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 脉 (“vessels”) or jingluo 経絡 (“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 non-transmitted 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 黃帝內経, 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 禪樞 (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 桂經) by Wang Shuhe, also compiled from earlier sources. These include a text self-titled the Vessel Document (Maishu 桂書) found in a 186 BCE tomb in Zhangjiashan 張家山 (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 桂法), 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, *yin* and *yang*, orally transmitted stories, astronomy (and astrology), *wuxing* (the Five Agents), calendars, various types of divination, medical classics (*yi jing* 輔經), 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, *yin* and *yang*, *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 陶弘景 (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* 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.

If the recipes were inappropriate, causing too much heat or cold and resulting in “inner damage of the jing (vital essence, spirit) and qi (jing qi neishang)”, then, even though the damage was not outwardly apparent, a physician (yi) had to be consulted. The section on “those proficient in the medical canon” (yijingzhe 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.

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...
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 acu-moxa therapy, the presumed late fifth-century BCE Bian Que 扁鹊 (Qin Yueren 秦越人) and the second-century 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 qie mai 切脉), 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”...
Medicine and Healing in Ancient East Asia

(“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 射後求卒方), which survives only in a version edited by the occult master Tao Hongjing: Recipes from Behind the Elbow for Every Emergency (Zhouhou beiji fang 射後備急方). 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 金匮緑囊). But this had also been lost until it was reinvented during the Song era, with names such as Golden Chest Formulary (Jinkui fang 金匮方) 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 (Taiipingjing 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.