bowuguan, 1998, *Laozi* 老子A strip 35; *Xing zi ming chu* 性自命出 strips 2 and 44). This involved "rectifying" (*zheng* 正) the human "intention, will" (*zhi* 志) for an individual's inner harmony, or even for the pacification of an entire people. *Qi* also represented the productive aspects of Heaven and Earth (*tiandi*) and *yinyang* (Ma Chengyuan, 2001–12, Vol. 2, *Min zhi fumu* 民之父母 strips 12–13, *Rongchengshi* 容成氏 strips 29–30; Jingmenshi bowuguan, 1998, *Taiyi sheng shui* 太一生水 strip 10).

The concept of "primordial qi" (yuanqi 元氣), something beyond life and death and thus a key to immortality, is understood as a Han idea. But in the fourth-century-BCE bamboo manuscript called the Hengxian 恆先, there is the term "eternal qi" ( $heng\ qi$  恆氣), which formed the central balancing mechanism or "pole, pivot" (ji 極) of the cosmos. It was self-generating and could split into clear and turbid forms that condensed into Heaven and Earth (Ma Chengyuan, 2001–12, Vol. 3, strips 1, 2, 4, 9). Understanding the nature of qi was one step toward enlightenment, although unlike the late Han and early medieval ideas of bodily escape, it was seen as a tool for leadership (Brindley, 2013; Cook, 2013a; Perkins, 2013).

The application of the concept of qi in a medical context appears first in the fourth-century-BCE bamboo divination and sacrifice manuscript discovered in a Chu tomb in Baoshan 包山, Hubei. This records three years of attempts by a team of diviners, who specialized in ten different methods, used in rotation, to diagnose the afflictions of an ailing member of the Chu elite. While they focused on identifying the demonic agent that caused the ailment, the symptoms included qi flowing in reverse  $(ni \stackrel{.}{\cancel{10}})$  or "up"  $(shang \perp)$ , which resulted in an afflicted "heart" (xin) or "heart-and-abdomen" (xinfu) (the upper and lower front body). Weakness or shallow breath was "scarce"  $(shao \cancel{b}) qi$  (Cook, 2006; Ke Heli, 2021). The movement of qi either up or down reflects a much simpler model of inner circuitry than imagined in the HDNJ and later canons. The MWD Model of the Vessels (Maifa) of the second century BCE explains it as follows (Ma Jixing, 1992, 247–282; Harper, 1998, 213):

The model of the vessels [should be] clarified for the lower [people] as it was valued by the sages. As for qi, it benefits the lower part [of the body] and harms the upper part as it follows warmth and goes away from coolness to it (lower part). This is why sages have cold heads and warm feet. To heal ailments, remove surplus [qi] and supplement what is lacking.

以脈法明教下脈亦聖人所貴也。氣也者利下而害上從暖而去清焉。故聖人寒頭而暖足。治病者取有餘而益不足也。

In fourth-century-BCE bamboo manuscripts, the body is spatially divvied up in two ways: front-and-back and inner-and-outer. Similar but more fragmented records than those from Baoshan have been discovered in other tombs inhabited by Chu officials: in Wangshan 望山 and Tianxingguan 天星觀 in Hubei and in Xincai 新蔡 (also referred to as Geling 葛陵 by some scholars) in Henan. Chu records refer to the trunk of the body as "heart" (xin), "back" (bei 背), "abdomen-and-heart" (fuxin or xinfu), and as "back-and-chest" (beiying 膺), or "chest and ribs" (xiongxie 胸脅). Only the "abdomen-and-heart" suffered afflictions of breath or appetite, suggesting some sense of internal function, confirming Elisabeth Hsu's idea that qi represented the invisible inner aspect of the outer visible form (xing 形) (Hsu, 2008–9). The trunk (including front-and-back) could suffer from "bloating" (pangzhang 肨脹). Besides qi, another aspect of the inner body mentioned is bones. An affliction in the foot (or lower leg) bones is mentioned in the Wangshan record and the entire skeleton, the "one-hundred bone body" (baiguti 百骨體), is mentioned in the Xincai record. The most common locution for "body" found in all the fourth-century-BCE records is gongshen 躬身 (Cook, 2006; Ke Heli, 2021); Deborah Sommer (2008) notes that, in transmitted texts, ti implied bodies formed out of component parts, whereas gong indicated separate individuals.

While front-and-back were clearly concepts since the Shang OBI, the evolving senses of inner-and-outer are evident in fourth-century-BCE bamboo manuscripts. The *Stalk Divination (Shifa* 滋法) (hereafter *Stalk*) manuscript, as it is titled by Tsinghua University scholars, likely came from the same region as the Baoshan manuscript. In this divination manual (about the size of a placemat and easily rolled for carrying), a drawing of the human body is included in a chart for easy reference. It was drawn facing forward placed within a cosmograph of influencing cosmic agencies including direction, season, and time. *Yin* and *yang* are not stated; only four of the Five Agents are mentioned, suggesting that the fifth and missing Agent – Earth – later representing the Center and the emperor, and the *wuxing* system, was a product of the early imperial age.

Another pre-imperial aspect is the focus on male and female agencies representing cosmic forces such as the phases of the moon and the seasons. They were symbolized in the manuscript by eight stacks of three numbers derived from stalk or dice divination. These named trigrams are familiar as the building blocks of the sixty-four hexagrams in the *Book of Changes (Yijing* 易經), a popular Han philosophical text derived from a Zhou divination manual (the *Zhouyi*) and used in late medieval medical diagnosis. But the earlier manuscript had no

philosophical dimension. It was a pragmatic method for diagnosing problems. Trigram patterns were interpreted to determine, for example, if someone would live or die. The trigrams also were responsible for different sites on the body. The outer rim of the body is marked with male trigrams: top of the head, ears, hands, and feet. The inner sections of the body are marked with female trigrams: face, upper chest (heart), lower chest (abdomen), and inside the upper thighs. The most powerful trigrams (Qian 乾and Kun 坤), the ones composed of pure male and female numbers, mark the top of the head and the heart respectively. The eight trigrams, which marked sections of the body, also correlated to lists of ghosts and demons that might be sources of *sui* (Cook & Zhao, 2017, 131–139).

The inner-and-outer distinction is also reflected in the comparisons of symptoms listed in divination records recovered from Chu burials in Hubei and Henan. The troubles of the deceased, of Shao Tuo 邵佗, a minister (zuoyin 左尹), in the Baoshan record and of Shao Gu 邵固 in the Wangshan record, were both described as "heart" conditions with restricted bodily movement. Shao Tuo suffered from reverse and scarce qi. Shao Gu suffered from blockage or congestion (yi sai 以塞) and diarrhea (shanbian 善便) (strips 17–18; Chen Wei, 2009, 272, 279). In Wangshan strip 38, this condition is further described as a "contracted bowel" (ju bian 聚便, read by some as an "urgent bowel," zhoubian 驟便) and curiously listed together with an affliction of the foot bones (zugu ji 足骨疾) (Cook, 2006, 261; Chen Wei, 2009, 272, 280). A perceived connection between functions of the heart, abdomen, and legs hints at the route of a foot vessel as described in the later MWD manuscripts, suggesting perhaps a rudimentary conception of a mai system.

Shao Wang 邵王, Lord of Pingye 坪夜君, of the Xincai record was afflicted with bloating and a heart condition (strips A3, 219, 117, 120; Chen Wei, 2009, 405, 435). Fansheng, Lord of Diyang 邸陽君番勝, whose suffering is recorded in the Tianxingguan record, suffered from the same back, chest, and heart ailments but also chills ("cold and hot," *cangran* 滄然) and grief (*qiqi* 戚戚 for 慼慼), which caused a suppression of his appetite, aggravated by a dry throat (*yi gan* 嗌幹) (Yan Changgui, 2004, 276–277). The psychological aspect of illness persists as a diagnosable symptom throughout Qin and Han manuscripts and points to the role of "heart" as both a physical location and a source of invisible *qi*.

Shao Tuo of Baoshan suffered "anxiety, troubles" (you 憂). Some scholars read the you as qi 感 ("distress"), a synonym attested in Han dictionaries. The condition of qiqi was linked in the Analects (論語 Lunyu) to something suffered by "lesser people" (xiaoren 小人) ("Shu er" 述而 37). In a Han tale of a medical case attributed to the legendary Bian Que, a patient is described as qiqi. This young woman was experiencing chills and was near death. He felt her pulse and

pronounced "worm conglomeration" (raoxia 蟯痕) (Hsu, 2010, 84). The Records of History (Shiji 史記) explain that "the ailment of raoxia involves abdominal bloating and yellowed and coarse skin, and when stroking [the pulse] [feels] like a condition of qiqi" (蟯瘕為病, 腹大, 上膚黃麤, 循之戚戚然). Commentaries note that this condition of qiqi involves feeling of "movement" (dong 動) in the heart — a Han description of pathological agitation felt in a vessel (Hsu, 2010, 84–85). In the fourth-century-BCE Guodian 郭店 bamboo strips, the condition of qi 戚 (read as qi 感) is said to derive from "anxiety" (you), resulting from excessive "movement" (dong) of the heart, also known as "congested emotion" (yun 慍 "anger"). Interestingly, the original graph written for "congested emotion" was 囚 ("prisoner") over a heart 心, which might also be translated as qiu 怄, "brooding," although scholars prefer to read it as yun (Jingmenshi, Xing zi ming qu 性自命出, strip 34; Chen Wei, 2009, 222). Han recipes for "heart blockage" (xinbi 心痹) continue to include a similar psychological dimension.

A word used to describe a heart condition that appears in the records of Wangshan, Tianxingguan, and Xincai (but not Baoshan) is read as *mian* or *men* 悦 ("heart pressure, confused"), defined as "gloomy, grieved" (*men* 懣, 悶) (Hubeisheng wenwu kaogu yanjiusuo et al, 1999, 146–147; Yan Changgui, 2004, 276; Chen Wei, 2009, 279 n. 13). This heart condition occurs in the context of symptoms causing "anxiety, trouble" (*you* or *qi*) for which the diviners were charged to find the source (*gu* 故) of the curse (*sui*) and then "attack" (*gong* 攻) it (a magical procedure). The examples that follow are selected from longer divinatory statements (Chen Wei, 2009; Liu Xinfang, 2011):

Baoshan Strip 207: 病腹疾以少氣

The ailment is an affliction in the abdomen, with a scarcity of *qi* Strips 218, 220: 以其下心而疾少氣

With it going below the heart and afflicting (Shao Tuo) with scarcity of *qi* Strips 221, 223: 既有病病心疾少氣不內食

[He] already has an ailment which is a heart affliction, with scarcity of *qi* and loss of appetite

Strips 236, 239, 242, 245, 248: 既腹心疾以上氣不甘食

[He] already is afflicted in the abdomen-and-heart with rising qi and loss of appetite

Wangshan 1 Strip 9: 既痙以悗心不內食

Already [has] swellings (boils?), with heart pressure and no appetite Strip 13: 既痤以心悗 (?) 然不可以動 (?) 思遷身痿(?)

Already [has] swellings, with heart pressure, inability to think clearly or move his body, weakness Strip 17: 既心悅以塞善弁 (便?) [broken]

Already [has] heart pressure with obstructions and much easing of the bowels

Strip 37: [broken] 不能食以心悗以弁胸臘 (脅) 疾 [broken]

Cannot eat, with heart pressure, and with easing of the bowels and affliction in the chest and ribs

Strip 38: [broken] 以心悗不能食以聚 (驟) 弁足骨疾 [broken]

With heart pressure and inability to eat, with urgent easing of the bowels and affliction in the foot bones

Xincai A1 Strip 14: 背膺疾以肨脹心悗 [broken]

Affliction in the back-and-chest, with bloating and heart pressure

A3 Strip 100 既背膺疾以胛以心 [broken]

Already is afflicted in the back-and-chest, with [problems] in the shoulders and the heart

A3 Strip 189 既心悗肨脹以百骨體疾

Already has heart pressure, bloating, with affliction in the skeleton.

A3 Strip 233 既心疾以會於背且心悗 [broken]

Already afflicted in the heart, with convergence [of bad qi?] in the back and then [causing] heart pressure

Note that each patient shares the same contingent symptoms. While all share heart pressure, some suffer from lack of appetite, others from chest or back pain, or from diarrhea. Shao Tuo of Baoshan had problems with his qi moving up and down between his heart and abdomen, with the final reversal causing the diviner to ask if it would cause him to die (shang wu si 尚毋死). In bamboo strips from a Qin tomb in Zhoujiatai 周家台, Hubei (dated to around 213 BCE–210 BCE), a similar heart affliction is defined as a jia 瘕 syndrome, "congestion, conglomeration," in which the normal flow of qi and perhaps other bodily elements, such as blood or "essence, spirit" (jing), is blocked. In the second-century-BCE Han text from LGS, known as the *Liushi bingfang* 六十病方 (strips 494, 532, 626), "successive congestion" (chengjia 承瘕) is described as fatal when it moves up and down within the heart-and-abdomen, resulting in bloating in the rib area and trembling and breaking out in sweat. Similar symptoms are described for "chest congestion" (xiong jia 胸痕) in another LGS text, the Zhubing 諸病 2 (strip 415). In this case, the patient feels equal pain in the back and chest. The text specifically categorizes this illness as "heart blockage" (xin bi 心痹) (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 131; Lin Zhenbang, 2019, 141; Wang Yitong, 2019, 3-6).

The heart condition *mian* 悦 is explained as "heart pressure" in the *HDNJ Lingshu* and as caused by overindulgence in sweet foods. Huangdi asks about

the situation of sweetness coursing through the flesh of the body and why it results in mian. The minister Shao Yu explains that sweet flavors that enter the stomach are a weak type of qi incapable of rising to the Upper Burner (upper third of the trunk) and thus lingering in the stomach, setting up a moist soft environment for "bugs" to thrive. The bugs cause heart pressure and then the qi of sweetness goes into the flesh (黃帝曰: 甘走肉, 多食之. 令人悗心, 何也? 少 俞曰:甘入于胃,其氣弱小,不能上至於上焦,而與谷留於胃中者,令人柔潤 者也, 胃柔則緩, 緩則蟲動, 蟲動則令人悗心. 其氣外通於肉, 故甘走肉) (Unschuld, 2016a, 574–575). Elsewhere in the Lingshu, the problem of insufficient lower qi results in loss of physical mobility (wei 痿), receding qi (a condition known as *jue* 厥), and heart pressure (xin mian) (下氣不足, 則乃為 痿厥心悗;) (Unschuld, 2016a, 337). This is one of a series of cases when "perverse qi" gets into the body. Elsewhere in the Lingshu, the problem of too much or too little qi is discussed. Too much results in the chest (xiong) feeling full with pressured breathing (mian xi 息); too little results in not even being able to talk (Unschuld, 2016a, 364). We see a clear transition to yinyang wuxing correlative medicine in the HDNJ versus the simpler explanations in the fourththrough second-century-BCE manuscripts.

Among the cases of Bian Que described in the *Shiji* is one about a case of an infant feeling "upset and oppressed" (fan men 煩懣) due to an ailment of blocked qi (氣鬲病; 病使人煩懣). Symptoms include inability to keep food or drink down caused by "anxiety" (you). Bian Que used a concoction to get the qi to properly descend and get the child eating again. He then worked on the heart qi to balance out the overly strong yang caused by the body being hot (身熱) and the food not being ingested, causing excessive (blood) in the vessels (絡脈有過). If the blood had risen, the patient would die. It was all caused by a "sad heart" (bei xin 悲心) (Hsu, 2010, 74–75). In the HDNJ, the term fanmen 煩悶 ("vexation") is linked to heart pain and fanyuan 煩寃 ("vexation and grievance") is connected to a feeling of fullness in the abdomen (Tessenow & Unschuld, 2008, 108). In Qin and Han manuscripts, fan suggests a serious stage of an illness. In a manner somewhat reminiscent of oracle bone piercing, "heart blockage" in the Han was treated with paired needling of the back-and-front (HDNJ Lingshu 7, "Guan zhen" 官鍼; Unschuld, 2016a, 141).

The etiology of congested or distressed hearts is reminiscent of fourth-century-BCE cases: excessive sad emotion, overindulgence in a particular taste, and invasion of a demonic influence. The symptoms also include bloating and scarcity of qi. The Han texts go further in their conception of what is occurring inside the body and use methods to interpret it – such as pulse-reading and interpreting facial complexions – and methods of healing – such as administering decoctions or acumoxa – that are not mentioned in late Zhou texts. For the

late Zhou, the situation of affliction and healing through exorcism is explained by the philosopher Hanfeizi 韓非子: "The afflictions of people are caused by ghosts cursing" (鬼祟也疾人) but "ghosts harming people" (鬼傷人) is reversed by the "harm" people cause ghosts through exorcism rituals (人逐除之之謂人傷鬼也) ("Jie lao" 解老, Wang Xianshen, 1991, 104).

Diviners used specialized tools (turtles, stalks, and others) to identify afflicting spirits, any number of powerful human ancestors, anonymous ghosts, or the spirits of built spaces and of terrestrial and celestial forms. If the spirit could be named, it received sacrifices and prayers according to a hierarchical system of offerings including animal sacrifice and gifts of jade and clothing. Healers "willed and attacked [the ghost] to resolve [the affliction]" (si gong jie 思攻解) (Yan Changgui, 2004, 289–291). They used force of mind (their own heart qi?) as well as possibly implements to attack (gong 攻) or send off (shi 使) the spirit. The verb "willed" (si 思) sometimes alternated in the same rhetorical formula with the word "command" (ming 命), suggesting also the force of words. Harper (1998, 92-93) calls the "release" (jie 解) of the body from demonic possession an elimination ritual (see also Lo, 2002b; Cook, 2006, 84-85). In one MWD manuscript, the Recipes for Fifty-Two Ailments (Wushier bingfang 五十二病方) (hereafter Recipes), the healer first invoked the paired powers of Sun-and-Moon and Mother-and-Father, then verbally threatened the harmful spirits with an actual (or symbolic?) beating (ji 擊) using a hammering stone (duan shi 鍛石). Other words used for hammering demons include gai (毅, 段) and duan 段. Instead of a stone, an iron mallet (tie chui 鐵椎) might be used (Ma Jixing, 1992, 477; Harper, 1998, 148, 261, sec. 120). A conceptual parallel can be drawn between the use of pointed implements to exorcise demons from the body in magical medicine and the rise of needling practices to control qi in cosmic medicine. The healing movements were the same even if the rationales had different names.

The late Zhou approach to illness and healing is revealed also in narrative tales about corrupt rulers whose physical bodies and territorial states suffer in tandem, showing a continuation of the ruler's social body but with an added moral component (Riegel, 2012–13; Caboara, 2016). In the transmitted versions of these tales, healing required behavioral modification instead of sacrifices, prayers, and exorcism, suggesting later editing in an attempt to move away from demonography. The bamboo manuscript versions still value addressing the spirits, but, notably, specific ailments are named instead of just listing symptoms or afflicted parts of the body as seen in the divination texts. The Shanghai Museum bamboo book collection preserves two such tales: Jian Dawang bo han 東大王泊 (迫) 旱 (The Great King Jian Suffers the Drought) and Jing Gong nüe 競公灌 (Lord Jing's nüe-Fever) (Ma Chengyuan, vols. 4 & 6).

In the first tale, the state was experiencing a drought, after the king had conquered new territory. The king, known in transmitted texts as King Jian of Chu 楚簡王 (r. 431 BCE-408 BCE), exposed himself to the sun in an ancient rain ritual and ended up with a debilitating skin condition, jie 疥 (itchy skin disorder, scabies), which over prolonged exposure could develop into saoshu bing 藻(瘙)鼠(癙)病 (itchy pustules ailment) (Zhang Qixian et al., 2014, 4; Ma Chengyuan, 2001–12, Vol. 4, 199). Therefore, the diviner in charge, Turtle Minister (guiyin 龜尹), suggested shortcuts to the proper rituals to the new territory's mountains and streams. But another officer warned that upsetting "the standards of the spirits" (guishen zhi chang 鬼神之常) would offend them. Dream analysis confirmed the identity of the primary offended spirit, Drought Mother (Hanmu 旱母), possibly another name for the demon Siba 槵魃, mentioned as a source of curses and associated with afflictions of the mouth in the Stalk (Cook & Zhao, 2017, 136). Once the king repaired the altars, performed the proper sacrifices, and treated the people benevolently, the sun no longer made him ill and the rain came.

The ruler, Lord Jing of Qi 齊景公 (r. 547 BCE—490 BCE), of the second tale also suffered from *jie* (the archaic graph was written with an added "bug" semantic) due to bad behavior (Riegel, 2012—13, 228—229; Caboara, 2016, 58). The transmitted versions specifically rejected the notion of ghosts and unhappy spirits, but the bamboo version blamed the king's severe feverish chills (*nüe* 瘧) on prolonged exposure to the wind (strip 2 recto) and to ineffective invocators and astrologists (*zhushi* 祝史) (Riegel, 2012—13, 229). The transmitted version focuses on how the sage minister Yanzi 晏子 advocated moral behavior instead of the useless bribing of spirits, whereas the bamboo version focuses on the nature of the illness (Cao Jianguo, 2020).

The *nüe*-type of fever is often translated as malaria, although as with the name of any ancient ailment we cannot be sure of its precise biomedical identity. In the *HDNJ Suwen* "Nüe lun" 瘧論, different types of seasonal *nüe* (also called *kainüe* 痎瘧) affect different parts of the body, depending on the hot or cold nature of the *qi*. Symptoms include back pain, shortness of breath, nausea, and "vexation and grievance" (Unschuld & Tessenow, 2011, vol. 1, 535–552). The seasonal nature of *jie* and *nüe* is emphasized in the transmitted ritual canon the *Zhouli* 周禮:

The Physician for Afflictions (*jiyi* 疾醫) is in charge of taking care of the myriad peoples' illnesses. Every season there is a pestilence (*liji* 癘疾): in the spring there is the scalp disorder (*xiaoshouji* 痟首疾, *xiao* is unknown, maybe a graphic variant for 消 "wasting"); in summer there is the itchy *jie*-skin disorder (*yangjieji* 癢疥疾); in the fall there is the *nüe*-cold disorder; and in winter there is the coughing-up of *qi* disorder (*sou shangqiji* 嗽上氣疾).

The physicians were instructed to treat the patients with dietetic and herbal medicines according to the Five Agents, five sounds, and five colors, checking for changes in the apertures (*qiao* 竅, acumoxa points) linked to problems in the viscera (Ruan Yuan, 1983, Zhouli zhushu 5.29).

The most famous Zhou tales of ill rulers are preserved in transmitted literature, including collections of historical tales such as the *Zuozhuan* 左傳 and the *Guoyü* 國語, along with references in philosophical texts, such as the *Hanfeizi*. These accounts also depict a struggle between different healing approaches. In a tale dated to 581 BCE, Lord Jing of Jin 晉景公 (r. 589–581) was treated first by a shaman of Mulberry Fields (Sangtian wu 桑田巫) and then Physician Huan 醫緩 from Qin 秦. The symptoms include two nightmares:

- (1) the Lord being chased by a large li  $\mathbb{R}$  (pestilence demon) with long loose hair that reached the ground; and
- (2) two boy demons hiding deep in the space between his heart and diaphragm.

Both dreams were interpreted (the first by the shaman and the second by the physician) as fatal. The pestilence demon was associated with the ghosts of those killed unjustly. Physician Huan noted that the location of the two small demons on top of the *huang* 肓 (the region between the heart and diaphragm in later medicine) and beneath the *gao* 膏 (fat) rendered useless the usual remedies of "attack" (*gong*), "reach and penetrate" (*da* 達), or "herbal decoctions" (*yao* 藥) (Wai-yee Li 2007, 240–242; Cook, 2013b, 18–21; Brown, 2015, 32). "Reaching and penetrating" is vocabulary employed later in acumoxa therapy.

A second account concerns the attempts to heal a later Jin ruler, Lord Ping of Jin 晉平公 (r. 557 BCE-524 BCE). He suffered from "urine retention" (long 癃) and was treated by a legendary minister Zichan 子產 (d. 522 BCE), originally of Zheng 鄭, and a Physician He 醫和 of Qin (Riegel, 2012–13, 233–241; Hanmo Zhang, 2013; Brown, 2015, 21–40). In the *Hanfeizi*, the physical ailment and a three-year drought were both caused by the ruler's interest in licentious music (Wang Xianshen, 1991, 44–45). Music was understood to stimulate the heart and cause emotion (qing) to rise out of the person's inner purpose or "intention" (zhi), a kernel of humanity lodged in the heart that one had to properly nurture in order to succeed in life (Wai-yee Li, 2005, 135; Cook, 2017, 225–241). In the *HDNJ* Lingshu, the ailment long is classed as a "heat" ailment that can present like gu poisoning in a male, blocked menses in a woman, and for either sex with a feeling of "dissolution" or "detachment" (jie 解) in the lower back accompanying a loss of appetite (Unschuld, 2016a, 302). The diagnosis of gu poisoning, linked to indulgence in sex with women with taboo clan names and at inauspicious times of the day, appears also in late Zhou accounts of Lord Ping's illness (Zuozhuan for 541 BCE; Liu, 2021, 73-78).

When Lord Ping became ill, diviners determined that the curse (sui) was caused by obscure star and land spirits, the deified sons of legendary emperors whose native lands had been trampled and ancestral sacrifices interrupted by the Jin. Zichan first shifted the focus from nature spirits to issues of morality; then Physician He confirmed the cause was neither ghosts nor bad diet but a fatal "bedroom disorder like gu" (shiji ru gu 室疾如蠱) that caused "confusion" (huo 惑) and weakened will (zhi). To be healed, the ruler must align action to cosmic agencies and proper timing, explained as the six qi of Heaven (yin, yang, wind, rain, darkness, light) as organized by the four seasons and the five nodes (jie 節), the five flavors, five colors, and five sounds. Excess yin causes a cold illness; excess yang a heat illness; excess wind results in limb afflictions; excess rain results in an abdominal illness; excess darkness causes confusion; and excess light afflicts the heart (Brown, 2015, 27). This is obviously a later editor's cosmic medical overlay and supports Miranda Brown's (2015, 39) suggestion that the figure of Physician He is "a contrived rhetorical device."

The contrived nature of the diagnosis in the transmitted tale is exacerbated by the use of the *Book of Changes* to confirm the diagnosis, a practice undocumented in early non-transmitted texts. The interpretation relies on a poetic description of the images Mountain over Wind linked to the two trigrams that make up the Gu hexagram, according to the *Shuogua* 說卦 (*Explaining Mantic Images*), a text transmitted as a commentary to the *Changes* (see Xing Wen in Cook, 2013b, 20–21). Notably, this commentary is also the only place in the *Changes* where the word "ailment, illness" (*bing*) appears. Only later Han derivations of the *Changes*, such as in the *Jiaoshi Yilin* 焦氏易林, mention specific ailments.

The *Shuogua* focus on how the eight trigrams link to the body recalls the fourth-century-BCE *Stalk* bamboo manual mentioned earlier in this section. In the *Shuogua*, the order of paired trigrams is as a gendered hierarchy of couples (male to female, high to low): Qian 乾 – Kun 坤, Zhen 震 – Xun 巽, Kan 坎 – Li 離, Gen 艮 – Dui 兌. Table 1 follows the *Stalk* order; basically male trigrams and odd numbered days are *yang*; female and even numbers, *yin*. Both texts claim to represent the Way of Heaven (*tian zhi dao* 天之道), but the *Shuogua* reflects the *Changes* tradition of taking Kan and Li as Water and Fire, whereas they are the exact opposite in the *Stalk*. The Stem + Number (S#) and Branch + Number (B#) correlations are from charts written under the cosmogram in the *Stalk*.

Notably absent in the *Shuogua* is the sexually charged journey described in the *Stalk* of the pair Kun and Qian meeting to birth the moon over the course of a month (Cook & Zhao, 2017, 126–127). Perhaps this served as a guide to the

 Table 1 Trigram correlations

Trigram	Stalk Divination	Shuogua
Qian	Top of head	Head (shou 首)
	Northwest	Northwest, Heaven, Metal, Cold, Dark Red
	S1, S9	
Kun	Heart or chest	Abdomen (fu 腹)
	Southwest	Earth, Black
	S2, S10	
Gen	Lower arms and hands	Lower arms and hands (shou $\mp$ )
	Northeast	Northeast, Mountain
	S3, B5, B11	Finger (zhi 指)
Dui	Mouth and face	Mouth and tongue (koushe 口舌)
	West, Metal, White	Autumn, Swamp
	Supervisor of Receiving, Sishou 司收	
	S4, B6, B12	
Kan	Ears, sides of head	Ears (er 耳)
	South, Fire, Red.	North, Water
	Supervisor of Planting, Sishu 司樹	"With regard to its application to people, it represents increased anxiety,
	S5, B3, B9	heart ailment, ear pain, the mantic sign of blood, and red" 其於人也為加憂為心病為耳痛為血卦為赤.

Table 1 (cont.)

Trigram	Stalk Divination	Shuogua
Li	Abdomen North, Water, Black	Eyes $(mu \parallel)$ South, Fire, Sun
	Supervisor of Storing, Sizang 司藏 S6, B4, B10	"With regard to its application to people, it represents the main abdomen and the mantic sign of dryness ( <i>qian</i> )" 其於人也為大腹為乾卦.
Zhen	Lower legs and feet	Lower legs and feet $(zu \mathbb{Z})$
	East, Wood, Green Supervisor of Thunder, Silei 司雷 S7, B1, B7	East, Dragon, Thunder, Dark Yellow
Xun	Inner thighs and crotch Southeast S8, B2, B8	Inner thighs and crotch ( <i>gu</i> 股) Southeast, Wood, Wind, White "With regard to its application to people, it represents baldness, a broad forehead, and eyes with a lot of white area" 其於人也為寡髮為廣顙為多白眼.

best times to try to produce a baby, or perhaps it was meant to guide men in sexual cultivation practices.

One of the most colorful tales of a master healer is Tsinghua University bamboo manuscript When Red Pigeons Gathered on Tang's House (Chijiu zhi ji Tang zhi wu 赤鳩集湯之屋), featuring the minister Yi Yin, who specialized in soups and magic. Yi Yin, once possessed by a talking raven, gained super healing powers, thus reinforcing the Han tale of ancient doctors, like Bian Que, as being part bird (Unschuld, 2000, 64–65; Allan, 2015). As a chef, Yi Yin concocts a soup of the pigeons that had gathered on the roof of ruler Tang's house that allows the drinkers magical seeing powers (which the modern scholar Du Feng notes is similar to the "medicine for holding the center," huizhong yao 懷中藥, provided to the Lord of Changsang 長桑君 by Bian Que to cure the effects of old age: Du Feng, 2014a, 5; see Shiji 45). Yi Yin's cosmic knowledge (including the five flavors) is lauded in other Tsinghua bamboo manuscripts (Chen Hui 2019; Cook 2019; Guo Lihua 2019).

In *Red Pigeon*, the ruler Tang was angry that both Yi Yin and Tang's wife had tasted the soup before him. Yi Yin tried to run away, but Tang paralyzed him with a curse. A swarm of ravens spotted Yi Yin and thought about consuming him, but the chief, Shaman-raven (*wuwu* 巫鳥), had another idea. He would possess Yi Yin's body and force him to travel to the competing political ruler, the emperor of the Xia, called Xia Hou 夏后 (who was doomed to be overthrown by Tang) and heal him of a heart problem. The cure was called "soothing the thorn-like pain" (*fu chu* 撫楚), possibly the name of a treatment or of a herb (Huang Dekun, 2013, 85 n. 17). Shaman-raven explained the demonic origins of the Lord of Xia's affliction:

Di (the Sky god) commanded two yellow snakes and two white rabbits to take up residence in the beams of the lord's bedroom. They afflicted the lord underneath, causing a heart pressure disorder such that he did not recognize anyone. Di commanded the Earth god to make two mounds under the lord's bed that could jab the lord's body above, causing such evil turmoil that he could not rest

帝命二黃蛇與二白兔居后之寢之棟. 其下舍后疾是使后悗 (?)疾而不知人. 帝命后土為二陵屯, 其居后之牀下, 其上 斤 (析?刺?) 后之體是使后之身苛慝 不可及于席.

Yi Yin (possessed by the Shaman-raven) explained to Xia Hou that the house had to be demolished to expel the demonic manifestations (Allan, 2015, 5–8). The bodily symptom of "evil turmoil" (symptoms of demonic illness) occurs in other manuscripts (Huang Dekun, 2013, 86, n. 4; Li Ling in Ma Chengyuan, 2001–12, vol. 2, 276). Examples in the transmitted *Zuozhuan* and *Guoyu* point

to the behavior of thieves, barbarians, and corrupt rulers. The paradigm for overthrowing a ruler is to end corruption and evil, as the king's body mirrored the health of the state.

Interestingly, this demonography is counterbalanced in the other Tsinghua bamboo texts featuring Tang, where we learn of his interest in the cosmic configurations of well-being. In the *Tang zai Chimen* 湯在啻門, for example, Yi Yin's explanation to Tang on the role of qi in life lays the ideological groundwork for Han sexual cultivation techniques and later medieval Daoist Inner Alchemy (neidan 內丹) practices that evolved under the influence of Buddhism into visualizing "embryos" of a pure self (Raz, 2014). Yi Yin explains that the embryo was the harmonious joining of the qi of the five flavors, initiated by the "jade seed, semen" (yuzhong 玉種). Ten months later, a baby was born. Although the heartbeat, amniotic sac, bones, muscles, and skin are mentioned, all other body terms are vague. This confirms the idea that it was only later that the five flavors begin to correspond to the five viscera. After the baby was born, it flourished as its qi expanded and become strong. Old age occurs as a result of slowing qi that goes in the wrong directions (niluan 逆亂), thus causing affliction. Death comes when qi reaches an end (zhong 終) and "the 100 intentions run out" (baizhi er qiong 百志而窮). The Tang zai Chimen contextualizes the creation of a human within the cosmic frame of state, Earth, and Heaven (see Cao Feng, 2019; Chen Hui, 2019; Cook, 2019; Guo Lihua 2019; Huang Guanyun, 2019).

The bamboo trigram divination text and the Tsinghua philosophical tales anticipate the view of the healthy human body as a microcosm of balanced cosmic influences but one that was still vulnerable to demonic forces. The correlative system of *yinyang wuxing* underpinning the transmitted canons is as yet unformed.

### Qin Bamboo Texts: Magic and Recipes

As the Qin leaders swept east from their origins in the northwest beginning in the seventh century BCE, they forcibly mixed peoples and traditions from different cultural regions, culling from the knowledge network the technical expertise that they felt would be useful to run the empire they formed in the third century BCE. Divination and recipe texts were mixed with other types of technical information, such as sericulture, animal husbandry, astronomy, math, law, and much more. While medical information is diverse and mixed with magical formulas, we see a growing awareness of genres, such as women's and children's separate healing needs. We also see the emergence of named ailments, a distinction of the role of physician, and a tendency to consider

clusters of symptoms – trends that continue during Han when medical literature begins to evolve as a separate genre.

Divination texts with medical predictions include (1) the hemerological "daybooks" (*rishu* 日書), found in sites in Shuihudi 睡虎地, Yunmeng 雲夢, Hubei (c. 217 BCE) and Fangmatan 放馬灘, Tianshui 天水, Gansu (ca. 239 BCE), and (2) other texts recovered from looters, such as the *Nine Stalks of Yu* (*Yu jiu ce* 禹九策), now preserved by Beijing University. Recipe texts include (1) fragments, also preserved in Beijing University, titled the *Random Jottings on Medical Recipes* (*Yifang zachao* 醫方雜抄) (ca. 214 BCE); (2) random strips lumped together with legal documents recovered from an ancient well at Liye 里耶, Changsha, Hunan (ca. 222–208 BCE), titled *Ailment Recipes* (*Bingfang* 病方); (3) Zhoujiatai (ca. 213–210 BCE) fragments titled *Recipes for Ailments and Other Things* (*Bingfang ji qita* 病方及其他). They are similar in style and content to Han recipe texts from MWD, LGS, and Han sites in Gansu: Wuwei and Dunhuang (Zhang Chaoyang, 2016, 68–69; Yang & Brown, 2017). Shared content from different regions and time periods helps scholars decipher and knit together fragmented strips as well as show how some treatments were transmitted over hundreds of years.

Daybooks reveal a continued concern with gender and time as factors for diagnosis and prognosis. They clarify the supernatural agency of the 10 Stems and 12 Branches signs, marking the days of the sexagenary calendar, the hours of the day, and their influence over the healing of the gendered body. The Qin further categorized the power of twelve differently named days linked to the movement of astral bodies such the Dipper or the 28 Astral Lodges (she 舍) (Harper & Kalinowski, 2017, xxi-xxii, 139-142, 464-465). Such correlations with medical diagnoses appear in daybooks found in the tomb of a local official in Shuihudi. The section called "Sickness" (bing) is found in Daybook A between a section on a hemerological system called "stars" (xing 星) keyed to the twelve months and the 28 Astral Lodges and a list of good days for offering sacrifices to parents. In manuscript B, "Sickness" is only one line that appears between a section called "being afflicted" (youji 有疾) (with similar content to Sickness in A) and a section dealing with nightmares called "dreams" (meng 夢) (Harper & Kalinowski, 448, 452). Generally, illness is keyed to sexagenary days, directions, colors, and sometimes the Five Agents. What follows is a sample from manuscript A and Table 2 lists correlations in the section (Shuihudi Qin mu zhujian zhengli xiaozu, ed., 1990, 193). Note: "S#" = Stem, 1 through 10:

### Sickness 病

If you are afflicted on a Jia (S1) or Yi (S2) [day], then it is a curse from the parents that [must be resolved] with meat from the East wrapped up in a lacquer dish. Sickness will occur on a Wu (S5) or Ji (S6) [day] and recovery on a Geng (S7) [day], so express your gratitude through sacrifice on a Xin

 Table 2 Daybook correlations

Days of affliction	Sources of curse	Days of sickness	Day of recovery	Day and items of sacrifice	Consequences and signs of death
S1 S2	Parents 父母	S5 S6	S7	S8, meat brought from the East wrapped up in a lacquer dish	Trouble (fever?), Year, East, Green
S3 S4	Grandfather 王父	S7 S8	S9	S10, red-colored meat, rooster, wine	Trouble, Year, South, Red
S5 S6	Shamans doing the <i>kan</i> (earth-pattern) walk (?) 巫堪行 (or action by Shaman Kan), Grandmother 王母	S9 S10	S1	S2, yellow, <i>suo</i> 索 (dried?) fish, <i>qin</i> 堇 ale	Trouble in state center (bang zhong 邦中), Year in West (mistake for center?), Yellow
S7 S8	In-law ghosts (or others outside the clan) 外鬼, died of injuries 傷死	S1 S2	S3	S4, dog meat, fresh eggs, white	Trouble, Year, West, White
S9 S10	Strangers 毋逢人, in-law or non-kin ghosts 外鬼	S3 S4	S5	S6, ale, dried meat, strips of prepared meat	Trouble, Year, North, Black

(S8) [day]. If you don't then trouble will occupy the eastern (section of the residence) and the Year (astral spirit) will be in the East and [with the advent of] Green (in the cycle of Five Agents), death [will occur].

甲乙有疾父母為祟得之於肉從東方來裹以漆器. 戊己病庚有 (閒) 辛酢. 若不 [酢] 煩居東方歲在東方青色死.

The demonic sources of illness listed in Qin manuscripts are similar to those mentioned in the earlier *Stalk* and in a later early Han-period bamboo manuscript preserved by Beijing University self-titled as *Tricks of Jing (Jingjue* 荆决 (訣), hereafter *Tricks*). The difference is the names used for the numerical trigrams produced. The *Stalk* trigrams are gendered and link to names in the *Changes*, whereas the *Tricks* trigrams are named after select Stems and Branches (Cook & Zhao, 2017, 136–139; Dotson, Cook, & Zhao 2021, 163, 275–284). Gendered Stem and Branch signs appear in the Shuihudi daybooks and are used to mark a body diagram, but the correlation is different from the Chu system. In Qin and Han daybooks, the Branch signs only mark the periphery of the body and they rotate depending on the *yin* or *yang* nature of the season. Season, branch sign, and body section were correlated to calculate the fate of a pregnancy (Harper & Kalinowski, 2017, 244–247).

Daybooks also name some ailments that became categories of illness in Han medicine. One of thirty-three different ailments mentioned in the daybooks found in Fangmatan is *dan* 癉 ("exhaustion") (Yu Yue, 2015, 17–19). The tomb contents reflect a literate man concerned with fate. Besides daybooks, it also includes an account of a man resurrected from the dead, maps, and a Liubo 六博 game which could double as a cosmic divination board (Gansusheng wenwu kaogu yanjiusuo 2009). Strips 14 and 15 of Daybooks A and B record that on a "remove day" (*churi* 除日) (the second of the twelve day categories), people afflicted with *dan* would die.

Timing was critical to healing *dan* (see Zhoujiatai strip 313; Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 127; Chen Wei, 2005):

In the first month select half a *sheng* measure of peach tree worm feces, add it to full-bodied ale, heat and drink it so people do not suffer an exhaustion (*dan*) ailment.

以正月取桃橐(蠹)矢(屎)少半升,置淳(醇)酒中,溫,飲之,令人不單(癉)病.

In the *HDNJ* and MWD vessel texts, timing is not emphasized; *dan* is understood as heat experienced in a specific part of the inner body, such as the intestine (Zhang & Unschuld, 2015, 118; Harper 1998, 198). But in the LGS

Zhubing 諸病 2, it was caused by wind and, if afflicting the heart, linked to insanity (Wang Yitong, 2019, 18–21).

Fangmatan Daybooks A and B mention various odd physiognomic features, such as broken teeth, protruding eyes linked to big bellies, small necks or heads, black moles, and other physical "flaws, blemishes" (ci 強). Daybook B mentions "suffering from illness" (bing) in a range of body parts (including heart, intestines, waist, kidneys, chest, ribs, shoulder, arms, neck, ears, eyes), often in combinations of body parts and connected with colors or physical attributes (strips 126, 90–107, 111, 113–121, 259). Han-period LGS texts reaffirm an attention to color. These correlations suggest an incipient interest in cosmological correspondences in which color reflects a quality of *qi* used in physiognomy (Despeux, 2005).

Removing or modulating physical defects is a shared concern in Qin and Han recipes (Harper 1998, 303). Zhoujiatai Strip 318 provides a technique for getting rid of black moles with a heat technique (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 127–128; Wang Guiyuan, 2007):

Recipe to get rid of black moles: select a small thin dried stalk, chop it up and gather [the pieces] together in a bundle about the size of the pinky finger. Select one *sheng* measure of gathered ashes and steep them [in ale], mix the stalk with the ashes, to rub on [the black moles] so the blood will come out. Then eat a lot of scallions so the sweat comes out. If they persist then select a lot of hoed-under mulberry wood [pieces] and burn them to ash; the slice up some beef about the size of the moles and cook it to ash [over the mole] so that it heats up but does not burn as it is applied to the black mole, when cold penetrates, do it over again.

去黑子方: 取稟本小弱者,齊約大如小指. 取東(柬)灰一升,漬之. 沃(和) 稟本東(柬)灰中,以靡(摩)之,令血欲出. 因多食蔥,令汗出. 栖(恒)多取 櫌桑木,燔以為炭灰,而取牛肉剝(劙)之,小大如黑子,而炙之炭火,令溫勿令焦,即以傅黑子,寒轍(徹)更之.

The divination manuscript titled the *Nine Stalks of Yu* seems to be a pastiche of fragments copied from earlier texts but with an added introduction and new commentary. The topic of illness is embedded in such concerns as travel, business, and proper sacrifice. The introduction explains that the two methods recorded involve the nine "stalks, counting rods" (*zhi* 支, read as *mei* 杖) of Yu and the five of Huangdi but does not display, as in the *Stalk* or *Tricks*, the mantic image (numerical trigram) of the results. In the *Changes* tradition, the number nine symbolized the peak of *yang* before it would flip to *yin*. In myth, nine also symbolized the Nine Continents of the earth. The number five was a *yang* number and could represent the *wuxing*. Huangdi symbolized celestial authority and Yu channeled the floods and healed the earth. In many Qin and Han recipe

Odd	Even
1: the right eye	2: left eye
3: right ear	4: left ear
5: right nostril	6: left nostril
7: anxious heart & grimacing mouth, two ears (of a vessel)	8: head & eyes (movement possibly related to turtle divination?)
9: the king's body	

**Table 3** Numerical correlations and the body

texts, patients and healers had to perform am exorcism choreography called the Pace of Yu (yubu 禹步) to cure warts, hernias, abscesses, heart troubles, toothache, and more (Lewis, 2006b, 142–143). The body as a simulacrum of the earth's geography inspires Han vessel theory (Lo & Gu, in press).

In the Yu method, if odd numbers one, three, five, seven, or nine are thrown, the fortunes are generally auspicious; if even numbers two, four, six, or eight are thrown, they are inauspicious. The Huangdi sections, two each of good and bad fortunes, can be read as add-ons to the Yu sections, which are keyed by numbers and to parts of the body (mostly the face) but in a haphazard manner (Table 3).

The left side of the body is *yang* and the right *yin*. The text confirms a *yin*-and-yang correlation of number and time. If a six is thrown and you feel sick at midnight, this is inauspicious. Generally, illness in the Yu stalk sections is addressed only in terms of whether it is fatal or not. A few more specifics are found in the Huangdi sections. In the "Good Outcomes" (Shan 善) section, the text notes that affliction will be limited to the waist and spine (疾不在它方, 唯 腰與膂) but that continuous sacrifices are necessary for the ailment of weakness (wei bing) to abate (今弗恆祠, 將瘴(痿)病弗舍). In the section "Bad Endings" (E zhong 惡終), skepticism creeps in:

Praying and sacrificing unceasingly will have the same results as with a shaman or doctor. A person's fate will be such that prayers and sacrifices are of no use. Send away the shaman and release the doctor, retire to the bedroom, and prepare the articles for burial.

禱祠毋居, 巫醫是共. 命是將然, 祠祀奚攻(功). 歸巫釋醫, 寢具葬庸.

The Huangdi passages above not only name a specific aliment, *wei*, but also make a purposeful distinction between two types of healers – shamans and doctors, specialists in invocations versus recipes, although clearly the arts overlapped. For the Qin, *wei* seems to be linked to supernatural affliction of the back, but in the

transmitted texts it is understood as bi ("blocked qi") and linked to the inner body spaces (Tessenow & Unschuld, 2008, 2–24, 441–442). We see again a shifting focus from attention to the outer body to the inner body over time and represented in non-transmitted local manuscripts versus the edited canons.

There is a narrative similarity between the Huangdi "Good Outcomes" passage and the earliest documented use of bi, which occurs in a tale told by Xunzi in the third century BCE. Both passages reflect the popular conception that bi was the result of a person walking at night and running into a ghost. In the "Good Outcomes" passage, there is no question that it is a real ghost, but Xunzi claims the victim must have mistaken his own shadow for a ghost and just "lost his qi and died" (失氣而死). The transmitted Xunzi text (thus subject to later editing) goes on to explain the typical approach for healing this type of bi, which derives from dampness, not ghosts (translation adapted from Knoblock, 1988, vol. 3, 109):

Bi is harm from dampness; in a case of bi, [people] beat drums and boil piglets, thus wasting money by wearing out drums and killing piglets, with no chance of curing the illness.

故傷於濕而痺, 痺而擊鼓烹豚, 則必有敝鼓喪豚之費矣, 而未有俞疾之福也.

Dealing with ghosts was a job for a "shaman" (wu 巫), a type of healer that can be traced back to OBI. The term "physician" (yi 醫) is relatively late. Qin daybooks suggest that a female might become either a shaman or a physician, but the latter role was considered bad luck for a female. It was good luck for a male to become a physician and "wear a cloak," a symbol of status (Shuihudi Qin mu zhujian zhengli xiaozhu, 1990, 252–253, Daybook B, strips 242, 244). In the Shuihudi legal texts, we find men and women of different status performing "physical examinations" (zhen 診).

Two examples in the *Models for Sealing and Physical Examinations* (*Fengzhenshi* 封診式), a legal text found in the Shuihudi tomb, describe two diagnoses, one by a physician (presumably male) and the other by a bondswoman. The first concerns a specific ailment, a case of *li* 癘, which in this instance might be "leprosy" but elsewhere seems to be linked to seasonal pestilence, wind afflictions, insect infestations, or epidemics (translation adapted from McLeod & Yates, 1981, 152–153; Shuihudi Qin mu zhujian zhengli xiaozu, 1990, 156, strips 52–54):

Li 癘

Transcript: The Chief A of X village brought along villager C, a member of the rank and file. The denunciation reads: "I suspect [a case of] li and have come and brought him along. We questioned C. His statement reads: 'At the age of three, I became sick with sores on the head (病论); my eyebrows

swelled up (眉突); it could not be ascertained what sickness it was. I have no other liability.' We ordered Physician D (醫丁) to examine him. D said: 'C has no eyebrows (無眉); the bridge of the nose is destroyed (艮本絕); his nasal cavity is collapsed (鼻空壞); if you prick his nose, he does not sneeze (嚔); elbows and knees down to the soles of both feet are defective and are suppurating in one place (肘膝[][[]到[]雨足下踦潰一所); his hands have no hair; I ordered him to shout and the *qi* of his voice was hoarse (令號其音氣敗). It is *li*.'"

Female servants familiar with women's issues and birthing are called in to diagnose a miscarriage for investigating officers (Barbieri & Yates, 2015, vol. 1, 150–152; translation adapted from McLeod & Yates, 1981, 159–160; Shuihudi Qin mu zhujian zhengli xiaozu, 1990, 161–162):

#### Aborted Child 出子

Transcript: The denunciation of A, the wife of a member of the rank and file of X village reads: "I, A, had been carrying a child for six months. Yesterday, [I, A] fought with adult female C, a fellow villager. A and C seized each other by the hair and C knocked A to the ground. The villager, gongshi D, came to the rescue and separated C and A. When A reached her house, she immediately became sick with belly pains (病腹痛); last night, the child miscarried and aborted (子變出)." Now A, having wrapped and carried the child, has brought it along to denounce herself and to denounce C. We immediately ordered the Foreman Clerk X to go and seize C and immediately to examine the sex of the baby, how much hair it had grown, and the appearance of the placenta (診嬰兒男女生髮及保之狀). We also ordered a bondswoman (liqie 隸妾) who has given birth several times (數字 者) to examine the appearance of A's emissions of blood from her vagina and wounds (前血出及癰狀). We also questioned the people in A's house concerning the condition in which A reached the house and the type of belly pains when the child aborted.

Transcript of Assistant B: "[I] ordered the Foreman Clerk X and the bondservant X to examine the child which A had brought along. It had been previously wrapped in a cloth napkin and, in shape, it resembled clotted blood (衃血狀), large as a hand, and unidentifiable as a child. They immediately placed it in a basin of water and shook it: the clotted blood [became like] a child. Its head, body, arms, hands, fingers, legs down to the feet, and the toes, were of human type, but eyes, ears, nose, and sex were unidentifiable (其頭身臂手指股以下到足足指類人而不可知目耳鼻男女). When it was taken out of the water, it again had the appearance of clotted blood."

Another Form for it reads: "We ordered the bondswomen X and Y, who have given birth several times, to examine A. They both stated that A had dried blood at the sides of her vagina (前旁有幹血). At the moment, blood is still being emitted, but it is lessening; it is not menses (朔事). X had been carrying a child but it miscarried (變). The blood on her vagina and the blood that is being emitted resembles A's."

While the physician interviews the patient and determines the ailment from a cluster of symptoms, the bondswoman draws on personal experience. Bondswomen were women forced into servitude as punishment for crimes committed by themselves or their male relatives such as assault (including fighting that caused a miscarriage) or theft (Barbieri & Yates, 196–198). It is possible, but unknown, that some served as midwives.

Shamans also helped with birthing. In an earlier mythological tale of the "birth" of Chu lineage identity (recorded in the fourth-century-BCE bamboo manuscript preserved at Tsinghua University and known as the *Chu ju* 楚居), the mother of the Chu ancestral founder died in childbirth (twins were born out her "side, ribs," *xie* 脅) while being attended to by a shaman (Cook & Luo, 2017). Despite these birthing tales, it would be centuries before the medical canons acknowledged the fields of gynecology and pediatrics (Furth, 1999; Wilms, 2005).

Physicians and legal secretaries used a variety of medical vocabulary in these passages: two types of sores, bi 沱 (head sore) and yong (wounds, abscess, used to describe a blood pattern in this case). Blood (xue) was discussed in terms of embryonic development (looking like blood clots, pei 啄), the "front" (genitals) (qian 前), and the menses (shuo 朔). Medical vocabulary is also recorded in the recipe texts, which were presumably recorded and consulted by physicians.

The recipe texts found among the 3,800 bamboo strips in layer 8 of Well no. 1 in Liye document a combination of pharmaceutical and magical approaches to healing. The following are two preserved on strip numbers 876, 1376, 1959, and on strip 1221 that show that physicians considered alternative methods for the same syndromes, such as sudden heart pain (*baoxin tong* 暴心痛) (Chen Wei, 2012, 293–294, 317–318; Zhang Chaoyang, 2016, 70–71; cf. Harper, 1998, 453; Brown, 2015, 80; Yang & Brown, 2017, 248):

Recipe for curing sudden heart pain: Have (the patient) lean on the eaves of the left side of the house and with the left hand pluck stalks of foliage one *chi* (23.1 centimeters) long; do the Pace of Yu three times and break them and spread them on the patient's heart. According (to the type of patient), have the person (suffering in the) heart step with their left heel (dragging), (so for) males, 7 heel-down steps, for females, twice 7 heel-down steps. Already tested. No restrictions.

治暴心痛方:令以比屋左[榮][以][左][手][操]取其[木][若]草蔡長一尺, [禹][步]三析,傅之病者心上。 因以做 (左?)足踐踵其心, 男子七踵, 女子 二七踵。嘗試。勿禁。

(Recipe #) 7. Healing those suffering the burning sensation of sudden heart pain. Grind pennycress seeds. Grind two portions of 1 piece each of dried

ginger and a cinnamon twig. Grind them together. Once the three ingredients are blended together, extract a pinch the amount of three fingers up to the second joint and heat it in clarified ale.

七。病暴心痛灼灼者,治之,析蓂實,治,二;枯薑、菌桂,治,各一。凡三物並和,取三指撮到節二,溫醇酒

Magical techniques found in both Qin and Han recipe texts include performing the Pace of Yu and some almost identical recipes (Harper, 1998, 167–169; Xie Minghong, 2018, 9–11; Wang Yitong, 2019, 32). In Zhoujiatai Strips 326–328 to cure toothaches, it is performed along with an invocation (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 129; Harper & Kalinowski, 2017, 130–133):

Recipe for ending toothaches: look to the east at an old wall, perform the three steps of the Pace of Yu saying: "Ah! [I] dare report to the lord of the old wall to the east that X suffers from toothache and how to end X's toothache, [so I] offer [him] a black cow and calf." Look at a pottery tile and break it; look at a wall with tiles, then perform the Pace of Yu; when finished take a tile from the wall and bury it at the foot of the old wall to the east. Place the wall tile down [in the pit first, then] place the cows on top and cover it with the broken up tile, firmly burying them. Take the "cows" to be the "head bug" (i.e. the cause of the toothache).

已齲方: 見東陳垣, 禹步三步, 曰: "皋! 敢告東陳垣君子, 某病齲齒, 笱(苟)令某齲已, 請獻驪牛子母."前見地瓦, 操; 見垣有瓦, 乃禹步, 已, 即取垣瓦貍 (埋) 東陳垣止(址)下. 置垣瓦下, 置牛上, 乃以所操瓦蓋之, 堅貍 (埋)之. 所謂"牛"者, 頭虫也.

In another case (strips 335, 337, and 336; there is some debate regarding the order of these strips), the Pace of Yu, accompanied with an invocation to a mountain spirit, helps to heal a sick heart (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 131; Wang Guiyuan, 2007):

Sufferers of heart ailments (should) perform the Pace of Yu three times and say: "Ha! (I) dare to report to Mt. Tai: To Mt. Tai so high, about a person who lives there, and to Elder [name missing], about a person who is resting on a mat, for no reason acquires a heart ailment, and for no reason gets worse." Then have the sufferers of heart ailments lie down with their head to the south and with their left foot tap two times seven. [take  $\ldots$ ] annually fruiting red locust with a single finger (or a single fingers worth of = a twig of?) and wave it over So-n-so's congested heart affliction, then with two hands wave it over the patient's abdomen.

病心者: 禹步三, 曰: 皋!敢告泰山: 泰山高也, 人[居之]。[] []之孟也, 人 席之, 不智(知)而心疾, 不智(知)而咸歕。 即令病心者南首臥, 而左足踐之二七。[something missing?] 歲實赤 [隈 (槐)獨] 指, 撎某叚(瘕)心疾, 即兩手撎病者腹。

In this case, the affliction of the heart is described as jia  $\not\equiv$  (congestion of qi). In later medical canons, this condition involves "painful abdominal nodes" or lumps that might move up or down with the qi, a type of "conglomeration illness" (Zhang & Unschuld, 2015, 244). We are reminded of Shao Tuo's affliction in the fourth century BCE.

Physicians may or may not have to consider time or gender restrictions. In Zhoujiatai strip 1397: "use one cup of warm wine to create the dosage; [depending on] the time period prohibit women eating pork" (以溫酒一桮和之到服藥時禁女食彘肉). But, in some cases, time is not factored in, as on strip 1243: "If the cause of the illness is already known, heal it without regard to the season. Prepare enough of the healing herb to heal the illness. When already healed, wrap (the remaining) herb in cloth and store it. The method for curing is to expose it to sunlight until it is dry, (then) smith it" (病已如故, 治病毋時。壹治藥足治病。藥已治, 裹以繒臧(藏)。治術暴(曝)若有所燥, 冶) (Chen Wei, 2012, 298–299).

Some Qin recipes were preserved in the Han. Liye and MWD recipes using similar dried and peeled herbs for "metal wounds" (Harper, 1998, 228; Fang & Hu, 2015). Zhoujiatai recipes (strips 309–310) for "intestinal flushing" (*changpi* 肠澼), possibly dysentery, are also comparable (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 126–137; Zhang & Unschuld, 2015, 80; Harper, 2010, 56–58; Fang & Hou, 2015, 52–53):

Select the gall-bladder of a fat bovine and stuff it with black beans and the string it up and hang it in a dark place to dry out. To use it, remove 10 or so beans, put them in congee and drink it to end intestinal flushing (*changpi*). If it doesn't end, drink more of it again. With ingesting enough congee, the intestines . . . .

取肥牛膽盛黑叔(菽)中,盛之而係(系),縣(懸)陰所,幹.用之,取十餘叔(菽)置鬻(粥)中而飲之,巳(已)腸辟(澼).不已,復益飲之.鬻(粥)足以入之腸....

Treating heat ailments is common in both time periods. For example, on Zhoujiatai Strip 311 we find: "For those who suffer a warmth ailment but don't sweat, soak a cloth in full-bodied ale, drink it" (溫病不汗者, 以淳 (醇) 酒漬布, 飲之) (Hubeisheng Jingzhoushi Zhouliang yuqiao yizhi bowuguan, 2001, 126; Fang & Hou, 2015, 53–54; Xie Minghong, 2018, 31–32; in MWD, Harper, 1998, 453). The influence of seasonal or geographical hot and cold agencies begins to emerge during the Han. More than a millennium later, exposure to heat in southern climates was considered a source of epidemics (Hanson, 2011).

The Beijing University manuscript *Random Jottings on Medical Recipes* was written on the back of a bamboo roll (*juan*), behind a mathematical calculation

text for land measurement (the *Suan shu* 算書) and on the same roll as the *Nine Stalks of Yu* discussed earlier. Like Shuihudi manuscripts (and even many paper codices in the medieval Dunhuang collection), a bricolage of vaguely technical texts had been copied onto both sides of the manuscript. These included daybooks and texts on roads, clothing, and exorcism (Tian Tian, 2017, 52–53). The medical fragments reveal no obvious order and mix human conditions with silkworm problems (Tian Tian, 2017, 55–57). In the samples that follow, afflictions such as heart pain, seizures, and intestinal flushing are treated with magical techniques such as spitting and invocation, as well as with recipes, many using ingredients such as menstrual cloths. Han recipes treat the same afflictions with similar styles of treatments but with varied ingredients (Harper, 1998, 163–166, 246–247, 261, 282; Beijing daxue chutu wenxian yanjiusuo, 2013, 37–39).

For heart affliction, invoke, spit, and say: "Tok! Father and mother of So-n-so do not account for time in the case of So-n-so causing him endless heart pain; make him spit at it."

祝心疾唾之曰: 歜, 某父某母為某不以時, 令某心痛毋期, 令某唾之.

For a case of one afflicted with madness (or seizures?) where internal leaking blood will not come out, rinse out a young woman's menstrual cloth in a cup of water and drink it.

瘨(癲?)而内漏血不出者,以女子月事布,水一棓(杯),濯之而飲.

For a case of intestinal flushing, select a good section of rice stalk and grind it up finely, boil up some of it in rice water and drink it without eating anything.

腸辟(澼),取稻米善簡析摩,取其泔孰(熟)煮之而飲之,毋食它物.

Herbs and magical treatments are applied to abscesses, itchiness, heart pain, blocked urine, as well as issues having to do with childbirth and childcare. In an example of how to heal an abscess (strip 16), "pick the root of *lian* 蘞 (*Ampelopsis japonica*), wash off the dirt and grind it up with salt, mix in a little rice rinse water and apply it [to the affected area]. Remove it after one night" (已癰, 取蘞本, 洗去其土, 以鹽齑之, 以沐少和之, 即以涂之, 壹宿而 去之). On strip 32, there appears another recipe for treating "abscesses that are festering, use pig, sheep, and chicken excrement [mixed] with Yanlu (an herb) and pig's fat, and heat it [over the afflicted area] until the end of the day, and stop" (癰潰者, 以豕矢, 羊矢, 雞矢, 奄盧, 豕膏, 熏之冬 (終) 日, 已矣). For a fussy baby (strips 2 and 11): "if you carry an infant with you when you are guest in someone's home and the infant won't stop hollering, have someone take the infant's left hand and shake it . . . enter the room, do it (like grinding

something in a mortar?) in two [sets of] seven times and there will be no more hollering" (負嬰兒爲人客,嬰兒篤虒(嗁)不可止. 令人把嬰兒左手,以搖, ... 入室,臼二七,不虒(嗁)矣). Similar recipes can be found in Zhoujiatai, Liye, and MWD (Tian Tian, 2017, 53–54). The numerical sets of seven are also found in the ZJS manuscripts.

As we saw with Xia Hou's bedroom in the analysis of *When Red Pigeons Gathered on Tang's House* and also occurring in the Baoshan record discussed earlier, living spaces could be demonically infested and cause illness. The Qin exorcism includes a special herb, Pig's Head (also known as Tianmingqing 天 名精, *Carpesium abrotanoides*), as well as invocation. For example, see strips 18–20 (Tian Tian, 2017, 54–55):

On the first Mao Day (B4) in the first month, pick 3 [stalks of?] Pig's Head, gather it in a bouquet and grind it up, purify it with ale, and toss the sediment into the well, using the juice to sacrifice at the doors of the gate and the four corners of the residence. Invoke (spirits with a spell): "God (di) has a divine herb named Pig's Head, born in winter, flourishing in summer, sharing God's chamber; drink it to expel the 100 afflictions; elder father and elder mother, do not let the 100 afflictions pass through So-n-so's chamber." Drink it without eating and at first step forward [three times (?)].

正月上卯,取豕首三、韋束一,薺(齏)之,以酉(酒)淳之,而投其宰(滓)井中,以其汁祭門戶、宮四陋。.祝曰:"啻(帝)有神草,名爲豕首,冬生夏實,與啻(帝)同室,飲之以去百疾,丈父丈母,毋令百疾過某室。"飲之,毋庸食,先少(步)者(?)始(?)。

The call for father and mother spirits to intervene is found in the MWD *Recipes* as part of incantations to relieve "urine retention" (*long*) and "inguinal swelling" (*tui* 癩) (Ma Jixing, 1992, 477; Harper, 1998, 162, 259–263).

The Qin also continued the late Zhou practice of praying to nature spirits to heal illness. An inscription on both sides of two jade plaques of unknown provenance but presently stored in the Shanghai Museum has been the source of much scholarly speculation, particularly since many words are hard to decipher (Hou Naifeng, 2005). The inscription (side 1 is carved into the jade; sides 2–4 are written in red ink) can be generally understood to be as follows:

Side 1: A descendant and heir of the Qin [royal family] Yin said: It is midwinter, month 11, and the retreating *qi* (results in) harmful withering. My body has encountered an illness which makes me depressed. Tossing and turning with anxiety, there is no improvement, no cure. Nobody understands it and neither do I and so it remains completely uncertain. I am at my wits end as to what to do and full of fear and despair.

又(有)秦曾孫小子駰曰: 孟冬十月, 厥氣 [] (敗? 戕?) 週 (凋). 余身曹 (遭) 病, 為我慽憂. [] [] 反 [] (側), 無間無瘳. 眾人弗智 (知), 余亦弗智 (知), 而靡有鼎 (定?息?) 休. 吾窮而無奈之可 (何), 永戁憂驁 (愁).

Side 2: The Zhou era is gone, with its statues and laws scattered and lost. Oh dear, I, the Little One, wish to serve Heaven and Earth, the Four Pivots, the Three Brilliances, the Mountains and Rivers, the spirits (above and below), the Five Annual Sacrifices, the Founding Ancestors, but have no access to their methods. Presenting fine sacrificial male-pigs and exquisite jades and silks, I, the descendant, feel so confused and blundering.

周世既沒, 典灋 (法) 蘚 (散) 亡, 惴惴小子, 欲事天地, 四亟 (極), 三光, 山川, 神示 (祗), 五祀, 先祖, 而不得厥方. 羲 (犧) 豭既美, 玉帛 (?) 既精, 余毓子厥惑, 西東若惷.

Side 3: There is a man from the east who handles punishments and law (or methods for natural configurations?), his name is Xing. He is pure when it comes to methods and clean when it comes to doing the right thing. I dare to announce: "I am innocent! [please] make the spirits understand my situation"; it's as if the spirits do not accept one's actions and [insist on] punishing the innocent (?), who among the loyal (?) people serving the spirits [then] dare not be true?

東方有士姓, 為刑 (形?) 灋 (法) 氏, 其名曰陘. 潔可以為 灋 (法), 淨 (?) 可以為正. 吾敢告之: 余無辠 (罪) 也, 使明神智 (知) 吾情; 若明神不 [] 其行, 而無辠 (罪) [] 友 (宥?) 刑 (?), [] [] [] (烝) 民之事明神, 孰敢不精?

Side 4: I, Little One Yin, dare to take up a large jade scepter, an auspicious jade circlet, and auspicious jade [horse ornament?] to report to the Great Mountain Hua: "Great Mountain, grant me in the eighth month to return the illness afflicting my body (heart and abdomen) and legs (lower and upper sections of the legs) to its origin. Please take charge of the jades and use the two just seven-year-old bovine sacrificial animals, the purified X and goats, pigs, four chariot horses, three people from a single household who come forward with one jade circlet to walk along the dark and light sides of Great Mountain Hua to mitigate the spiritual blame. Once the spiritual blame is mitigated . . . then they will bury (the sacrificial objects) to the glory of their descendants for myriad generations. If [you, Great Mountain] cause my, the Little One Yin's, illness to revert to its origin, [I shall] report it to Taiyi and the Great General, and so too will the family (of the people sacrificed?) and the royal household (report it).

小子駰敢以芥 (介, 玠) 圭, 吉璧, 吉 [] 以告於 [] (華) 大山. 大山又(有) 賜, 八月(?) 已吾 (?) [] (腹) 心以下至於足髀之病能自復如故. 請又 (有?) 司 [] (?) 用牛羲 (犧) 貳, 亓(其) 齒七, 潔 (?) [] [] 及羊, 豢, 路車四馬, 三人壹家, 壹璧先之; [] [] 用貳羲 (犧), 羊, 豢, 壹璧先之, 而 [] (覆) [] (華)大山之陰陽, 以遂 (?) 悠 (?) 咎, 悠 (?) 咎既 [], 其XX裡, 枼(世) 萬子孫, 以此為尚 (常). 句(苟) 令小子駰之病日 (自?) 復故, 告太一, 大將軍, 人壹家 (?), 王室相如.

The patient, Yin, believed to be King Hui Wen of Qin 秦惠文王 (r. 325–311), felt anxiety and pain in his upper and lower body and accused a spirit, possibly Hua Mountain (or a nature spirit under its authority), of afflicting him in retaliation ("spiritual blame," *jiu* 咎) for ending the Zhou era. Hua Mountain (the sacred peak of the west versus Taishan, the sacred peak of the east) seems to be under the authority of star spirits, Taiyi and the Great General. To intercede with this powerful pantheon, Yin used an occult specialist from the East (Chu? Yue?) to direct the sacrificial ritual and get the spirits to take back their curse. The notion of spiritual blame causing illness goes back to the Shang; the term *jiu* is common in late Zhou texts (Cook, 2006, 80–81). In Chu records, mountain deities were among the many spirits considered as possible culprits (or as possible sources of salvation), who must be offered animal and other sacrifices.

Qin medical manuscripts bridge the transition from the performance of purely magical medicine to a focus on collecting recipes for healing specific conditions. Magical medicine reflects the continued belief in perverse external influences – supernatural and increasingly environmental – over human health. Attention to the inner versus just the external body condition is reflected in the increase in diagnosing clusters of symptoms as named ailments. There is also evidence of increased professionalism and the use of a variety of approaches to treat both ailments and symptoms. A fuller imagination of the inner body landscape emerges during the Han.

## Han Bamboo and Silk Manuscripts: Medical Literature As a Genre

The bamboo and silk manuscripts discovered in Mawangdui, Changsha, Hunan (MWD), in the early 1970s revolutionized our understanding of ancient medicine. The tomb includes a range of medical literature along with manuscripts on philosophy and "technical arts" (shushu 數稅), maps, and charts (Ma Jixing, 1992; Harper, 1998). Healing the sick body and enhancing the healthy were cojoined arts. A similar mix of recipe, magical, vessel-theory, and nurturing long-life (yangsheng) texts was found in a tomb in Zhangjiashan, Hubei (ZJS). This tomb also included legal, mathematical, divination, and other technical arts texts, but no philosophical texts. Scattered Han medical writings have also been found in the medieval Buddhist caves at Dunhuang in Gansu and in a watchtower in Juyan 居延, Ejina 額濟納, Mongolia (99 BCE-31 CE). Recipe and other bamboo texts (comprising about 900 strips) were discovered second-century-BCE Han burials in 2012-13 in Chengdu, Sichuan (Laoguanshan), along with a remarkable inscribed lacquerware figure. Later Han (mid-first-century-CE) materials include bamboo texts discovered in the early 1970s from a tomb in Wuwei, Gansu (Yang & Brown, 2017).

In the family graveyard of the local ruler of Changsha Kingdom, Li Cang 利蒼 (d. 186 BCE), in tomb no. 3, the tomb of Li's thirty-year-old son (d. 168 BCE) contained a lacquer box filled with about thirty manuscripts along with maps, diagrams, and pictures (Harper, 1998, 14–16). Of these, sixteen are classed as medical literature (Mawangdu Han mu boshu zhenli xiaozu, 1985). Three of them had two versions (Ma Jixing, 1992, 4–5). From their script styles and vocabulary, scholars assume they represent copies of texts actually written at different times, some as early as the Qin (Ma Jixing, 1992, 8–21; Harper, 1998, 19–30, 38–40). Some are versions of texts also found in ZJS, suggesting a shared knowledge circulated by specialists. One of the most significant advances that these texts represent is the documentation of vessel theory (but only numbering eleven vessels and not the twelve recorded in the *HDNJ*). There is no evidence of acumoxa. The texts note the lancing of swellings on the body but only cauterization to treat the vessels (Harper, 1998, 5). This contrasts with later canonical literature.

The MWD library of medical literature is fundamental to our understanding of Han practice. The texts, listed below, were all titled by modern archaeologists; the title translations and notes about which texts are grouped together are drawn from Donald Harper (1998):

(1) The following texts share one large silk  $24 \times 450$  centimeters long (sections of these texts, except for the last, *Recipes*, are also found in the ZJS *Maishu*; see Lo, 2000, 18–19):

Cauterization Canon of the Eleven Vessels of the Foot and Forearm (Zubi shiyi mai jiujjing 足臂十一脈究經)

Cauterization Canon of the Eleven Yin and Yang Vessels (Yinyang shiyi mai jiujing 陰陽十一脈灸經 (Versions A & B)

Model of the Vessels (Maifa 脈法) (Versions A & B)

Death Signs of the Yin and Yang Vessels (Yinyang mai sihou 陰陽脈死候) (Versions A & B)

Recipes for Fifty-two Ailments (Wushier bingfang 五十二病方)

(2) The following texts share one large silk approximately  $50 \times 110$  centimeters long:

Eliminating Grain and Eating Vapor (Quegu shiqi 却穀食氣)
Cauterization Canon of the Eleven Yin and Yang Vessels (Yinyang shiyi mai jiujing 陰陽十一脈灸經)

Drawings of Guiding and Pulling (Daoyin tu 導引圖)

(3) On a single badly damaged silk approximately 24 centimeters wide:

Recipes for Nurturing Life (Yangsheng fang 養生方)

(4) On another badly damage silk of about the same size:

Recipes for Various Cures (Zaliao fang 雜療方)

(5) On a silk  $49 \times 49$  centimeters:

Book of the Generation of the Fetus (Taichan shu 胎產書)

(6) On 33 bamboo slips:

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Ten Questions (Shiwen 十問)
Conjoining Yin and Yang (He yinyang 合陰陽)
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(7) On 11 wooden slips:

Recipes for Various Charms (Zajin fang 雜禁方)

(8) On 56 bamboo slips:

Discussion of the Culminant Way in Under-heaven (Tianxia zhidao tan 天 下至道談)

Ma Jixing (1992, 3–4) divides the texts into four main types: preventative medicine (including some self-cultivation texts), medical theory (vessel and cauterization as well as some self-cultivation texts), therapeutic (recipe and some of the vessel and cauterization texts), and other (including self-cultivation sex texts, charms, spells, and magical techniques). He notes a number of categories of ailments, including: "injury" (shang 傷), "spasms" (xian 癎), "urine retention" (long), "hemorrhoids" (zhi 痔), "abscesses" (yong), "festering pustules" (ju 椬), "scabbing" (bi), "scabies" (jia 布), "facial pustules" (ma 瘜), and others of unsure meaning (Ma Jixing, 1992, 28; translations adapted from Harper, 1998; Zhang & Unschuld, 2008).

The locations of the eleven vessels and sets of syndromes are described in the cauterization manuals but not always in a uniform manner. Basically, there are sets of *yin* and *yang* vessels that originate in the feet and hands and thread their way around muscles and bone into the core of the body or up to the head. They were not interconnected as described in the *HDNJ* (Harper, 1998, 82–90; he suspects that the use of *yin* and *yang* initially referred to relative inner or outer sides of muscles around which the vessels moved). The two sets of vessels include Great Yang (*taiyang* 太陽), Minor Yang (*shaoyang* 少陽), Yang Brilliance (*yangming* 陽明), Minor Yin (*shaoyin* 少陰), Great Yin (*taiyin* 太陰), and Ceasing Yin (*jueyin* 厥陰) vessels, although the *jueyin* vessel for the hands is missing from the MWD corpus. Viscera, such as heart, stomach, liver, and spleen, are mentioned but without the systematic correlations described in the *HDNJ*. The term *wuzang liufu* (five viscera and six cavities) appears only in a self-cultivation context involving the technique

Month	Agent	Body
4	Water	Blood
5	Fire	Qi
6	Metal	Muscle
7	Wood	Bone
8	Earth	Skin
9	Stone	Hair

Table 4 Body formation correlations

of "sucking *qi*" (*xiqi* 喻氣) in the *Ten Questions*. In the *HDNJ*, the hand Great Yin vessel reaches the lungs. In the MWD texts, it reaches the heart. On the other hand, the kidney is mentioned in connection to the foot Minor Yin vessel in the *Cauterization Canon of the Eleven Yin and Yang Vessels* (hereafter *Yinyang*) as well as in the *HDNJ* (Harper, 1998, 210).

In the MWD text *Book of the Generation of the Fetus*, the *wuxing* are correlated with time as seen in Qin daybooks (not viscera as in *HDNJ*). Interestingly, whereas in the late Zhou *Stalks* manual there were only four agents, in the MWD text there are six, each correlated with a month numbering four to nine and a developing part of the fetus (Harper, 1998, 379–380) (Table 4). The *Changes* tradition of odd-*yang*, even-*yin* numbers seems to inform these correlations. In the MWD vessel texts, *yin* vessels indicate death and the *qi* of Earth versus *yang* vessels with life and the *qi* of Heaven (Harper, 1998, 88).

Ma Jixing (1992, 89) notes the great variability in the vessel paths described in MWD versus HDNJ. The MWD hand yin vessels go from the hands to the chest, but in HDNJ the direction of influence is the opposite. The MWD hand yang vessels go from hands to head just like the HDNJ, except for the MWD Great Yang vessel, which goes from head to hand. The MWD foot yin vessels go from foot to thighs to abdomen in one text (Cauterization Canon of the Eleven Vessels of the Foot and Forearm, hereafter Zubi) and from head to abdomen in another (Yinyang), except for the Great Yin vessel, which went from lower abdomen to the foot. The foot yin vessels in the HDNJ go from foot to chest. The foot yang vessels go from the malleolus or shin to the head in one text (Zubi) or to the thigh or head in another (Yinyang). In the HDNJ, they go from head to feet.

Ma Jixing (1992, 26) notes a few areas used for pulse-reading: above the inner malleolus, along the Minor Yin vessel of the lower body, and along the Great and Minor Yang vessels of the arms. The qualities of pulse determined

were listed in the *Model of the Vessels (Maifa)* and in the ZJS *Maishu*: "full" (ying 盈), "empty" (xu 虛), "slippery" (hua 滑), "rough" (se 濇 or 澀), and "quiet" (jing 靜) (Ma Jixing, 1992, 295; Hsu, 2010, 31). The *Maifa* explains:

The way to examine the vessels: Place the left [hand five cun (about 11 cm) up from the malleolus] and press on it (an 案). Place the right hand at the malleolus and palpate it (tan 擅). If other vessels are full and this one alone is empty, it controls the ailment. If other vessels flow evenly (slippery) and this one alone is blocked (rough), it controls the ailment. If other vessels are still and this one alone is agitated, it controls the ailment. (after Harper, 1998, 216–217)

The physician diagnoses by pressing or palpating different vessels to evaluate their relative fullness and texture of flow.

Pathology arises when a vessel is "moved, disturbed" (dong 動) or experiences a "reversal" (*jue* 厥) (Harper, 1998, 202). For example, if the foot Yang Brilliance vessel is moved, a person may shiver with cold, yawn and stretch a lot, have swellings, have extreme anxiety, or maybe even run around singing without clothing. Pain and numbness in different parts of the body linked together by a vessel explain seemingly diverse symptoms (Ma Jixing, 1992, 232–238; Harper, 1998, 206). In heat illnesses, for example, we see that treatments vary according to the vessel affected and whether it was a *yin* or *yang* one, or a mixture of *yin* and *yang* vessels – suggesting that reading the combined *yin*-and-*yang* signature of the body is not conceptually unlike reading the lines of a *Changes* hexagram. If a patient has five or more of the symptoms linked to the Ceasing Yin vessel of the foot, they will die, unless a *yang* vessel is also involved. Ailments arising in connection with more than one vessel factor into the outcome.

Heat illnesses mentioned include those that are internal (*zhong*), cause sweating, or a "troubled heart (delusions accompanying fever?)" (*fanxin* 煩心) – a symptom often indicating psychological symptoms and severity. Related afflictions are coldness syndromes, some which cause shaking or alternate with hot ( $n\ddot{u}e$ ) (Ma Jixing, 1992, 29). The texts instruct the physician to cauterize the Great Yang or Yang Brilliance vessels of the foot for coldness experienced in the middle of the forehead but the Minor Yang of the foot for a cold shin. For heart trouble, cauterize the foot Ceasing Yin vessel. If heart trouble is combined with belching (evidence of rising qi), then cauterize the forearm Great Yin vessel.

In the *HDNJ*, vessels are treated with needling or moxibustion through "openings" (xue 穴, qiao 竅, kou or cunkou 寸口) but these terms do not appear in the MWD corpus. When the term "Nine Apertures" (jiuqiao) does appear, it refers not to points on the body but to actual openings in the body – mouth, ears, eyes, nostrils, genitals, or anus – that qi could penetrate to fill the inner body

(zhong) or the Six Cavities (liufu). It is not clear where on the body the physicians who used the MWD literature treated the vessels. In some cases, it seems to be around the waist, possibly to redirect the movement of qi (Harper, 1998, 91). There is evidence for the strategic use of lancing stones (bian  $\mathcal{E}$ ) and heat through cauterization (jiu  $\mathcal{R}$ ). Heat therapies included roasting the afflicted area over fire, pressing hot objects against it, fumigating it, or soaking it in a hot medicinal bath (Harper, 1998, 95–97). Other therapies included "pulling" (yin, guiding the qi through physical contortions) and massage, superficial surgery, drugs, and magic (Harper, 1998, 395; Lo, 2018b, 76).

The overlapping goals of healing and self-cultivation are evident from manuscripts and texts found in MWD and elsewhere (Li Jianmin, 2007, 146–190). The "Pulling" manuscripts discovered at MWD (including the *Daoyintu* and others) and ZJS (*Yinshu*) describe an exercise culture in which physical postures, named after wild animals, helped strengthen areas of the body and in some cases healed by pulling or guiding out the sources of pain, such as internal heat (Harper, 1998, 312–315; Lo, 2018b, 84–86). The physical choreography required is reminiscent of exorcistic movements used in healing. For example, to heal exhaustion (*dan*), the ZJS manual, strip 29, advises (after Lo, 2014, 38–40):

Pulling inner exhaustion: Squat and [do something] with the buttocks, with the left hand stroke the neck, with the right hand stroke the left hand, raise the yoke of the neck (?) and bend forward as far as possible, then slowly in a relaxed manner focus on exhaling (the source of the exhaustion). Straighten up, raise the head and stop. (Once) settled down, then repeat five times.

引內癉: 危坐[] 尻, 左手撫頸, 右手撫左手, 上扼(?)俯極, 因徐縱而精呴之, 端仰而已, 定右復之五而。。。

Healing and strengthening the body also included sexual practices. In *Conjoining Yin and Yang*, a female orgasm helps the male to absorb *yin qi* to balance excess inner *yang qi* (Lo, 2000, 23; Lo, 2013, 2018a). Vivienne Lo's investigations of two lacquerware figurines discovered in Han coffins in Sichuan suggest that vessel therapy combined healing with longevity goals such as achieving a "jade body" (Lo & He, 1996; Lo, 2000; Lo & Gu, in press). They do not appear to be gendered, attesting to Charlotte Furth's theory of the generally androgynous approach to medicine before the Chao Yuanfang's and Sun Simiao's introduction of gynecology in the medieval era (Furth, 1999). These small probably handheld sculptures, one from Shuangbaoshan 雙寶山 and one from LGS, like the MWD texts, depict eleven vessels that run in parallel lines from the feet and hands up through the body into the head.

The vessel pattern on the figure from LGS is the more complex of the two. The following observations are drawn from brief reports, photographs, and personal observation of the artifact in the Chengdu museum. Vessels are depicted in two different colors, white and red, and some intersect, looping across others over the shoulder blades and creating a loose network across the front torso and abdomen area, roughly dividing it into three regions corresponding to the upper, middle, and lower burners (jiao 焦). Inscribed terms may coincide with acumoxa points. Notably five viscera are inscribed in a line down the spine, beginning at the top: heart, lungs, liver, stomach, and spleen. (The HDNJ includes the kidneys, not the stomach, in the wuzang.) The backs of the figure's knees are called xi 奚 (溪 "streams") (Lo & Gu, in press). At the front of the body, over the clavicle, is the "basin" (pen 盆), a well-known term. Down over the right breast, next to a hand vessel, is an unknown graph. It is positioned like the modern Pericardium meridian or the Ceasing Yin hand vessel missing in MWD. The graph resembles yun 氳 (a primal earth qi), hu 壺 (vase-type ale vessel), yi 壹 (one), or yun 壹 (another way of writing primal earth qi) (Ke & Cai, 2021). The point near it on the Pericardium meridian would be PC-1 Celestial Pool (Tianchi 天池), which in the HDNJ is described as along the "hand-heart ruler [conduit]" (Unschuld, 2016a, 70). The term yun does not appear in the HDNJ. In the MWD and ZJS vessel texts, the earth qi links to yin, perhaps suggesting the vessel type (Harper, 1998, 79; Lo, 2000, 26–28). Clearly visible down the right side of the trunk is the term "armpit abyss" (yeyuan 腋淵). In fact, the term appears in reverse, *yuanye*, in the *HDNJ* as a point near the "big network [vessel] of the spleen" before it spreads to the chest and flanks (Unschuld, 2016a, 208; now it is along the Gall Bladder meridian, GB-22). There may be still other inscriptions on the body to be discovered once official photographs are formally published.

The practice of needling is evident in second-century-BCE Sichuan and also later in Gansu. The first-century-CE medical manuscripts discovered in a vaulted tomb in Wuwei, Gansu, include recipes, *materia medica*, and acupuncture therapy. The time-contingent acupuncture treatment prohibitions link early concerns with later medieval practices (Yang & Brown, 2017, 241, 245, 249). Recipes for decoctions follow ailment descriptions, a tradition also tracing back to the Qin. The recipes are general cures or for specific ailments such as persistent coughs (*jiu kai shang qi* 久欬上氣), cold damage following wind exposure (*shanghan sui feng*), metal wounds, eye pain, large accumulations in the heart and abdomen (*xinfu daji* 心服大積), chronic diarrhea (*jiu xie* 久泄), male sexual deficiencies, abscesses, scabs, and *qi* reversal (*niqi* 逆氣) syndromes including throat paralysis, heart and abdominal pain, throat pain, uterine pain, dry throat, and tooth pain (Yang & Brown, 2017, 258–301).

Of particular interest is the section on strips 19–23 that detail needling rules for particular ailments – for example, where to position the needle, how deep, and how long to keep it there. It also cites prohibitions by age and location of the body from a lost text Huangdi's Prohibitions Regarding the Souls When Curing *Illness* (Huangdi zhibing shenhun ji 皇帝治病神魂忌). The prohibitions restrict the needling or cauterizing of areas of the body that are occupied by souls at certain ages. This idea of souls moving around the body according to the calendar or age is prevalent in medieval texts discovered at Dunhuang (Harper, 2005; Despeux, 2007). In the Wuwei manuscript, the key locations are the heart (age one), the abdomen (age two), the back (age three), the head (age four), the feet (age five), hands (age six), shins (age seven), shoulders (age eight), [missing text]. People aged between 60 and 70 are treated the same as 6-yearolds; those between 70 and 80 as 7-year-olds; those between 80 and 90 as 8-year-olds; and those between 90 and 100 as 9-year-olds. People over 100 should not be needled or cauterized at all because the qi vessels are completely "cut off" (qi mai yi jue 氣脈壹絕) (Yang & Brown, 2017, 267-268). Prohibitions by Stem and Branch day listed on wooden tablets also determine treatments and link the late Han practice back in time to Qin daybooks. In the Wuwei text, on a Chen (B5) or Xin (S8) day, one cannot cauterize, needle, or drink decoctions. New moons and dark nights as well as Jia (S1) and Wu (B7) are also dangerous (Yang & Brown, 2017, 299–300).

In general, we see Han medicine as a continuation of Qin concerns but with new trends developing. There is an increasing interest in development and archiving of medical literature. There is a growing tendency to incorporate aspects of cosmic medicine with the magical, although a concern with the supernatural influence of time is common to both practices. Acumoxa practices and rudimentary *yinyang wuxing* correlations become evident in texts found in the west. Healing and self-cultivation were joined arts to maintain physical and mental welfare. In general, we see the seeds of approaches laid out in the canons but little evidence of a predominant canonical literature guiding physicians.

## Medieval Paper Texts: The Persistence of Magic

The legacy and transformation of Han medicine through Silk Roads contacts are evident in the thousands of texts discovered in the early twentieth century that had been stashed in Buddhist Cave 17 at Dunhuang sometime in the eleventh century. Seventy-four medical texts were found; as in Qin and Han texts, medieval medical texts shared a single book or codex with a wide range of other types of text (Wang & Barrett, 2005). Many are Tang copies of earlier texts or even ancient originals. Ma Jixing (1988) categorizes the medical texts as:

- (1) versions of chapters found in the *HDNJ* on the signs of death and pulse-taking;
- (2) three variations of viscera or *wuzang* theory, presumably based on the theories of Mingtang (Illuminated Hall), Zhang Zhongjing (Han physician), and Jī vaka (Qipo 耆婆) (fifth-century-BCE doctor of Buddha);
- (3) diagnostic methodologies that are mostly types of pulse-reading, but other methodologies such as divination as well;
- (4) cold damage theory, some similar to material found in the transmitted *Shanghan lun* and the *Jingui yaolüe fanglun*;
- (5) treatments, including secret instructions (from a ghost) on the internal use of medicines to bolster the viscera and external medicines attributed to Liu Juanzi 劉涓子 (ca. 370–450) for pediatric and other skin infections;
- (6) recipes;
- (7) *materia medica*, including versions of the *Newly Revised Materia Medica*, the Tang revision of Tao Hongjing's work (Liu 2021, 81-82), and *Shiliao bencao* 食療本草, a Tang book on dietetics;
- (8) acumoxa treatments, theory, and prohibitions;
- (9) various texts on magical or yangsheng methods;
- (10) Buddhist and Daoist recipes; and
- (11) random jottings of medical information on physicians, records, ailments, names and prices of medicines, and medical equipment.

Studies of select texts are included in collections edited by Vivienne Lo and Christopher Cullen (2005) and by Catherine Despeux (2010). Many manuscripts are scanned and available to the public in the IDP (International Dunhuang Project) database. Wang Shumin (2005) notes a number of new medical concepts: For the first time, the space between the temples is identified as a "host" (zhu 主) of the spiritual "essence" (jing) and "recognition, consciousness" (shi 識). Nine storage depots (zang) of qi include four belonging to the outer structure (xing  $\mathbb{H}$ ) – corners of the head (temples), ears and eyes, mouth and teeth, chest and trunk; and five belonging to the spirit (shen) - heart, liver, spleen, lungs, and kidneys. Among the fragmentary acumoxa texts, the locations of points listed for treatment of specified conditions or for calibrating the qi in various viscera differ from those in medical canons and are often inconsistent among different Dunhuang manuscripts, suggesting that there were no fixed points even by the tenth century (Lo, 2005, 207–251; Lo, 2010, 239–284). The number and names of the points also vary. Some points or "openings" (xue) were specified as for qi and others for wind (for wind as a cause of insanity, see Chen Hsiu-fen, 2005). There were also multiple other spiritual or supernatural entities in the body that could affect acumoxa practice (this is particularly the case with regard to calendrical prohibitions; see Harper, 2005; Arrault, 2010).

Pulse-reading texts vary in their numbers of pulse types and which indicate a fatal condition or when to add drug therapy – generally differing from the canon *Maijing* (for pulse-reading with physiognomy; see Despeux, 2005; for pulse-reading, see Hsu, 2010). Manuscripts of *materia medica* and recipes record drug applications and therapies, such as one to treat acute heart pain with saltpeter and realgar (see Butler and Moffett, 2005; Despeux, 2010, 333–629; Engelhardt, 2010). Self-cultivation and sexual practices continued to be part of the healing literature (Lo & Cullen, 2005, 207–290).

Magical medicine, including Daoist, Buddhist, and popular practices, persisted (Strickmann, 2002). It was often transmitted as "secret instructions" (jue 決 for 訣), such as Master Qing Wu's Secret Instructions on the Pulse (Qing Wuzi maijue 青鳥子脈決, P.3655) and Wondrous Instructions on the Skill of Quiescent Breathing (Huxi jinggong miaojue 呼吸靜功妙決, P.3810). Qing Wuzi (Master Blue Crow) is identified as the sixth-century master of yinand-yang divination, Xiao Ji 蕭吉 (Ma Jixing, 1988, 92-93; Harper, 2010a, 39, 66–72). It is the last of three medical texts probably dating to the early Tang found on P.3655 that take up a total of ninety-seven columns of text. The first two are the Illuminated Hall Treatise of the Five Viscera (Mingtang wuzang lun 明堂五臟論) and The Seven Superficial and Eight Deep Pulses in the Three Sectors (Qi biao ba li san bu mai 七表八理三部脈). The text by Qing Wuzi appears on columns 64–79. It is essentially a version of the *Verses* for Examining the Pulses of the Left and Right Wrists (Zuoyou shou zhenmai ge 左右手診脈) preserved in the Wang Shuhe mai jue 王叔和脈訣 (also known simply as the *Maijue* by the Song period). It includes seven verses, all in heptasyllabic meter (qiyan gejue 七言歌訣) (for medieval phonetic reconstruction, see Baxter & Sargart, 2014). The first verse is an overview of pulse diagnostics:

Left and right reveal the signs of the pulses in the four seasons (over the course of) 45 (pulse) movements during one full breath. If below the finger (of the physician pressing down) (the pulse) is urgent or full, there is Wind Toxin increasing the indicator of Heat. If below the finger, it is slow, deep, and thin, then a Cold ailment has overtaken the body along with Wind qi. In the case of a (demonically infected) stolen vessel, one typically asks about the Five Agents and in the case of dripping or blocked (vessels) there is no cure.

左右須候四時脈 (meak), 四十五動為一息 (sik)。 指下如法急緊洪 (huwngH), 兼有風毒加熱機 (kjj)。 指下遲遲脈沉細 (sejH), 冷病纏身並風氣 (khjjH)。 賊脈頻來問五行 (haengH), 屋漏陸門終不治 (driH)。 The next six verses on pulses ( $mai\ ge\$ 脈歌) deal with the pulses in the  $cun\$ 寸,  $guan\$ 關, and  $chi\$ 尺 positions on the left and right wrists as diagnostic criteria for the viscera: (1) the left wrist cun opening ( $kou\$ 口) to the Heart (xin), (2) left wrist middle indicator ( $zhongzhi\$ 中指) to the Liver sector ( $gan\ bu$ ), (3) left wrist  $chi\ hong\$ 尺中 to the Kidney sector ( $shen\ bu$ ), (4) right wrist  $cun\ kou$  to the Lung sector ( $fei\ bu$ ), (5) right wrist zhongzhi to the Spleen sector ( $pi\ bu$ ), (6) right wrist  $chi\ zhong$  to the Gate of Life ( $mingmen\$ 命門) (Ma Jixing, 1988, 93–96).

The second text, *Wondrous Instructions on the Skill of Quiescent Breathing*, a self-cultivation text, consists of sixteen columns of text possibly copied in the ninth century. The breath techniques focused on the circulation of blood and *qi* and on the fortifying of primordial *qi* (*yuanqi*). This involved regulating the emotions. Various Daoist techniques and spells boosted the cosmic *qi* in the body, allowing for revitalization and long life, if not total escape from mortality altogether.

Materia medica for strengthening the body also qualified as technical secrets. In another text known as Buxing jue 輔行決 (also called the Secret Instructions for Assisting the Body, also called the Essential Methods for the Application of Drugs to the Viscera and Bowels 輔行決臟腑用藥法要 by the physicians in China who preserved copies), longevity drugs were traced to Tao Hongjing (Ma Jixing, 1992, 115). In fact, the teachings, passed on by a "hermit" (yinju 隱居), draw from the Han period Canonical Methods for Brews and Decoctions (Tangye jingfa 湯液經法) and include fifty-six recipes and the "rules of reinforcing and reducing methods for the five viscera" (五臟補瀉法例), focusing on the correlation of drugs with the Five Agents and five flavors. It also includes the earliest remedies for infectious diseases (tianxing 天行). Many of the recipes continued to be handed down and appear in existing versions of the *Treatise on* Cold Damage and the Treatise on the Essential Prescriptions of the Golden Casket (Ma Jixing, 1992, 115-137; Wang & Barret, 2005). The "hermit" editor explained that the purpose of the text was to make sure that healers knew to go beyond simply supplementing or discharging (bu xie 補瀉) the perverse qi (xie qi) that had entered the body. Because the process of dealing with the evil qi also threatened the person's "spiritual essence" and qi, it was essential to bolster the qi of the five viscera with multiple doses of medicinal decoctions. Without this extra step, the viscera could become depleted and over time harmed to the point of risking death (Fruehauf & Dell'orfano, 2015: preface).

The Dunhuang materials reveal the range of medieval healing practices. They reflect the rise of court-sponsored medical canons but also the many materials left out of them. They reinforce the entwined nature of magical medicine with cosmic medicine but also show the persistence of drug experimentation and herbal decoctions.

#### **4 Conclusion**

Non-transmitted textual material – preserved on bones, bronzes, bamboo, silk, and paper – reflect ideas and treatments for maintaining human well-being that are not reflected in the transmitted medical canons. Yet, by the end of the Han, we can see the development of methods and concepts that will eventually coalesce in literati writings. Cosmic or *yinyang wuxing* medicine dealing with the perverse influences of environmental *qi* was intermixed with magical practices that addressed spirits and demons. A shift from simple external observation to inclusion of diagnostic methods of internal disorders occurred while symptom clusters also began to be defined as specific ailments. Manuscripts also reveal the diversity of practices preserved and changed over time by physicians and healers of different social statuses and locales.

# **Archaic Graphs**

- 1 Shang oracle bone graph for 蛋 > 毒 du "toxin"
- 2 城 點 Shang oracle bone graphs for 疾 ji "affliction"
- 3 输Early Zhou graphs for 殷 Yin, the Zhou name for the Shang people. Also a rare Shang word possibly for a medical procedure.
- 4 \(\bar{A}\) Huayuanzhuang bone graph for some type of healing.
- 5 **以** Shang oracle bone graphs for 禦 yu "drive away, ward off, exorcise"

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