The *Treatise on Cold Damage* and the Formation of Literati Medicine: Social, Epidemiological, and Medical Change in China, 1000-1400

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ABSTRACT

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This dissertation explores the profound changes that occurred in literate Chinese medicine during the Song (960-1279), Jin (1115-1234), and Yuan (1276-1368) dynasties—changes which established the pattern of the text-based Chinese medical tradition from that time to the present day. In particular it examines the transformation of the Han dynasty (206 BCE-220 CE) text, the *Treatise on Cold Damage* (*Shanghan lun* 傷寒論), from one member of a diverse tradition of texts giving instruction on the treatment of cold damage disorders (*shanghan* 伤寒, a class of potentially epidemic, febrile illnesses) into the preeminent—almost the only—canonical text about such illnesses and a touchstone for medical thinking on all types of illnesses. I argue that a two primary factors account for the *Treatise's* remarkable rise in status: the rise in the frequency of epidemics caused by Chinese society's crossing of epidemiological frontiers, both in terms of population and in terms of geographic distribution, and a crisis of trust in medicine which was part of a much broader epistemic crisis brought about by the radical changes in social structure, commerce, governance, and material culture during the Song.

The increase in epidemics gave added weight to the topic of cold damage, but the decisive factors singling out the *Treatise* were related to its usefulness in addressing the medical crisis of trust. Medical authors were unanimous in their condemnation of the status quo in medicine. The focus of their criticisms was the figure of the common physician (*shiyi* 世醫). Common physicians, the dominant practitioners of text-based medicine in the Northern Song,

belonged to social stratum just below that of the elite. For elite medical authors, common physicians were the primary problem with medicine: they were inadequately or incorrectly educated, failed to appreciate the complexity of illness, and lacked elite ethical values. While elite authors agreed that common physicians were the problem, they disagreed on how to resolve this problem. Three approaches developed a more elite form medicine—which I term "literati medicine." It was among the proponents of one of these approaches—"literati-physician medicine," which held that only members of the elite could be proper physicians—that the *Treatise on Cold Damage* became central to medical thought and practice.

Literati physicians found the *Treatise* useful for a variety of reasons. In terms of their social relations, both within the clinical encounter and in broader society, it was a useful tool for arguing for their own superiority over their common physician competitors. In terms of their clinical doctrines, it provided a model by which to deal with what they saw as the central problem in medicine: the protean nature of illness. As long as that remained the central problematic of their medical tradition, the *Treatise* retained its central place. By the Yuan, literati physicians dominated all of literati medicine and ultimately all of textually based medicine, making the *Treatise* a central text for all physicians.

The history of the *Treatise*'s transformation into one of the most fundamental texts of the Chinese medical tradition is therefore rooted in the formation of literati medicine, and its struggle for both social legitimacy and clinical efficacy. The *Treatise*'s continued importance from the Yuan to modern times is the result of the survival of literati medicine for nearly one thousand years. In spite of many changes, modern Chinese medicine remains committed to a vision of illness as irreducibly complex and to an approach to cure—individualization of treatments—first learned from the *Treatise on Cold Damage* during the Song dynasty.

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For all those who share my love of Chinese medicine,

may it survive into the 22nd century and beyond!

INTRODUCTION
Problems of Continuity and Rupture

The research that became this dissertation grew out of a purely personal sense of puzzlement. I am both a historian and a clinician of Chinese medicine. During my clinical education, I began reading the great classics of Chinese medicine. I started with the *Yellow Emperor's Inner Classic* (*Huangdi neijing* 黃帝內經, ca. 1st c. BCE, hereafter the *Inner Classic*), the oldest text in the received tradition of Chinese medicine and traditionally seen as its foundation. I found it fascinating and inspiring, but foreign. It felt very distant from the medicine I was learning to practice. As I read other medical texts, I noticed a pattern. Everything written before the Song Dynasty (960-1279) struck me as unfamiliar to one degree or another, but everything written from the Song onward appeared—for the most part—natural and logical. I knew that the Song was considered a watershed in Chinese history, and I began to suspect that it might also be a major point of transition in Chinese medical history as well.

There was one text, however, that didn't fit the pattern: the *Treatise on Cold Damage* (*Shanghan lun* 傷寒論, ca. 206 CE, hereafter the *Treatise*), which I studied at the urging of one of my professors. In spite of being one of the oldest texts I read, the *Treatise* not only seemed natural and logical but also seemed to be a key for unlocking Chinese medical theory and practice. It resolved many issues that had puzzled me for years, and opened up new possibilities I had never considered. The *Treatise* felt like the foundation of everything else I had learned. As I continued my studies, I found that many more knowledgeable and experienced physicians shared my feelings—such as Liu Duzhou (劉度舟, 1917-2001) who referred to the *Treatise on Cold Damage* as the "soul of Chinese medicine 中醫之魂."[1] Moreover, I learned that the *Treatise* had

[1] Liu Duzhou, *Liu Duzhou shanghan linzheng zhiyao*, ed. Chen Ming, Zhang Baowei, and Liu Yanhua (Beijing: Xueyuan Chubanshe, 1998), 1–2.

risen to new prominence during the Song following its editing and publication by the Song imperial government. Once again, everything seemed to change in the Song.

I was left with two interrelated questions. What happened in the Song that made the medical texts written thereafter different from those written before, and why did the *Treatise on Cold Damage*, written so long before the Song, feel so much like a post-Song text? To reframe these questions in more historical terms: why did I have a visceral sense of rupture in the medical literature pre- and post-Song but an equally strong sense of continuity with the *Treatise*—an extremely old text? These were the questions I set out to answer through my research.

I soon learned there was no shortage of scholarly discussion about medicine and the *Treatise on Cold Damage* during the Song. The rupture I sensed with pre-Song medical texts was affirmed by many scholars. Miyashita Saburō 宮下三郎 traces out a plethora of changes related to medicine in the Song, Jin (1115-1234), and Yuan (1271-1368) dynasties.[2] Paul Unschuld argues for a thoroughgoing transformation of doctrinal perspectives in this period.[3] Ishida Hidemi 石田秀実 describes a revival of "classical medicine" during the Song.[4] Both Robert Hymes and Chen Yuanpeng elucidate important changes in the social position of Song doctors, and Asaf Goldschmidt, following up on the work of both Miyashita and Unschuld, attempts a survey of the medical changes of the Song, including the new status of the *Treatise on Cold Damage*.[5] In spite of this impressive amount of research, however, the continuity I sensed with

[2] Miyashita Saburō, "Sō Gen no iryō," in *Sō Gen jidai no kagaku gijutsushi*, ed. Yabuuchi Kiyoshi (Kyōto: Kyōto Daigaku Jinbun Kagaku Kenkyūjo, 1967), 123–70.
[3] Paul U. Unschuld, *Medicine in China: A History of Ideas*, 2nd ed. (University of California Press, 2010).
[4] Ishida Hidemi, *Chūgoku Igaku Shisōshi: Mō Hitotsu No Igaku*, Shohan, Tōyō Sōsho 7 (Tōkyō: Tōkyō Daigaku Shuppankai, 1992).
[5] Robert Hymes, "Not Quite Gentlemen? Doctors in Sung and Yuan," *Chinese Science*, no. 8 (1987): 9–76; Chen Yuanpeng, *Liang song de "shangyi shiren" yu "ruyi"* (Taibei: Wenshi Congkan, 1997); Asaf Goldschmidt, "The Transformations of Chinese Medicine During the Northern Song Dynasty (A.D. 960--1127): The Integration of Three Past Medical Approaches into a Comprehensive Medical System Following a Wave of Epidemics" (Ph.D., University of Pennsylvania, 1999); Asaf Goldschmidt, "Changing Standards: Tracing Changes in Acu-Moxa Therapy during the Transition from the Tang to the Song Dynasties," *East Asian Science, Technology, and Medicine*,

the *Treatise* remained unexplained. Even the concrete evidence of this continuity, seen in the numerous references to the *Treatise* and its medicinal formulae in other medical texts, appeared largely unrecognized. My curiosity remained unquenched.

This dissertation is the result of my efforts to clarify and make sense of what was initially a very personal and visceral recognition of an unresolved problem. Over the course of my research that initial perplexity was refined into ever more precise questions, but my goal has remained to understand more clearly the place of the *Treatise on Cold Damage* in the transformation of Chinese learned medicine between the Song and Yuan dynasties. The questions I am asking relate to the literate medical tradition and not to the myriad forms of folk healing, ritual healing, devotional healing, etc. that were always part of the Chinese healthcare marketplace. For that reason, I have not included these other domains of healthcare within the scope of this dissertation. In doing so I am in no way implying that these other forms of healing were unimportant—they were clearly widespread and influential in the period I am studying. They simply fall beyond the purview of my work.

This dissertation is divided into two parts and five chapters. The first part places the *Treatise on Cold Damage* in its historical context. The introduction to Part One introduces the *Treatise* and its basic history as well as the illness it is devoted to describing: "cold damage (*shanghan* 傷寒)." Chapter 1 reexamines the changing status of the *Treatise* in the Song by tracing the development of cold damage studies from the Han (206 BCE-220 CE) through the

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no. 18 (2001): 75–111; Asaf Goldschmidt, "The Song Discontinuity: Rapid Innovation in Northern Song Dynasty Medicine," *Asian Medicine: Tradition and Modernity* 1, no. 1 (2005): 53–90; Asaf Goldschmidt, "Huizong's Impact on Medicine and on Public Health," in *Emperor Huizong and Late Northern Song China: The Politics of Culture and the Culture of Politics*, ed. Patricia Ebrey and Maggie Bickford (Harvard University Asia Center, 2006), 275–323; Asaf Goldschmidt, "Epidemics and Medicine during the Northern Song Dynasty: The Revival of Cold Damage Disorders (Shanghan)," *T'oung Pao* 93, no. 1 (March 2007): 53–109; Asaf Goldschmidt, "Commercializing Medicine or Benefiting the People – The First Public Pharmacy in China," *Science in Context* 21, no. 3 (2008): 311–50; Asaf Goldschmidt, *The Evolution of Chinese Medicine: Song Dynasty, 960-1200* (New York: Routledge, 2008).

Song. I argue that an inadequate understanding of the *Treatise*'s situation before the Song has led to an incorrect understanding of what occurred during the Song. The *Treatise* did not experience a "renaissance" or "revival," because it was always a highly valued text. Rather it changed from being one of many texts on cold damage to being the only authoritative text on cold damage, but this narrowing of vision counter-intuitively led to a flowering of writing about cold damage unlike any previously seen. Chapter 2 introduces the Song Dynasty and its history. The Song is one of the most important periods of change in Chinese history, and this chapter outlines the transformations most relevant to the topic of this dissertation—those in the social, epidemiological, and medical realms. Chapter 3 introduces a new perspective on the medical changes that occurred in the Song. I demonstrate that the Song elite's well-known "interest" in medicine was in fact a fear of poor medical treatment. "Common physicians (*shiyi* 世醫)," the literate but sub-elite practitioners who dominated textually based medicine in the Song, came to be seen as incompetent and unethical by an elite that had lost faith in the foundations of contemporary medical knowledge and practice. The search for solutions to this problem was one of the driving forces behind the changing landscape of text-based medicine up through the Yuan. Supporters of one of the proposed solutions advocated for the development of a form of medicine practiced by elite men. I call that medicine "literati-physician medicine." Supporters of literati-physician medicine were responsible for elevating the *Treatise on Cold Damage* to the new position it attained in this period. Part Two of the book is devoted to explaining why literati physicians found the *Treatise* useful. It begins by presenting two useful theoretical perspectives by which I analyze literati-physician medicine. Chapter 4 then discusses how literati physicians made use of the *Treatise* in their many social interactions. I contend that the *Treatise* was useful in arguing for literati-physician medicine both within society broadly and within the particular

context of clinical encounters, where physicians had to win the trust of patients and their family. Chapter 5 turns to the more explicitly medical benefits the *Treatise* provided to its supporters. I show that the overarching problematic that concerned both literati physicians and elite non-physicians was the complexity and changeability of illness. The *Treatise on Cold Damage* provided a model for how to cope with the protean character of illness. It offered both a means of learning how to treat illness and a base from which to develop literati-physician medicine further. It therefore came to be seen as the most fundamental text for all of medical practice—not merely for treating cold damage. In the conclusion I return to the issue of continuity and rupture. Literati-physician medicine ultimately succeeded in dominating the field of learned medicine, and the *Treatise on Cold Damage*, by this time its most essential text, thus became central to textually based medicine in China generally. I argue that since the Song, Chinese physicians have continued to see complexity and mutability as the central problematic of medicine, and therefore the *Treatise* has remained central to their education, practice, and innovation.

PART ONE
The *Treatise on Cold Damage* and the Song Dynasty

To a great degree, the history I am presenting hinges on the nosological entity, cold damage. Although this is not a history of cold damage, a good deal of that history is included here, often for the first time. Like most terms, cold damage was not completely stable over time. Its meaning shifted in important ways. The reader will discover many of these shifts in later chapters; for the moment it is adequate to understand the basic meaning that cold damage carried throughout most of this period.

At its simplest, cold damage was a generic term for any acute, potentially epidemic, febrile illness. Cold damage was understood as an illness caused by invasion of external, climatic cold during the winter. This cold initially lodged on the surface of the body, trapping the body's native heat in the interior and thereby causing fever. Not all cold invasions led to an immediate illness, however. In some cases, the cold entered the interior of the body and hid. During spring or summer, the warmth of the weather would cause the cold to transform into heat and manifest itself as an illness characterized by a more severe fever. Regardless of whether the illness manifested immediately or only after some time, all of these illnesses were categorized as cold damage. After its initial manifestation, cold damage usually moved deeper into the body, causing a variety of different symptoms. The *Treatise on Cold Damage* presented a method of understanding, anticipating, and treating the various transformations of cold damage disease.

The *Treatise* began its life as part of the larger text, the *Treatise on Cold Damage and Miscellaneous Diseases* (*Shanghan zabing lun* 傷寒雜病論) that included information on all types of illness and was divided into two large sections, one covering cold damage and another covering all other types of illness, collectively known as miscellaneous diseases (*zabing* 雜病). It

was composed by the late Han dynasty (206 BCE-220 CE) physician Zhang Ji (張機, styled Zhongjing 仲景, ca. 150-219). Little is known about Zhang Ji's life. The preface of the text, now part of the *Treatise*, reveals only that he saw himself as part of the elite stratum of society (*shi* 士) and that he belonged to a large clan.[6] The earliest reference to Zhang Ji is provided by Huangfu Mi (皇甫謐, ca. 215-287), who recounts an anecdote regarding Zhang Ji's medical skill in the preface to his *Systematic Classic of Acumoxa* (*Zhenjiu Jiayi Jing* 針灸甲乙經, completed between 256-282). Huangfu Mi concludes by stating, "Zhongjing expanded on Yi Yin's [*Classic of*] *Decoctions* and composed several tens of fascicles using his extensive experience."[7] Neither the *Records of the Three Kingdoms* (*Sanguozhi* 三國志, 297) nor the *History of the Latter Han* (*Hou Hanshu* 後漢書, 445) mentions Zhang Ji. The earliest discussion of Zhang Ji's life is found in the Tang dynasty (618-907) *Records of Famous Physicians* (*Mingyi zhuan* 名醫傳, date unclear) by Gan Bozong (甘伯宗, dates unclear). This text is now lost, save for a handful of fragments preserved in other works. Among these fossilized fragments is a biography of Zhang Zhongjing quoted in the preface to the Song dynasty edition of the *Treatise*: "[Zhang Zhongjing was] a person from Nanyang 南陽 [in modern Henan province]. His given name was Ji. Zhongjing was only his style-name. He was selected for office on the basis of merit and served as an official in Changsha as the Grand Protector. He first received his [medical] skills from Zhang Bozu, who was from the same prefecture [as Zhongjing]. People at the time said the subtlety of his knowledge and skill surpassed his teacher. In the treatise he authored, his words

[6] The authorship of the preface of the *Shanghan lun* is complicated. Few scholars now accept the entire preface as the work of Zhang Ji. The portion I cite here, however, genreally accepted as authentic; see, Fu Yanling, *Zhang Zhongjing yixue yuanliu* (Beijing: Zhongguo Yiyao Keji Chubanshe, 2006), 158–159.
[7] In Huangfu Mi, *Zhenjiu jiayi jing jiaozhu*, ed. Xu Guoqian and Zhang Canjia, Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1996), 16–17. All translations my own unless otherwise noted.

are concise yet profound, his methods simple yet thorough."[8] Later biographies of Zhang Ji based themselves on this discussion and add nothing significant to our knowledge of his life.

The *Treatise on Cold Damage* was eventually separated from the remainder of the *Treatise on Cold Damage and Miscellaneous Diseases* and circulated independently. The section of the text devoted to miscellaneous diseases survives only in an abbreviated form as *Essentials of the Golden Coffer* (*Jingui yaolue* 金匱要略, ca. 206). Zhang Ji's authorship of the *Essentials of the Golden Coffer*, as it currently exists, is generally accepted, with the limitation that the text has undergone serious editing by unknown hands—as indicated in the title—and was further edited by the Song dynasty editorial committee.[9] The authorship of the received *Treatise* is more complicated. The Song dynasty edition, from which almost all extant editions descend, is divided into ten fascicles and twenty-two chapters. Zhang Ji's authorship of the fifth to the fourteenth chapters is almost universally accepted. The authorship of the first four chapters is disputed, and the last eight chapters are generally considered to be additions to the text made after the time of Zhang Ji.[10]

The chapters to follow in Part One set the stage for the larger argument I am making. Chapter 1 presents a new interpretation of the history of cold damage studies and the place of the *Treatise* in it. A lack of information on the period between the Han and the Song has produced a number of erroneous viewpoints on the *Treatise*'s history. If we are to understand the transformation of its status during the Song and the role it played in the medical history of the

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[8] In Zhang Ji, *Zhongjing quanshu zhi Shanghan lun, Jingui yaolue fanglun*, ed. Zhang Xinyong (Beijing: Zhongyi Guji Chubanshe, 2010), 307.

[9] In this dissertationicular, the final three chapters of the *Jingui yaolue* are suspect. The Song editors extracted this text from a larger text called the *Essentials of the Formulary of the Golden Coffer and Jade Case* (*Jingui yuhan yaolue fanglun* 金匱玉函要略方論). The term "golden coffer (*jingui* 金匱)" was frequently used to refer to the works of Zhang Ji and the phrase "jade case (*yuhan* 玉函)" often indicated the works of Ge Hong (葛洪, 283-343), and these chapters contain material similar to that found in Ge Hong's known works. This has led many scholars to suspect the final three chapters derive from a Ge Hong-inspired tradition, and not from Zhang Ji or his students.

[10] Gu Wujun, *Shanghan lun qiushi gouxuan* (Beijing: Xueyuan Chubanshe, 2006), 351–352.

period, we must first understand clearly what actually happened. Chapter 2 contextualizes the present study by summarizing previous research on the social, epidemiological, and medical changes that occurred during the Song Dynasty. Finally, Chapter 3 examines the state of medicine in the Northern Song (960-1127), paying particular attention to the motivations that led both the Song government and many private gentlemen to take an interest in or even take up the practice of medicine.

CHAPTER 1
A Narrowing of Vision, a Broadening of Discourse: Cold Damage Studies before and after 1065

The Song dynasty has long been recognized as a watershed in Chinese medical history. The upsurge in writing on cold damage—a category of potentially epidemic febrile illnesses[11]—is one of the more significant changes scholars have recognized in the medical literature of the Song.[12] At the center of this upsurge was the Han dynasty (206 BCE-220 CE) *Treatise on Cold Damage* composed by Zhang Ji around the year 206. Following the Song government's editing, printing, and distribution of this text in 1065, the production of medical texts devoted to cold damage studies (*shanghanxue* 傷寒學)[13] increased dramatically. In the 214 years between 1065 and the end of the Song dynasty, 75 texts are known to have been composed on the *Discourse*, compared to a mere eleven in the 105 years from the beginning of the dynasty to 1065.[14] Studies of Song medicine have described this phenomenon as a "revival of cold damage disorders" after an extended period of neglect or a "renaissance" of the *Treatise on Cold Damage*.[15] This chapter draws on pre-Song medical texts and on Song medical texts produced earlier than 1065 to challenge this characterization of cold damage studies in the Song dynasty and before. I argue that the study of cold damage illnesses and their treatment was a flourishing part of learned medicine in China prior to the Song, and the *Treatise on Cold Damage* was always a valued part

[11] This characterization of cold damage illnesses is open to debate, this dissertationicularly from the point of view of many Ming dynasty (1368-1644) and later authors, but this characterization accurately portrays what authors from the Song to the Yuan saw as the most basic and important features of cold damage.
[12] E.g., Miyashita Saburō, "Sō Gen no iryō"; Ishida Hidemi, *Chūgoku Igaku Shisōshi*; Unschuld, *Medicine in China*; Goldschmidt, *Evolution*.
[13] I take this term from Li Maoru and Ren Yingqiu both of whom argued for the existence of a broad pre-Song cold damage studies tradition on the basis of material in the works of Sun Simiao 孫思邈 (d. 682) and Wang Tao 王燾 (692-756), see, *Yiji Xulu Ji* (Beijing: Zhongyi Guji Chubanshe, 2009), 82; Ren Yingqiu, "Shilun gudai zhi 'shanghanxue' de gaikuang ji qi liupai de xingcheng," in *Dangdai mingyi lun Zhongjing shanghan*, ed. Liu Shi'en and Mao Shaofang (Beijing: Xueyuan Chubanshe, 2008), 127–131.
[14] Based on a count of texts recorded in Okada Kenkichi et al., *Sō izen shōkanron kō* (Ichikawa-shi: Toyo Gakujutsu Shuppansha, 2007); and Wang Ruixiang and Wei Wang, eds., *Zhongguo guyiji shumu tiyao* (Beijing: Zhongyi Guji Chubanshe, 2009).
[15] E.g., Goldschmidt, "Epidemics and Medicine"; Unschuld, *Medicine in China*, 169.

of that tradition. The notion of a "revival" or "renaissance" is therefore untenable. Furthermore, the upsurge in writing on cold damage was in fact an upsurge in writing about a single text, the *Treatise on Cold Damage*, chosen from a previously far more diverse tradition of texts on cold damage studies. From the Song onward, the *Treatise* became the single most written-about text in the Chinese medical literary corpus. The question which we must answer, therefore, is not why cold damage studies increased in importance during the Song dynasty, but why the *Treatise on Cold Damage* became so central to cold damage studies and to literate Chinese medicine as a whole.

This chapter is divided into three sections. The first explores the tradition of cold damage studies before the Song dynasty. The relative lack of sources from this period has contributed to its general neglect, but a meaningful analysis of cold damage studies in the Song cannot be made without understanding what went before. Fortunately, a combination of manuscript discoveries—both in Japan and in the Dunhuang manuscripts—and the reconstruction of texts from quotations preserved elsewhere has recently made it possible to form a reliable picture of cold damage studies in this period. The second section discusses the *Treatise on Cold Damage* during the Song before its 1065 imperial publication. Although once again sources are limited, careful study reveals far more variation in the text of the *Treatise* than previously recognized. The final section surveys cold damage studies from 1065 to approximately 1350, examining the consequences of the imperial publication of the *Treatise* and the changed character of cold damage studies. This chapter concludes by raising basic questions about the changed status of the *Treatise on Cold Damage* which the remainder of this dissertation will seek to answer.

SECTION ONE: Cold Damage Studies Prior to the Song

In order to understand the changes which occurred in the cold damage studies tradition during the Song, it is first necessary to understand that tradition prior to the Song and Zhang Ji's place within it. I begin with an inventory of known texts from the pre-Song cold damage studies tradition and then examine their content and structure before concluding with a discussion of how pre-Song cold damage studies authors viewed Zhang Ji and his work.

An Inventory of Sources for Pre-Song Cold Damage Studies

The sources for a pre-Song history of cold damage studies do not at first appear rich. The received tradition comprises only nine relevant texts: the *Yellow Emperor's Inner Classic* corpus,[16] the *Treatise on Cold Damage* itself and its variant edition the *Classic of the Golden Coffer and Jade Case* (*Jingui yuhan jing* 金匱玉函經), Wang Shuhe's (王叔和, 201-280) *Classic of the Pulse* (*Maijing* 脈經, 280), Ge Hong's (葛洪, 280-343) *Formulae to Keep Close at Hand* (*Zhouhou fang* 肘後方, 315),[17] Chao Yuanfang's (巢元方, fl. early 7th c.) *Treatise on the Origins and Signs of Diseases* (*Zhubing yuanhou lun* 諸病源候論, 610), Sun Simiao's (孫思邈, d. 682) *Formulae Worth a Thousand Gold* (*Qianjin yaofang* 千金要方, 652) and *Further Formulae Worth a Thousand Gold* (*Qianjin yifang* 千金翼方, 681), Wang Tao's (王燾, ca. 692-756) *Secret Essentials of the Outer Terrace, 752*), and the Tamba Yasuyori's (丹波康賴, 912-995) Japanese medical compendium, *Formulae at the Heart of Medicine* (*Ishinpō* 醫心方, 982).

[16] I borrow this term from David Keegan who uses it to describe the corpus of material from which the various extant texts bearing the title *Huangdi neijing* were compiled; see David Joseph Keegan, "The 'Huang-Ti Nei-Ching': The Structure of the Compilation; the Significance of the Structure" (PhD Dissertation, University of California, Berkeley, 1988).

[17] *Formulae to Keep Close at Hand* has a this dissertationicularly convoluted textual history and the extant version was edited and altered by Tao Hongjing 陶弘景 (456-563) and Yang Yongdao 楊用道 (fl. 12th c.).

These nine, however, give access to a wider field. Leaving aside the *Inner Classic* corpus, the *Treatise* itself, and the *Classic of the Golden Coffer and Jade Case*, the remaining six texts were primarily composed by compilation from identifiable earlier texts. They therefore present a far broader picture of pre-Song cold damage studies than their numbers suggest. Of the six, the *Classic of the Pulse*, though the earliest, is the least useful, both because it rarely identifies its sources and because the extant edition's Song dynasty editors found it necessary to draw extensively upon other texts to correct and complete their edition.[18] *Formulae Worth a Thousand Gold in Emergencies* names four sources for cold damage study, and *Further Formulae Worth a Thousand Gold* contains an important variant edition of the *Treatise*. *Secret Essentials of the Outer Terrace* contains the richest material on pre-Song cold damage studies, identifying eleven more sources. *Formulae at the Heart of Medicine*, though written in the early Song dynasty, is a compendium of the pre-Song medical knowledge then known in Japan. It mentions six further texts not mentioned in the earlier sources.

In addition to these sources from the received tradition, seven recovered texts—three discovered in Japan, the other four among the Dunhuang manuscripts—have greatly enriched our understanding of cold damage studies prior to the Song. The first, the *Short Essay on Classical Formulae* (*Jingfang xiaopin* 經方小品, also known as *Xiaopin fang* 小品方, ca. 454-473), was previously known only from quotations in the sources listed above. The discovery in Japan of a manuscript copy of the first fascicle, including a table of contents, has greatly facilitated the reconstruction of this text. The *Short Essay* is particularly valuable since Tang dynasty physicians held it in as much esteem as the works of Zhang Ji. Its loss was lamented by the Song editors of the *Treatise* because it provided "a contrast to Zhongjing 仲景之比也," and it was

[18] Song editors' preface, in Wang Shuhe, *Maijing jiaozhu*, ed. Shen Yannan and Du Tongfang, Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1991), 13–14.

cited even more frequently than Zhang Ji in *Formulae Worth a Thousand Gold*.[19] Japanese scholars have also brought to light two pre-Song editions of the *Treatise*, the *Kōji* edition (康治本, 805) and the *Kōhe*i edition (康平本, prior to 806),[20] which provide invaluable information on the *Treatise* during the Sui (581-619) and Tang (619-907). *Helpful Instructions on Methods for Using Medicinals According to the Viscera and Bowels* (*Fuxingjue zangfu yongyao fa* 輔行訣臟腑用藥法) by Tao Hongjing (陶弘景, 456-563), was discovered among the Dunhuang manuscripts and has shed light not only on cold damage studies in Tao's time, but also—by preserving material from the otherwise lost Han dynasty text, *Canonical Method of Decoctions* (*Tangye jingfa* 湯液經法)—on the sources that Zhang Ji used in composing the *Treatise*. The Dunhuang manuscripts also contain three fragments of variant editions of the *Treatise* enriching our knowledge of its status during the Sui and Tang.

These sources, and the sources they in turn cite, are tabulated below (Table 1-1). They allow us to construct a picture of cold damage studies before the Song, which, if incomplete, is nonetheless highly informative. The first point—which they make clear by their sheer number, 37 in all, and the continuity of their composition from the beginning of the common era up through the Tang—is that cold damage studies in this long time-span was never a minor or neglected field of medical endeavor. On the contrary, it was a thriving tradition represented by many figures other than Zhang Ji, and it consistently attracted the attention of medical authors. In the English-language scholarship, previous estimates of the size of the pre-Song cold damage studies corpus have been hampered by a focus on texts devoted exclusively to cold damage

[19] *Qianjin yaofang*, postface, in Sun Simiao, *Sun Simiao yixue quanshu*, ed. Zhang Yinsheng and Han Xuejie (Beijing: Zhongguo Zhongyiyao Chubanshe, 2009), 560.
[20] This date, taken from, Qian Chaochen, *Shanghan lun wenxian tongkao* (Beijing: Xueyuan chubanshe, 1993), 663–664, is still speculative. It is based on an analysis of the movement of Chinese books into Japan. Internal textual evidence, however, confirms that this edition was produced following the beginning of the Sui and prior to the beginning of the Song.

studies,[21] a genre almost non-existent prior to the Song. Even the *Treatise* itself was originally part of the larger *Treatise on Cold Damage and Miscellaneous Diseases*, which included material on a variety of different types of illness. Compilations and compendia were the medical genres of choice in this era, and an examination of these genres reveals the richness of cold damage studies before the Song.

Text	**Author**	**Extant?**[22]
Yellow Emperor's Inner Classic corpus	Unknown (1st c. BCE)	yes
Canonical Method of Decoctions (*Tangye jingfa* 湯液經法)	Attributed to Yiyin 伊尹	partial
Great Treatise on Yin and Yang (*Yinyang dalun* 陰陽大論)	Unknown	no
Classic of Difficulties (*Nanjing* 難經)	Unknown (ca. 1st c.)	yes
Treatise on Cold Damage (*Shanghan lun* 傷寒論)	Zhang Ji 張機 (ca. 150-219)	yes
Classic of the Golden Coffer and Jade Case (*Jingui yuhan jing* 金匱玉函經)	Zhang Ji 張機 (ca. 150-219)	yes
Classic of the Pulse (*Maijing* 脈經)	Wang Shuhe 王叔和 (201-280)	yes
Formulae to Keep Close at Hand (*Zhouhou fang* 肘後方)	Ge Hong 葛洪 (280-343), Tao Hongjing 陶弘景 (456-563), Yang Yongdao 楊用道 (fl. 12th c.)	yes
Various	Hua Tuo 華佗 (fl. 2nd c.)	partial
Unknown	Chen Linqiu 陳廩丘 (fl. 4th c.)[23]	no
Fan Wang's Formulae (*Fan Wang fang* 范汪方)	Fan Wang 范汪 (fl. late 4th c.)	no

(continued on next page)

Table 1-1: Sources for Pre-Song Cold Damage Studies

[21] E.g., Goldschmidt, "Epidemics and Medicine," 59.

[22] This column indicates whether the text is extant as a separate text. All of these texts are at least extant as fragments quoted in other sources. Those labeled, "partial," are extant as large fragments, independently or in other texts.

[23] Some scholars suspect this is simply another name of Chen Yanzhi, due to similarities found between the materials attributed to Chen Linqiu and Chen Yanzhi's *A Short Essay on Classical Formulae*.

A Short Essay on Classical Formulae (*Jingfang xiaopin fang* 經方小品)	Chen Yanzhi 陳延之 (ca. late 4th-early 5th c.)	partial
Formulae of Teacher Shen (*Shenshi fang* 深師方)	Monk Shen 釋僧深 (fl. 5th c.)	no
Dunhuang *Treatise on Cold Damage* fragment A	Zhang Ji 張機 (ca. 150-219)	yes
Helpful Instructions on Methods for Using Medicinals According to the Viscera and Bowels (*Fuxingjue zangfu yongyao fa* 輔行訣臟腑用藥法)	Attributed to Tao Hongjing 陶弘景 (456-563)	yes
Collected Efficacious Formulae (*Ji yanfang* 集驗方)	Yao Sengyuan 姚僧垣 (499-583)	no
Records of Effective Formulae from the Past and Present (*Gujin luyan* 古今錄驗)	Unknown	no
Zhang Wenzhong's Formulae (*Zhang Wenzhong fang* 張文仲方)	Zhang Wenzhong 張文仲 (dates unclear)	no
Treatise on the Origins and Signs of Diseases (*Zhubing yuanhou lun* 諸病源候論)	Chao Yuanfang 巢元方 (fl. early 7th c.)	yes
Kōhei edition (康平本) of the *Treatise*	Zhang Ji (ca. 150-219)	yes
Essential Formulae Worth a Thousand Gold (*Qianjin yaofang* 千金要方)	Sun Simiao 孫思邈 (d. 682)	yes
Further Formulae Worth a Thousand Gold (*Qianjin yifang* 千金翼方)	Sun Simiao 孫思邈 (d. 682)	yes
Dunhuang *Treatise on Cold Damage* fragment B	Zhang Ji 張機 (ca. 150-219)	yes
Dunhuang *Treatise on Cold Damage* fragment C	Zhang Ji 張機 (ca. 150-219)	yes
Effective Formulae from Recent Times (*Jinxiao fang* 近效方)	Unknown	no
Formulae in Preparation for Emergencies (Beiji fang 備急方)	Wang Fangqing (王方晴, dates unclear)[24]	no
Mr. Cui's Formulae (*Cuishi fang* 崔氏方)	Mr. Cui 崔氏 (dates unclear)	no
Record of the Heart of the Classics (*Jingxin lu* 經心錄)	Unknown	no
Secret Essentials of the Outer Terrace (*Waitai miyao* 外台秘要)	Wang Tao 王燾 (ca. 692-756)	yes
Kōji edition (康治本) of the *Treatise*	Zhang Ji (ca. 150-219)	yes
Formulae for Physicians (*Yimen fang* 醫門方)	Unknown	no
Newly Recorded Formulae (*Xinlu fang* 新錄方)	Unknown	no
Formulae of the Jade Text (*Yuji fang* 玉籍方)	Unknown	no
Essential Record of the Jade Text (*Yuji yaolu* 玉籍要錄)	Unknown	no
Collected Essentials on Nourishing Life (*Yangsheng yaoji* 養生要集)	Unknown	no
Penetrating the Obscure (*Tongxuan* 通玄)	Unknown	no
Formulas at the Heart of Medicine (*Ishinpō* 醫心方)	Tamba Yasuyori 丹波康賴 (912-995)	yes

Table 1-1: Sources for Pre-Song Cold Damage Studies

[24] There is some dispute surrounding the authorship of this book, see Wang Tao, *Wang Tao yixue quanshu*, ed. Zhang Dengben (Beijing: Zhongguo Zhongyiyao Chubanshe, 2006), 1072–1073; and Okanishi Tameto, *Sō izen iseki kō* (Beijing: Xueyuan Chubanshe, 2010), 562–563.

The Contents of Cold Damage Studies Prior to the Song

With the sources inventoried above, it is possible to construct a reasonably accurate, if limited, picture of cold damage studies prior to the Song. Paul Unschuld and Asaf Goldschmidt argue that the use of medicinals prior to the Song was doctrinally simple or "pragmatic" and that diagnosis was "symptom-centered." The *Treatise*, they hold, was unique among pre-Song texts in combining the doctrinally rich ideas of the *Yellow Emperor's Inner Classic* corpus with drug therapy.[25] Both the notion that there are "pragmatic" approaches to health and healing that do not rest on culturally specific understandings and the idea that symptoms are not doctrinally rich entities have been disputed by a great deal of research in medical history and anthropology. Theoretical arguments aside, however, the surviving texts from the pre-Song cold damage studies reveal a tradition that is both doctrinally rich and diverse.

Particularly to readers accustomed to post-1065 cold damage studies, the overwhelming impression received from the pre-Song material is one of astonishing diversity. While dispute and disagreement are far from uncommon in the post-1065 tradition, the range of variation seen before the Song dwarfs that found in the post-Song tradition. This diversity can be seen in all aspects of the pre-Song approach to cold damage illnesses.

In terms of etiology and nosology, the *Treatise on Cold Damage* differentiates cold damage from illnesses due to seasonal *qi* (*shiqi bing* 時氣病)—the untimely arrival of cold or warmth throughout the year which was held to precipitate epidemics—also known as seasonal-movement illness (*shixing bing* 時行病) or heavenly movement illness (*tianxing bing* 天行病).[26] While this point of view is shared by the majority of surviving cold damage texts, there were differences of opinion. Chen Yanzhi (陳延之, ca. late 4th-early 5th c.), in his *Short Essay on*

[25] Unschuld, *Medicine in China*, 111–116, 167; Goldschmidt, *Evolution*, 142–146.
[26] *Shanghan lun*, *juan* 2, *pian* 3, p. 2b, in Zhang Ji, *Zhongjing quanshu*, 349.

Classical Formulae laments other authors' failure to distinguish cold damage from heavenly-movement warm epidemics (a subset of heavenly-movement illnesses):

> From the past up to today, it has been said that cold damage is an illness which is difficult to treat. Seasonal movement warm epidemics are the *qi* of toxic illness. But those who discuss them do not distinguish that cold damage and seasonal movement warm epidemics are different [types of] *qi*. They say that cold damage is merely the word [used by] refined scholars, while heavenly movement warm epidemic is the name [used] among farming families. They do not explain the differences and similarities of the illnesses.[27]
> 古今相傳, 稱傷寒為難治之疾, 時行溫疫是度病之氣, 而論之者不判傷寒與時行溫疫為異氣耳, 云傷寒是雅士之辭, 天行溫疫是田舍間號耳, 不說病之異同也。

Chen's complaint may have referred to Ge Hong's *Formulae to Keep Close at Hand*, which states,

> Cold damage, seasonal-movement, and warm epidemic, these three names [refer to] one type [of illness]… Moreover, in noble and refined speech, they are collectively called cold damage; the commoners' customary name [for them] is seasonal movement; and the words inscribed on Daoist talismans, the five warmths, is also different.
> 傷寒、時行、溫疫、三名, 同一種耳, 而源本有小異… 又貴勝雅言總名傷寒, 世俗因號為時行, 道術符刻言五溫亦復殊。

Following his own advice, Ge's text groups cold damage and seasonal-movement illness together in a single section of the text and rarely differentiates them when discussing their treatment.[28]

Similarly, the *Inner Classic*, the *Treatise*, and all other extant texts from this period argue that—assuming they are not caused by seasonal *qi*—febrile illnesses in seasons other than winter are nonetheless forms of cold damage: "As for febrile illnesses, they are all part of the category of cold damage 夫熱病者, 皆傷寒之類."[29] The cold *qi* of winter hides in the body and come forth in the spring or summer as a warm disease (*wenbing* 溫病) or hot disease (*rebing* 熱病).

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[27] *Juan* 6, *zhi dongyue shanghan zhufang*, in Yan Shiyun and Li Qizhong, eds., *Sanguo liang Jin Nanbeichao yixue zongji* (Beijing Shi: Renmin weisheng chubanshe, 2009), 810.
[28] *Juan* 2, *pian* 13, in Ge Hong, Tao Hongjing, and Yang Yongdao, *Buji Zhouhou fang*, ed. Shang Zhiyun (Hefei: Anhui Kexue Jishu Chubanshe, 1996), 52–64.
[29] *Huangdi neijing suwen*, *pian* 31, in Wang Bing, *Wang Bing yixue quanshu*, ed. Zhang Dengben and Sun Lijun (Beijing: Zhongguo Zhongyiyao Chubanshe, 2006), 156.

The *Treatise on the Origins and Signs of Diseases*, however, which combines material from many texts without naming its sources, mentions an illness named winter warmth (*dongwen* 冬溫) which it indicates is distinct from both cold damage and seasonal *qi* illness. Like Chen Yanzhi's complaint, this suggests the existence of differing points of view which have now been lost.

More explicit disagreement appears in discussions of the signs and symptoms of cold damage. Both the *Treatise on the Origins and Signs of Diseases* and *Formulae to Keep Close at Hand* emphasize that a surging or large pulse is indicative of cold damage:

> A flooding and large pulse with fever, this is cold damage disease.[30]
> 脈洪大者, 有熱, 此傷寒病也。

> To treat cold damage, seasonal *qi*, and warm disease with headache, vigorous fever, and a large pulse on the first day of contracting [the illness]…[31]
> 治傷寒及時氣、溫病, 及頭痛, 壯熱, 脈大, 始得一日…

By contrast, the *Treatise on Cold Damage* describes the earliest stages of cold damage, which it labels, "greater yang disease (*taiyang bing* 太陽病)," as presenting with a floating pulse: "When greater yang is ill, there is a floating pulse, a stiff and aching nape and head, and aversion to cold 太陽之為病，脈浮，頭項強痛，而惡寒."[32] The vigorous fever described in *Formulae to Keep Close at Hand* also differs from the indications mentioned in the *Treatise*, which maintains that fever is not necessarily present in the earliest stages of cold damage: "In greater yang disease, whether there is already a fever or not, there must be aversion to cold… 太陽病, 或已發熱或不發熱, 必惡寒…"[33]

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[30] *Zhubing yuanhou lun*, juan 7, *shanhan bing zhuhou shang*, *shanghan hou*, in Chao Yuanfang, *Zhubing yuanhou lun jiaozhu*, ed. Ding Guangdi and Ni Hexian, *Zhongyi guji zhengli congshu* (Beijing: Renmin Weisheng Chubanshe, 1992), 233.
[31] *Zhouhou fang*, *pian* 13, in Ge Hong, Tao Hongjing, and Yang Yongdao, *Buji Zhouhou fang*, 56.
[32] *Juan* 3, *pian* 5, p. 12, line 1, in Zhang Ji, *Zhongjing quanshu*, 359.
[33] *Juan* 3, pian 5, p. 12, line 3, in ibid.

Even greater differences are found in discussions of diagnosis and a given illness's location within the body. The *Treatise* famously uses the three yin and three yang (*sanyin sanyang* 三陰三陽) to differentiate the stages of cold damage. In their traditional order, the three yin and three yang are: greater yang, yang-brightness (*yangming* 陽明), lesser yang (*shaoyang* 少陽), greater yin (*taiyin* 太陰), lesser yin (*shaoyin* 少陰), and reverting yin (*jueyin* 厥陰). These are correlated with the acupuncture channels of the body, which are also divided up according to the three yin and three yang. In general, this sequence proceeds from shallower levels of the body to deeper levels and from less severe illness to more severe.[34] An identical sequence of three yin and three yang is described in the *Inner Classic* and the *Treatise on the Origins and Signs of Diseases*, but the signs and symptoms associated with each level and the treatment methods applied differ greatly from those in the *Treatise*. Moreover, the *Inner Classic* and the *Treatise on the Origins and Signs of Diseases* assert that cold damage moves deeper by one level each day, such that diagnosis is based largely on the number of days which have passed since the illness began.[35] The *Treatise*, on the other hand, leaves open the possibility that an illness might move more or less quickly through the three yang and three yin, and emphasizes diagnosis by examination of the pulse, signs, and symptoms, as seen in the following lines:

> In cold damage on the first day, the greater yang receives [the illness]. If the pulse is quiescent, then [the illness] has not transmitted [to another channel]. If [the patient] has a slight urge to vomit, is agitated and vexed, and the pulse is rapid and urgent, then [the illness] has transmitted [to another channel].
> 傷寒一日，太陽受之，脈若靜者，為不傳。頗欲吐，若躁煩，脈数急者，為傳也。
>
> In greater yang illness, if there is headache for more than seven days and then it spontaneously resolves, this is because [the illness] has completely traversed the [greater

[34] In this dissertationicular, the characterization of reverting yin as the deepest level is questionable. Both in the *Treatise's* presentation and in the *Inner Classic's* version of the three yin and three yang, reverting yin represents the possibility of recovery.
[35] *Suwen*, *pian* 31, in Wang Bing, *Wang Bing yixue quanshu*, 156–158; *Zhubing yuanhou lun*, *juan* 7, *shanghan bing zhuhou shang*, in Chao Yuanfang, *Zhubing yuanhou lun jiaozhu*, 218–220, 228–235.

> yang] channel. If [the illness] is about to arise in the next channel, then needle the foot yang-brightness [channel]. Prevent the channel from transmitting, and there will be recovery.[36]
> 太陽病, 頭痛至七日以上自愈者, 以行其經盡故也。若欲作再經者, 針足陽明, 使其經不傳則愈。

In the first line, we are informed that even on the first day of a cold damage illness, it is possible for the illness to transmit to another channel. In the second line, we are told that even after the passage of seven days—by which time the *Inner Classic* and *Treatise on the Origins and Signs of Diseases* hold that a cold damage patient is either recovering or repeating the cycle of six channels in a more severe form—an illness may still be in the greater yang channel. In both cases the keys to locating an illness are the pulse, signs, and symptoms, not the number of days since the illness began. Moreover, in other texts the three yin and three yang have no place in diagnosis at all. *Secret Essentials of the Outer Terrace* attributes to Wang Shuhe a passage—found with slight variations in *Essential Formulae worth a Thousand Gold* and the *Types of Cold Damage* section of the *Treatise*—which bases treatment completely on whether the exterior or interior is ill:

> If the exterior is pacified and the interior is ill, purge [the patient] and he will recover; sweat him and he will die. If the exterior is ill and the interior is pacified, sweat [the patient] and he will recover; purge him and he will die.[37]
> 夫表和裏病, 下之而愈, 汗之則死;裏病表和, 汗之而愈, 下之則死。

Both *Secret Essentials* and *Essential Formulae worth a Thousand Gold* also record a passage attributed to Hua Tuo (華佗, fl. 2nd c.) which prescribes treatment based on a combination of day-counts and the progression of the illness through different layers of the body:

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[36] Zhang Ji, *juan* 3, *pian* 5, pp. 12b-13a, lines 4 and 8, in Zhang Ji, *Zhongjing quanshu*, 359–360.
[37] *Juan* 1, *zhulun shanghan bajia*, in Wang Tao, *Wang Tao yixue quanshu*, 48; *Juan* 9, *shanghan li*, in Sun Simiao, *Sun Simiao yixue quanshu*, 182; *Juan* 2, *pian* 3, p. 7a, in Zhang Ji, *Zhongjing quanshu*, 354. This section of the *Treatise* is often considered an addition by Wang Shuhe. In the *Treatise* and *Essential Formulae worth a Thousand Gold* the discussion is phrased in terms of exuberance and vacuity of yin and yang. This is traditionally read as either a reference to the exterior (=yang) and interior (=yin) or to the pulses of the inch and cubit positions which correspond to exterior and interior respectively. Both of these interpretations appear to contradict material elsewhere in the *Treatise*.

> When [a patient] initially contracts cold damage, on the first day it is on the surface; you should massage a paste [into the patient] or use fire and moxabustion and [the patient] will recover. If it does not resolve, on reaching the second day, it is in the skin; you can use the method of needling and [have the patient] take resolve-the-flesh powder (*jieji san* 解肌散). If the sweat comes out, [the patient] will recover. On reaching the third day, it is in the flesh. Induce sweating once more and [the patient] will recover. If it does not resolve, stop and do not again induce sweating. On reaching the fourth day, it is in the chest. It is suitable [for the patient] to take hellebore pill (*lilu wan* 藜蘆丸). Mildly induce vomiting and he will recover. If the illness is severe and hellebore pill is unable to induce vomiting, [have the patient] take red bean and melon stalk powder (*xiaodou guadi san* 小豆瓜蒂散). Induce vomiting and he will recover. If you see that the patient is not yet clear-headed, use the method of needling once more. On the fifth day it is in the abdomen. On the sixth day it enters the stomach. Once it has entered the stomach, you can purge [the patient].[38]
> 夫傷寒始得, 一日在皮, 當摩膏、火灸即愈。若不解者, 至二日在膚, 可法針, 服解肌散發汗, 汗出即愈。若不解者, 至三日在肌, 復一發汗則愈。若不解者, 止, 勿復發汗也。至四日在胸, 宜服藜蘆丸, 微吐則愈。若病困, 藜蘆丸不能吐者, 服小豆瓜蒂散, 吐之則愈。視病尚未醒醒者, 復一法針之。五日在腹, 六日入胃, 入胃則可下也。

Formulae to Keep Close at Hand makes only one brief mention of the three yin and three yang, basing diagnosis on a combination of day counts, signs and symptoms, and whether the illness is located on the exterior or in the interior of the body.[39] Likewise, of the many sources cited in the *Secret Essentials of the Outer Terrace* and *Formulae at the Heart of Medicine*, apart from the *Treatise on Cold Damage*, the *Inner Classic*, and *Treatise on the Origins and Signs of Illnesses*, only the two works of Sun Simiao make use of the three yin and three yang.[40]

Diversity is also found in the form in which treatment is administered to the patient. The *Treatise* overwhelmingly favors the use of medicinal decoctions, making occasional use of powders and pills and even less frequently recommending acupuncture or moxibustion. While most other texts also emphasize medicinal formulae taken orally as the primary treatment for

[38] *Juan* 1, *zhulun shanghan bajia*, in Wang Tao, *Wang Tao yixue quanshu*, 48.
[39] Ge Hong, *Zhouhou fang*, *Juan* 2, *pian* 13, in Ge Hong, Tao Hongjing, and Yang Yongdao, *Buji Zhouhou fang*, 52–64.
[40] Wang Tao, *Waitai miyao*, *juan* 1, in Wang Tao, *Wang Tao yixue quanshu*, 47–68; Tanba Yasuyori, *Ishinpō*, *juan* 14, *pian* 23-59, in Tanba Yasuyori, *Ishinpō*, ed. Wang Dapeng et al. (Shanghai: Shanghai Kexue Jishu Chubanshe, 1998), 592–619.

cold damage, other forms of treatment did exist. *Formulae worth a Thousand Gold* contains three formulae for medicinal pastes which were both taken orally and massaged into the body,[41] *Mr. Cui's Formulae* records a method of steaming a patient and a method of using moxibustion to treat the early stages of cold damage,[42] and the passage attributed to Hua Tuo, translated above, recommends massage, acupuncture, decoctions, pills, and powders for different stages of cold damage.

Finally, even when treating cold damage with orally administered formulae, there is a wide divergence of opinion about which medicinals should be used to treat it. Not only do the specific medicinals chosen differ, but more importantly, the flavor and the *qi*—the degree to which a medicinal warms or cools the body—of the medicinals used also differ. Since at least the time of the *Inner Classic* corpus, flavor and *qi* combinations were an important element of treatment, and since at least the 1st century CE, when the *Divine Farmer's Classic of Materia Medica* (*Shennong bencao jing* 神農本草經) was compiled, flavor and *qi* had been seen as essential qualities of medicinal substances. Table 1-2 lists common formulae used in different pre-Song texts to treat the early stages of cold damage—greater yang disease in the *Treatise's* terms, the first one to two days in those texts which rely on day counts.

[41] *Juan* 9, *shanghan gao disan*, in Sun Simiao, *Sun Simiao yixue quanshu*, 186.
[42] Wang Tao, *Waitai miyao*, *juan* 1, Cuishi fang *yishiwu shou*, in Wang Tao, *Wang Tao yixue quanshu*, 61–62.

Text	Ingredients	Flavor and *Qi*
Treatise on Cold Damage	Cinnamon Twig Decoction (*Guizhi tang* 桂枝湯):	
	Cinnamon Twig (*guizhi* 桂枝, *Cinnamomum cassia*)	acrid, warm*
	Herbaceous Peony (*shaoyao* 芍藥, *Paeonia lactiflora*)	bitter, neutral
	Fresh Ginger (*shengjiang* 生薑, *Zingiber officinale*)	acrid, warm
	Date (*dazao* 大棗, *Ziziphus jujube*)	sweet, neutral
	Honey-fried licorice (*zhi gancao* 炙甘草, *Glycyrrhiza uralensis*)	sweet, neutral
	Ephedra Decoction (*Mahuang tang* 麻黃湯):	
	Ephedra (*mahuang* 麻黃, *Ephedra sinica*)	bitter, warm
	Cinnamon Twig (*guizhi* 桂枝, *Cinnamomum cassia*)	acrid, warm*
	Apricot Kernel (*xingren* 杏仁, *Prunus armeniaca*)	sweet, warm
	Honey-fried Licorice (*zhi gancao* 炙甘草, *Glycyrrhiza uralensis*)	sweet, neutral
Formulae to Keep Close at Hand	Scallion and Fermented Soybean Decoction (*Congchi tang* 蔥豉湯):	
	Scallion Whites (*congbai* 蔥白, *Allium fistulosum*)	acrid, warm
	Fermented Soybean (*chi* 豉, *Glycine max*)	bitter, cold#
Collected Efficacious Formulae	Unnamed Formula:	
	Cinnabar (*zhen dansha* 眞丹砂)	sweet, slightly cold
Formulae of Teacher Shen	Unnamed Formula:	
	Kudzu Root (*gegen* 葛根, *Pueraria lobata*)	sweet, neutral
	Black Plum (*wumei* 烏梅, *Prunus mume*)	sour, neutral
	Scallion Whites (*congbai* 蔥白, *Allium fistulosum*)	acrid, warm
	Fermented Soybean (*chi* 豉, *Glycine max*)	bitter, cold#

Table 1-2: Ingredients Used in Common Pre-Song Formulae to Treat Early-Stage Cold Damage[43]

[43] Species identifications are of the species most commonly used for the given medicinal today. There is reason to believe that the same or closely related species were used for many of these medicinals prior to the Song, but exact identification is impossible. The flavors and *qi* listed here are those found in the *Divine Farmer's Materia Medica* as reconstructed in Shang Zhijun, *Shennong bencao jing jiaozhu* (Beijing: Xueyuan Chubanshe, 2008). *: Cinnamon twig does not appear in the *Divine Farmer's Materia Medica*; the flavor and *qi* listed are for the two other forms of cinnamon which do appear there. #: Fermented soybean is not recorded in the *materia medica* tradition until the slightly later *Further Records of Famous Physicians* (*Mingyi bielu* 名醫別錄), added to the *Divine Farmer's Materia Medica* by Tao Hongjing ca. 500. The flavor and *qi* listed here are those presented by Tao.

The formulae listed in Table 1-2 are far from exhaustive. I have chosen formulae that were popular, as shown by their inclusion in many other texts. As seen above, the *Treatise* shows a pronounced preference for acrid, sweet, and warm combinations of flavor and *qi* when treating newly acquired cold damage. Ge Hong's *Formulae to Keep Close at Hand* is similar, using an acrid and bitter formula, but including medicinals with both warm and cold *qi*. *Collected Efficacious Formulae* is the most unusual, using sweet and cold cinnabar alone, but cinnabar as a treatment for cold damage is frequently seen in the pre-Song literature. Finally, *Formulae of Teacher Shen* combines almost all of the flavors and *qi* possible: sweet, sour, bitter, acrid, warm, and cold. It is not certain that all authors valued the categorization of flavor and *qi* used in the *materia medica* tradition, but the variety of medicinals used reveals the diversity of treatment methods within this tradition, particularly when one realizes that all of these texts agreed that inducing sweat was the goal of treatment in the early stages of cold damage.

Finally, the fragments of the Han dynasty *Canonical Methods of Decoctions* contained in the *Helpful Instructions on Methods for Using Medicinals According to the Viscera and Bowels* are worthy of separate consideration. *Canonical Methods of Decoctions* is first mentioned in the bibliographic section of the *Book of the Han* (*Hanshu* 漢書, 92 CE), in a section labeled "canonical formulae (*jingfang* 經方)" and is said to have contained thirty-two fascicles. The fragments of the *Canonical Methods* found in the *Helpful Instructions*—itself a previously unknown text found at Dunhuang—are its only extant portions. Although Zhang Ji makes no mention of the *Canonical Methods* in his preface, where he lists the sources he used for compiling his text,[44] both Huangfu Mi (皇甫謐, 215-282) in the preface to his *Systematic Classic of Acumoxa* (*Zhenjiu jiayi jing* 針灸甲乙經) and the *Helpful Instructions* assert that Zhang Ji

[44] Moreover, this section of the preface is widely suspected to be a later addition, a suspicion supported by its presentation as commentary in the *Kōhei* edition.

adapted the formulae of the *Canonical Methods* in producing his text. This is confirmed by the fragments of the *Canonical Methods* included in the *Helpful Instructions*, the formulae of which show clear kinship to many of Zhang Ji's formulae in their names, ingredients, preparation, and use.[45] Interestingly, the fragments of the *Canonical Methods* with the greatest similarity to the *Treatise on Cold Damage* refer to neither cold damage nor the theory that cold damage in winter can produce warm or hot illnesses later in the year. Instead, they mention only heavenly-movement illness (*tianxing bing* 天行病), and the names given the formulae—many of which are taken from the cosmic animals associated with the four directions—show a concern for yin and yang as conceived through the four directions, a framework entirely absent in the *Treatise*.[46] This seems to suggest that Zhang Ji adopted the formulae of the *Canonical Methods* but fit them into a doctrinal framework derived from the *Inner Classic* corpus; but too little of the *Canonical Methods* has survived to permit more than conjecture.

The diversity of pre-Song cold damage studies traditions as revealed here further supports the argument that cold damage studies was an active and thriving part of medical thought and practice before the Song. It was certainly not, "A unique approach… that had been virtually lost for eight centuries."[47] Not only was the *Treatise on Cold Damage* far from being the sole representative of cold damage studies in this period, it existed in a milieu replete with contending voices and differing points of view.

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[45] Huangfu Mi, *Zhenjiu jiayi jing*, author's preface, in Huangfu Mi, *Zhenjiu jiayi jing jiaozhu*, 17; Tao Hongjing, *Fuxingjue zangfu yongyao fayao*, in Ma Jixing, ed., *Dunhuang Yiyao Wenxian Jijiao* (Yangzhou: Jiangsu guji chubanshe, 1998), 187–193.

[46] E.g., minor white tiger decoction (*xiao baihu tang* 小白虎湯) and minor green dragon decoction (*xiao qinglong tang* 小青龍湯), which correspond to white tiger decoction (*baihu tang* 白虎湯) and ephedra decoction (*mahuang tang* 麻黃湯) in the *Treatise.*

[47] Goldschmidt, *Evolution*, 141.

The Structure of Pre-Song Cold Damage Studies Texts

The doctrinal diversity of pre-Song cold damage studies contrasts with a striking lack of diversity of genre. As we have seen, compilations and compendia dominate the surviving medical writing from this period, and no author wrote a text devoted exclusively to cold damage. Although the *Treatise on Cold Damage* itself may have been separated from the remainder of the *Treatise on Cold Damage and Miscellaneous Illnesses* at an early date, it was not originally composed as a text specializing in cold damage. Furthermore, with the exception of the *Treatise* (in its various editions), the *Inner Classic* corpus, the *Classic of Difficulties*, and the *Treatise on the Origins and Signs of Diseases*, all of the texts are structured as formularies (*fangshu* 方書), i.e., listings of formulae followed by the signs and symptoms they treat.

It is this common structure that Goldschmidt cites in support of his argument that before the Song diagnosis proceeded solely by symptom-matching.[48] The very size of these texts, however, reveals the implausibility of such a method. *Formulae Worth a Thousand Gold* contains more than six thousand formulae, and *Further Formulae Worth a Thousand Gold* and *Secret Essentials of the Outer Terrace*, each contain similar numbers. No individual could possibly memorize all the formulae and symptoms in even one of these texts. Large compendia such as *Formulae Worth a Thousand Gold* and *Essentials of the Outer Terrace* were intended as

[48] E.g., Goldschmidt, "The Song Discontinuity: Rapid Innovation in Northern Song Dynasty Medicine," 83, in which Goldschmidt refers to this style of organization in *Formulae of Sagely Beneficence* (*Shenghui fang* 聖惠方, 992); in, Goldschmidt, *Evolution*, 143, Goldschmidt cites two case histories of the Song physician and literatus, Xu Shuwei (許叔微, 1080-1154), to argue that Xu also practiced symptom-matching, but this is also a stylistic issue. The cited passages are this dissertation of the case narrative which is followed by doctrinal discussions not included in the narrative itself. The first case Goldschmidt cites is followed by a discussion of the meaning of a term found in the *Treatise on Cold Damage*; the second case is followed by a discussion which analyzes two quotes from Zhang Ji and the physiology of the eyes to diagnose the patient's ailment as a form of untreatable fatal expiry (*sijue* 死絕) of the viscera; see, Xu Shuwei, *Shanghan jiushi lun*, cases 20 and 26, in Xu Shuwei, *Xu Shuwei yixue quanshu*, ed. Li Jushuang and Liu jingchao (Beijing: Zhongguo Zhongyiyao Chubanshe, 2006), 62–63.

references and are not representative of the way practicing physicians learned medicine or selected formulae.

Moreover, these compendia were written primarily as references for laypeople not trained in medicine. In his *Short Treatise on Classical Formulae*, Chen Yanzhi clearly states that even his far shorter text is not intended for medical specialists:

> Now, if you wish to take the art of formulae as your study, you ought to thoroughly read the great, fundamental treatises on canonical methods… If you do not wish to take the art of formulae as your study, but merely [wish] to prepare yourself against emergencies, you should take oral instructions on formulae and reading this one book, a *Short Treatise on Classical Formulae*, as essential.[49]
> 今若欲以方為學者, 當精看大品根本經法… 若不欲以方術為學, 但以備身昉急者, 當以方訣, 看此《經方小品》一部為要也。

In origin, these published formularies are larger and more sophisticated versions of household formularies compiled by elite families, which consisted of formulae which members of the family had used or otherwise encountered and considered valuable enough to merit recording. The existence of household formularies is well attested in the Song dynasty by mention of such compilations in prefaces,[50] references in published formularies,[51] and the lengthy list of such formularies in Liu Fang's (劉昉, ca. 1080-1150) *New Book on Children* (*Youyou xinshu* 幼幼新書).[52] Their existence among the pre-Song elite is attested by Chen Yanzhi in his discussion of extant medical texts:

> All of the aristocratic families each compose themselves a compilation of medicinal formulae that they have taken. Ultimately, these large collections are what the court and scholars supplement and amend. It is not possible to record them all.[53]
> 一切諸貴家皆各自撰集服藥方，終歸是大集中事及術士所增損耳，不可悉錄也。

[49] *Juan* 1, *shu kan fangjue*, in Yan Shiyun and Li Qizhong, *Sanguo liang Jin Nanbeichao yixue zongji*, 785.
[50] E.g., Wang Gun (王衮, fl. 1047-1082) *Bojifang* (博济方, 1047), author's preface, in *Siku Quanshu, Wenyuange, Dianziban*, digital ed. (Taibei: Zhongwen Daxue Chubanshe, n.d.), 6–7.
[51] E.g., Su Shi (蘇軾, 1037-1101), *Su Shen Liang Fang* (蘇沈良方, 1075), *juan* 2, *lun fengbing*, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, ed. Song Zhenmin and Li Enjun (Beijing: Zhongyi Guji Chubanshe, 2009), 66.
[52] *Juan* 40, *pian* 15, in Qian Yi and Liu Fang, *Qian Yi, Liu Fang yixue quanshu*, ed. Li Zhiyong (Beijing: Zhongguo Zhongyiyao Chubanshe, 2005), 975.
[53] *Juan* 1, *shu kan fangjue*, in Yan Shiyun and Li Qizhong, *Sanguo liang Jin Nanbeichao yixue zongji*, 785.

The existence and use of these family formularies prior to the Song can also be seen in *Formulae to Keep Close at Hand's* reference to "households prepared for emergencies (*beiji jia* 備急家)":

> If heat illness is not treated promptly or is treated but [the patient] does not recover after more than ten days, all of these are aggravated illnesses. You should only take greater or lesser turtle shell (*biejia tang* 鱉甲湯) decoction. The measures [of the ingredients in] these formulas are small and the medicinals many. It is not something which households prepared for emergencies make; therefore, I have not recorded it.[54]
> 若熱病失治及治不差十日以上，皆各壞病，唯應服大、小鱉甲湯，此方藥分兩乃少而種數多，非備急家所辦，古不載。

Family formularies were a reference for the members of the family to use when someone fell ill. Keeping such a formulary, and—judging from Ge Hong's comments—some of the medicinals used in common formulae, prepared a household against medical emergencies. The full title of *Formulae to Keep Close at Hand* is *Formulae to Keep Close at Hand in Preparation for Emergencies* (*Zhouhou beiji fang* 肘后備急方), and that of *Formulae Worth a Thousand Gold* is *Formulae Worth a Thousand Gold in Preparation for Emergencies* (*Beiji qianjin yaofang* 備急千金要方). These texts were never intended to be tracts on medical doctrine or even textbooks of medicinal formulae. Even the *Treatise on Cold Damage*, which is not structured as a formulary, was intended primarily for non-physicians, as indicated by Zhang Ji's lamentation that the literati trusted their lives to ordinary physicians (*fanyi* 凡醫).[55] While we know that many of these texts came to be used by practicing physicians as well as laypeople, the surviving pre-Song medical works were overwhelmingly aimed at literate, elite, non-physicians. They were meant as references, massive compilations which could be consulted at need. Their emphasis on symptomology followed from their assumption that most of their readers were at best medical amateurs.

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[54] *Juan* 2, *pian* 13, in Ge Hong, Tao Hongjing, and Yang Yongdao, *Buji Zhouhou fang*, 56.
[55] *Shanghan lun*, author's preface, in Zhang Ji, *Zhongjing quanshu*, 305.

Zhang Ji's Place in Pre-Song Cold Damage Studies

Having examined the content and structure of the pre-Song cold damage studies tradition, we are now in a position to explore the place of Zhang Ji and his works in that tradition. In addition to arguing that cold damage studies was a neglected branch of medicine prior to the Song, both Unschuld and Goldschmidt have argued that the *Treatise on Cold Damage* was largely unknown and unimportant during the period from its composition to its publication by the Song government. Unschuld asserts that the *Treatise* "exerted marginal influence on medical thought and literature between the Han and Sung dynasties."[56] Goldschmidt, rather more specifically, argues that, "It seems that most physicians during the centuries following the third century CE until the eleventh century were not familiar with the *Treatise*," and, "there is only one source that refers to texts that can be associated with the *Treatise* prior to the seventh century."[57] Once again, however, Unschuld and Goldschmidt fail to consider a number of important compendia which cite the *Treatise* and neglect the possibility that the *Treatise* may not have been separated from its mother text at this time. When seen through the lens of the pre-Song cold damage studies tradition described in this chapter, the position of the *Treatise* looks very different.

References to the Treatise on Cold Damage in Texts Prior to the 7th Century

As Goldschmidt notes, references to Zhang Ji and the full text of the *Treatise on Cold Damage and Miscellaneous Diseases*, of which the *Treatise on Cold Damage* is but one part, are easily found in the third century. The earliest surviving citations from the *Treatise* are found in

[56] Unschuld, *Medicine in China*, 168.
[57] Goldschmidt, *Evolution*, 97.

Wang Shuhe's *Classic of the Pulse* which paraphrases large sections of the *Treatise*. While the extensive editing of Wang's work by Song editors makes it unreliable as a source for the early textual history of the *Treatise on Cold Damage*, its extensive citations of Zhang Ji's work attest to Wang's admiration. The next reference to the writings of Zhang Ji is found in Huangfu Mi's preface to his *Systematic Classic of Acumoxa,* in which Zhang is included in a list of famous physicians (*mingyi* 名醫) alongside such venerated figures as Hua Tuo and Bian Que (扁鵲, fl. 5th c. BCE).[58] Clearly, third century medical authors both knew of and respected Zhang Ji and his works.

Medical authors of the following centuries continued to draw on Zhang Ji extensively, though not always by name. Ge Hong, writing in the early 4th century, does not mention either Zhang Ji or the *Treatise on Cold Damage*, but he does record several of the formulae found in the *Treatise* and includes two of them—Major and Minor Bupleurum Decoctions (*da/xiao chaihu tang* 大/小柴胡湯)—in a list of the four most essential formulae for treating cold damage and seasonal *qi* illnesses.[59] The surviving fragments of Fan Wang's formulary, also dating to the fourth century, likewise include the *Treatise's* formulae without mentioning its name.[60] Chen Yanzhi, writing around the early 5th century, explicitly records a *Zhang Zhongjing's Differentiation of Cold Damage with Formulae* (*Zhang Zhongjing bian shanghan bing fang* 張仲景辨傷寒並方) as well a *Zhang Zhongjing's Miscellaneous Formulae* (*Zhang Zhongjing zafang* 張仲景雜方) in a list of the "great works (*dapin* 大品)" which a serious student of formulae should study, and quotations from "*Zhongjing's Treatise on Cold Damage*

[58] author's preface, in Huangfu Mi, *Zhenjiu jiayi jing jiaozhu*, 16–17.
[59] *Juan* 2, *pian* 2, in Ge Hong, Tao Hongjing, and Yang Yongdao, *Buji Zhouhou fang*, 55–56.
[60] Fan Wang, *Fang Wang fang*, *juan* 4, *zhi shanghan fang*, in Yan Shiyun and Li Qizhong, *Sanguo liang Jin Nanbeichao yixue zongji*, 679–685.

(*Zhongjing shanghan lun* 仲景傷寒論)" are numerous in his chapter on cold damage.[61] Surviving fragments of Monk Shen's (釋僧深, fl. 5th c.) fifth century formulary, the sixth century *Collected Efficacious Formulae,* and the formularies *Records of Effective Formulae from the Past and Present* and *Zhang Wenzhong's Formulae*—whose dates are uncertain—record Zhang Ji's formulae without noting their source.[62] Tao Hongjing's sixth-century *Helpful Instructions* explicitly mentions the respect granted to Zhang Ji by physicians:

> Formerly, Zhang Ji of Nanyang relied on these formulae to write the *Treatise on Cold Damage*. The treatments [it describes] are clear and thorough. Later scholars all reverently refer to it.[63]
> 昔南陽張機依此諸方, 撰為《傷寒論》一部, 療治明悉, 後學咸尊舉之。

Finally, imperial name avoidance dates the Dunhuang *Treatise on Cold Damage* fragment A to no later than the beginning of the Liang dynasty (502-557), attesting to the continued production of new editions of the *Treatise* during the fifth to sixth centuries.[64]

Though surviving pre-7th century works on cold damage must constitute only a small selection of what once existed, they are unanimous in viewing Zhang Ji's work not merely as one part of the cold damage studies tradition, but as one of the more valuable and respected components of that tradition. Even if the text of the *Treatise* itself was in limited circulation, which would be unsurprising in a manuscript culture, his formulae enjoyed wide circulation via their frequent citation in other formularies.

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[61] *Juan*1, *Shu kan fangjue* and *juan* 6, *Zhi dongyue shanghan zhufang*, in ibid., 785, 810–814.
[62] Ibid., 942–945, 1196–1201; *Waitai miyao*, *juan* 1, *Zhang Wenzhong fang* and *Gujin luyan fang*, in Wang Tao, *Wang Tao yixue quanshu*, 64–66.
[63] Ma Jixing, *Dunhuang Yiyao Wenxian Jijiao*, 187.
[64] Qian Chaochen, *Shanghan lun wenxian tongkao*, 582–583.

References to the Treatise on Cold Damage in Texts from the 7th to 10th Centuries

The absence of Zhang Ji's texts from the bibliographies of the standard histories prior to the Sui (581-617) has occasionally been taken as evidence that these texts were lost at the time. The *Book of the Sui* (*Suishu* 隋書, 636), however, was the first standard history to include a bibliography following Zhang Ji's lifetime. It records four texts by Zhang Ji. The *Old Book of the Tang* (*Jiu Tangshu* 舊唐書, 945) records one additional title by him, and the *New Book of the Tang* (*Xin Tangshu* 新唐書, 1060) records two more (see Table 1-3, below).[65] Furthermore, the composition of Dunhuang *Treatise on Cold Damage* fragments B and C (P3482) can be dated by imperial name avoidance to the period between 650 and 710.[66]

Medical authors from this period provide an even clearer picture of the status of Zhang Ji and his writings. The *Treatise on the Origins and Signs of Diseases*, following its usual style, does not cite the sources it is quoting or paraphrasing, but contains a large number of near-quotations from the *Treatise*.[67] Sun Simiao's works provide more direct information. Although he included a number of the *Treatise*'s formulae in *Formulae worth a Thousand Gold*, he complains that "The teachers of Jiangnan keep *Zhongjing's Formulae* (*Zhongjing fang* 仲景方) secret and do not transmit it 江南諸師，秘《仲景方》不傳."[68] Thirty years later, when he

[65] Goldschmidt, *Evolution*, 98, adapts a table from a Chinese source which includes two texts from the *Seven Records* (*Qilu*), a 6th century bibliography. The *Seven Records* is not extant, though some scholars believe they can reconstruct some of its contents on the basis of notations in the *Book of the Sui's* bibliography. This table is this dissertationicularly puzzling since the two items it lists do not appear (under those names) in any of the standard histories. I have therefore not included them in my discussion.
[66] Qian Chaochen, *Shanghan lun wenxian tongkao*, 583–585.
[67] E.g., *juan* 7, *shanghan zhuhou*, *shanghan hou*, in Chao Yuanfang, *Zhubing yuanhou lun jiaozhu*, 223–224, which contains near-quotes of lines 27, 58, 59, 265, 285, and other lines from the Song edition of the *Treatise*. Although some of these quotes could have been taken from the *Classic of the Pulse's* paraphrases of the *Treatise*, some of them do not appear there and so must be from the *Treatise* itself.
[68] *Juan* 9, *fahan, tu, xia hou*, in Sun Simiao, *Sun Simiao yixue quanshu*, 195. Some scholars read "*Zhongjing's Formulae*" as a phrase rather than a title: "Zhongjing's formulae. Given its similarity to titles recorded in the standard histories and the fact that many of Zhang Ji's formulae are, in fact, included in *Formulae worth a Thousand Gold*, I consider it far more likely that it was intended as a title.

compiled *Further Formulae worth a Thousand Gold*, Sun included a nearly complete edition of the *Treatise*, which he had apparently acquired in the interim.[69] Sun's earlier complaint has often been seen as an indication that Zhang Ji's text was not circulating and had little influence during this period, but it actually indicates precisely the opposite—that Zhang Ji's works were valued enough to be kept secret from competing physicians and that they were in circulation, albeit limited circulation. Moreover, in his preface to the chapters on cold damage in *Further Formulae worth a Thousand Gold*, Sun states explicitly, "As for Zhongjing, [his methods] have a particularly divine efficacy… 致於仲景，特有神功…"[70] Wang Tao's *Secret Essentials of the Outer Terrace* supports this picture of the *Treatise* as a highly valued text. He cites many texts which in turn cite the *Treatise*, and also makes many references to "Zhongjing's *Treatise on Cold Damage* 仲景《傷寒論》."

The remaining cold damage texts from this period are all known only through the Japanese text *Formulae at the Heart of Medicine*, composed in the 10th century. Like many of the earlier texts, they do not cite the *Treatise* directly. Unlike previous works, unattributed mentions of Zhang Ji's formulae are also rare. Only one formula listed is identical to a formula in the *Treatise*, though several others appear to be minor modifications of its formulae.[71] Taken as a whole, *Formulae at the Heart of Medicine* records only five formulae that are explicitly cited from the writings of Zhang Ji, all of them from *Zhang Zhongjing's Formulae*. None of these formulae are described as treating cold damage, and none of them are found in the Zhang Ji's extant works.[72]

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[69] *Juan* 9 and 10, in ibid., 675–702.
[70] *Juan* 9, in ibid., 675.
[71] The identical formula is virigate wormwood decoction (*yinchenhao tang* 茵陳蒿湯)--though the *Ishinpō* does not give this formula a name--and is cited from *Mr. Ge's Formulae* (*Geshi fang* 葛氏方); see, Tanba Yasuyori, *Ishinpō*, 612.
[72] *Juan* 9, 10, 16, 20, in ibid., 391, 449, 671, 829, 842.

Finally, although unrelated to the *Treatise on Cold Damage*, another set of Dunhuang fragments whose dates are difficult to ascertain contain portions of a text called the *Treatise on the Five Viscera* (*Wuzang lun* 五藏論, found in P2115v., P3655, and S5614) which is attributed to Zhang Ji. Nothing in these texts corresponds to any of Zhang's known writings, and the attribution is probably spurious; nonetheless, it clearly shows the esteem in which Zhang Ji was held. The mere fact of the survival within the Dunhuang materials of three fragments of the *Treatise* and these other fragments attributed to Zhang Ji demonstrates that he was already recognized as an important medical authority during the Tang, famous enough for his work to be present even in a relatively remote location like Dunhuang.[73]

The data above demonstrate that Zhang Ji and his works were both highly valued and available prior to the Song. It is possible that complete editions of the *Treatise* were in limited circulation during this period, as Sun Simiao's complaint seems to suggest. Such a situation would not be surprising given the nature of the circulation of books in this period and the habits of textual transmission employed by literate physicians at this time. First, although wood-block printing was invented in China during the Tang dynasty, the publishing industry did not truly begin to flourish until the Song. The vast majority of books in the Tang remained hand-copied, and no matter how well-developed a manuscript publishing industry may be, it cannot compare with wood-block printing for the sheer volume of books produced. Compared to the Song and later dynasties, *all* books would have been in limited circulation during this period. In particular, medical texts, dealing as they did with a topic the elite considered beneath their dignity, were unlikely to be copied in large quantities. Secondly, the nature of medical learning in this period tended to limit the circulation and alter the form of medical texts. Prior to the Song, physicians

[73] Donald Harper, "Précis de connaissance médicale: le shanghanlun (traité des atteintes par le froid) et le wuzang lun (traité des cinq viscères)," in *Médecine, religion et société dans la Chine médiévale: étude de manuscrits chinois de Dunhuang et de Turfan*, ed. Catherine Despeux, vol. 1 (Paris: Institut des hautes études chinoises, 2010), 82–83.

usually learned medicine as apprentices to a master. The early phase of study was dominated by observation and oral instruction. Only when the master felt the student was ready he ritually initiate the student into the master's lineage and allow him to copy the master's medical texts. Even when texts were bestowed upon a student, vows of secrecy were customary—as Sun Simiao's complaint attests—to protect the master's "trade secrets" from potential competitors. Moreover, it is unlikely that the texts transmitted were complete editions. The practice of giving students partial transmissions of a text and the possibility of a student learning from more than one master over time meant that the texts possessed by any physician were likely to be a compilation of fragments of various texts.[74] Finally, the nature of the *Treatise* itself complicated the situation. The writings of Zhang Ji were circulating under at least nine different names, and differences in the number of fascicles indicate that at least four of these were genuinely different texts. The known pre-Song texts by Zhang Ji are listed in Table 1-3. The wide variety of texts attributed to him testifies to his popularity, but would have complicated the process of finding a complete edition of any part of his work. Some of the texts listed in Table 1-3 may have been spuriously attributed to Zhang Ji, and even those which were authentically his work may have been incomplete. The incomplete edition of the *Treatise* obtained by Sun Simiao, the incomplete edition included in the *Formulae of Sagely Beneficence for the Era of Great Peace* (*Taiping shenghui fang* 太平聖惠方, 992), and the incomplete *Kōji* edition from Japan indicate that such abbreviated or fragmentary editions were in circulation. Other texts may have supplemented Zhang Ji's writings with those of other authors. The last three chapters of the extant edition of the *Essentials of the Golden Coffer*, the *Treatise's* sister text, are so similar to material found in Ge Hong's *Formulae to Keep Close at Hand*, that many scholars suspect these chapters were

[74] Nathan Sivin, "Text and Experience in Classical Chinese Medicine," in *Knowledge and the Scholarly Medical Traditions* (Cambridge: Cambridge University Press, 1995), 77–86; Keegan, "The 'Huang-Ti Nei-Ching,'" 219–247.

originally part of Ge Hong's work. Similar additions may have occurred in other editions of Zhang Ji's texts.

Title	Juan	Source
Treatise on Cold Damage and Miscellaneous Diseases (*Shanghan zabing lun* 傷寒雜病論)	16	*Treatise on Cold Damage*, ca. 206
Zhang Zhongjing's Differentiation of Cold Damage (*Zhang Zhongjing bian shanghan* 張仲景辨傷寒)	10	*A Short Essay on Classical Formulae*, mid-5th c.; *Book of the Sui*, 656
Treatise on Cold Damage (*Shanghan lun* 傷寒論)	not specified	*Helpful Instructions on Methods for Using Medicinals According to the Viscera and Bowels*, ca. early 6th c.; *Secret Essentials of the Outer Terrace*, 652
Zhang Zhongjing's Formulae (*Zhang Zhongjing fang* 張仲景方)	15	*Book of the Sui*, 656; Sun Simiao, *Essential Formulae worth a Thousand Gold*, 652
Zhang Zhongjing's Evaluation of Illness and Essential Formulae (*Zhang Zhongjing pingbing yaofang* 張仲景評病要方)	1	*Book of the Sui*, 656
Zhang Zhongjing's Formulae for Treating Women (*Zhang Zhongjing liao furen fang* 張仲景療婦人方)	2	*Book of the Sui*, 656
Treatise on the Five Viscera (*Wuzang lun* 五藏論)	N/A	Dunhuang
Zhang Zhongjing's Medicinal Formulae (*Zhang Zhongjing yaofang* 張仲景藥方)	15	*Old Tang History*, 945; *New Tang History*, 1060[75]
Treatise on Cold Damage and Sudden Illness (*Shanghan cubing lun* 傷寒卒病論)	10	*New Tang History*, 1060
Zhongjing's Treatise on Cold Damage (*Zhongjing shanghan lun* 仲景傷寒論)	not specified	Wang Tao, *Secret Essentials of the Outer Terrace*, 752

Table 1-3: Pre-Song Texts Attributed to Zhang Ji

Given the complex environment through which all medical books were transmitted in this era, it would not be surprising if the *Treatise* were in limited circulation. Far from indicating that the *Treatise* was lost or unimportant, such a situation actually highlights the effort which medical authors must have exerted to acquire and pass it on in the five editions which we know existed in the early Song.

[75] The line in the *New Tang History*'s bibliography places the name of Wang Shuhe before the title. Some scholars read this as this dissertation of the title; I read it as an attribution of authorship, following the *Old Tang History* which notes, "Authored by Wang Shuhe 王叔和撰," after the entry for this book.

SECTION TWO: The *Treatise on Cold Damage* in the Song prior to 1065

Before the Song the works of Zhang Ji were valued and well-known components of a thriving and diverse tradition of cold damage studies. How did they fare during the turbulence surrounding the fall of the Tang and the sixty years of disunity that followed it, and in what form did they exist in the first century of the Song, prior to the imperial publication of the *Treatise on Cold Damage* in 1065? We know with certainty that four editions of the *Treatise* and one abbreviated edition of Zhang Ji's collected works were extant in the Song before 1065. There is evidence that other editions existed as well. This part of the chapter examines the known editions and the evidence for other, unknown editions to argue that the *Treatise* was extant—though perhaps in limited circulation—in a number of variant editions prior to its publication in 1065.

In order to expedite discussing the various editions of the *Treatise* circulating at this time, I have used the customary names these editions are given in Chinese, even though these names are often problematic in one way or another. In all cases, I have explained the origin of an edition's name when it is first introduced. The only edition for which I have chosen not to use the customary name is the so-called "Song edition (*Song ben* 宋本)," i.e., the imperially produced edition of 1065. The extant "Song edition" is actually a 1599 copy of a Song edition made by the publisher Zhao Kaimei (趙開美, 1563-1624) and is more correctly called the Zhao Kaimei edition, though there is no reason to suspect that Zhao's edition differed from the original Song edition. Because every edition I am discussing in this part of the chapter was either produced or circulating during the Song, the term "Song edition" is potentially confusing. I therefore refer to it as the imperial edition.

Known Editions of the *Treatise on Cold Damage* which were Extant before 1065

Produced between 1034 and 1042 and supplemented in 1064, the *Catalogue of the Institute of Exalting Literature* (*Chongwen zongmu* 崇文總目) is a catalogue of holdings of the imperial library. Although the original was lost and can be only partially reconstructed on the basis of quotations in other works,[76] the surviving material from the catalogue provides a useful picture of what texts were available, particularly to government officials, at the time.

The *Catalogue* includes four editions of the *Treatise on Cold Damage*. Two of these editions are readily identifiable and still extant. One is the edition contained in *Further Formulae worth a Thousand Gold*. Another is the edition contained in the massive imperial medical compendium, *Formulae of Sagely Beneficence for the Era of Great Peace*. Judging by the identical title and number of fascicles, the third of these editions, the *Treatise on Cold Damage* in ten fascicles, is probably the text used by the Song government Bureau for Editing Medical Texts (*Jiaozheng yishu ju* 校正醫書局)[77] as their base edition in producing the imperial edition of the *Treatise*, though it is impossible to be certain. The final edition of the *Treatise* found in this imperial catalogue is now extant only in part as the *Essentials of the Golden Coffer*, an abbreviated version of those parts of Zhang Ji's original *Treatise on Cold Damage and Miscellaneous Disorders* that did not concern cold damage. In its original form, it was titled *Essentials of the Golden Coffer and Jade Case* (*Jingui yuhan yaolue* 金匱玉函要略) and consisted of three fascicles, the first of which dealt with cold damage and the second with miscellaneous illnesses while the third listed the formulae mentioned in the rest of the text. By the time the Bureau's editors began working on this text, they had already produced two full

[76] Endymion Porter Wilkinson, *Chinese History: A New Manual*, Rev. ed. (Cambridge, MA: Harvard University Asia Center, 2012), 942.
[77] See below and Chapter 2 for more details on the Bureau.

editions of the *Treatise* and saw no reason to edit and publish an abbreviated version of it. Therefore they published only the section of the text discussing miscellaneous illnesses.[78] The section discussing cold damage was eventually lost.

A fourth edition of the *Treatise*, the *Classic of the Golden Coffer and Jade Case*, though not listed in the imperial catalogue, was published by the Bureau in 1066 and must therefore have been circulating prior to 1065.

The Tang Edition

Although we cannot know in what numbers it circulated, *Further Formulae Worth a Thousand Gold* was extant during the first hundred years of the Song, and, as discussed above, it contains an edition of the *Treatise on Cold Damage*—nowadays often referred to as the "Tang edition (*Tangben* 唐本)." The Tang edition is in fact fascicles nine and ten of *Further Formulae worth a Thousand Gold*. Although it lacks the three chapters "The Method of Differentiating the Pulse 辨脈法," "Evaluating the Pulse 平脈法," and "Types of Cold Damage 傷寒例" which open the imperial edition, the order of the remaining lines in the Tang edition is comparable to the imperial edition. Within the central section of the text, however, the Tang edition groups lines which recommend the same formula into explicitly named sections, e.g., "The Method of Using Cinnamon Twig Decoction in Greater Yang Disease 太陽病用桂枝湯法," resulting in some variation from the order found in the imperial edition.

The wording of the Tang edition is usually similar to the imperial edition, but is even closer to the *Classic of the Golden Coffer and Jade Case* and shows a tendency to clarify passages that are obscure or difficult in the imperial edition:

[78] *Jingui yaolue*, Song editors' preface, in Zhang Ji, *Zhongjing quanshu*, 553.

> [Tang Edition] If the patient spontaneously sweats, this is due to the construction *qi* being pacified while the defensive *qi* is not pacified. The construction moves inside the vessels; the defense moves outside the vessels. Induce sweating again. If the defense is pacified [the patient] will recover. Cinnamon Twig Decoction (*guizhi tang* 桂枝湯) is appropriate.[79]
> 病者自汗出, 此為榮氣和, 衛氣不和故也。榮行脈中, 衛行脈外, 復發其汗, 衛和則愈。
>
> [*Classic of the Golden Coffer and Jade Case*] If the patient frequently sweats spontaneously, this is due to the construction *qi* being pacified while the defensive *qi* is not pacified. The construction moves inside the vessels, is yin, and governs the interior; the defense moves outside of the vessels, is yang, and governs the exterior. Induce sweating again. If the defense is pacified [the patient] will recover. Cinnamon twig decoction is appropriate.[80]
> 病常自汗出者, 此為營氣和, 衛氣不和故也。營行脈中, 為陰主內, 衛行脈外, 為陽主外, 復發其汗, 衛和則愈, 宜桂枝湯。
>
> [Imperial Edition] If the patient frequently sweats spontaneously, this indicates that the construction *qi* is pacified. If the construction *qi* is pacified, but the exterior is not harmonious, it is only because the defensive *qi* is not harmonized with the construction *qi*. Since the construction moves within the vessels, and the defense moves outside of the vessels, if you again induce sweating, and the construction and defense are pacified, then [the patient] will recover. Cinnamon twig decoction is appropriate.[81]
> 病常自汗出者, 此為榮氣和, 榮氣和者, 外不諧, 以衛氣不共榮氣諧和故爾。以榮行脈中, 衛行脈外, 復發氣汗, 榮衛和則愈, 宜桂枝湯。

The key difficulty in the imperial edition lies in the final phrase, "… [if] the construction and the defense are pacified, then [the patient] will recover" since the line has already informed us that the construction is already pacified (though see the footnote for this quote above). This led the Southern Song (1127-1279) author Guo Yong (郭雍, 1101-1187) to compare this line in the imperial edition to the cognate line in the *Classic of the Pulse*—which is extremely similar to the line in the *Classic of the Golden Coffer and Jade Case*—and observe:

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[79] *Qianjin yifang*, *shanghan shang*, *taiyang bing yong guizhi tang fa diyi*, in Sun Simiao, *Sun Simiao yixue quanshu*, 676.
[80] *Juan 2*, *pian* 3, in Xuxiu siku quanshu bianzuan weiyuan hui, *Xuxiu siku quanshu*, vol. 984 (Shanghai: Shanghai Guji Chubanshe, 1995), 94.
[81] *Juan* 3, *pian* 6, p. 14a, line 53, in Zhang Ji, *Zhongjing quanshu*, 381. I have translated this line following the majority of commentators in order to elucidate the problem interpreters of this line encountered. In my opinion, the final two *he* 和 characters of this line should be read as *huo* "mix," making the line's meaning quite clear.

> The wording of these two is slightly different, but the principle is completely in agreement. I fear that this text [the imperial edition] was altered by later people. It must be that the construction *qi* alone is pacified and the defensive *qi* is not yet pacified.
> 二者語小異而理皆通,《脈經》尤明, 恐本論為後人筆削, 蓋營氣獨和而衛氣未和也。

Both the Tang edition and the *Classic of the Golden Coffer and Jade Case* differ from the imperial edition on precisely this point, eliminating the point of confusion by deleting the reference to pacifying the construction *qi*.

In length, the Tang edition is comparable to the imperial edition, though slightly shorter. The six chapters on the illnesses of the three yin and three yang—usually referred to as the six channel illness chapters (*liujingbing pian* 六經病篇)—total 327 lines compared to the 381 of the imperial edition[82] and the text includes 105 formulae while the imperial edition of the *Treatise* mentions 113.[83]

The Gao Jichong Edition

The earliest known Song edition of the *Treatise on Cold Damage* is found in the eighth fascicle of *Formulae of Sagely Beneficence for the Era of Great Peace*, an imperially sponsored compendium in the style of the two *Formulae worth a Thousand Gold* and *Secret Essentials of the Outer Terrace* but dwarfing them all by containing more than 16,000 formulae. The rather short edition of the *Treatise* found in this massive compendium is generally known as the Gao Jichong edition (*Gao Jichong ben* 高繼沖本) because it was in origin an edition of the *Treatise* donated around the year 970 by Gao Jichong (高繼沖, 942-973), a former general of the state of

[82] Since at least the end of the Yuan, these six chapters have come to be seen as the core of the *Treatise* by Chinese physicians, but there are also good textual reasons for using them as a point of comparison between editions: these six chapters are the only content which, in varying forms and orders and with omissions and additions, are shared by all known editions of the *Treatise*.

[83] The imperial edition gives no ingredients for one of its formulae, limonite pill (*yuyuliang wan* 禹餘糧丸), making the actual total of formulae 112.

Nanping (南平, 924-963) eager to prove his loyalty to the victorious Song emperor Taizu (r. 960-976).[84]

The first sections of the Gao Jichong edition—which draw extensively on *Origins and Signs of Illnesses*, *Essential Formulae worth a Thousand Gold*, and the *Inner Classic* corpus—were probably added by the editors of *Formulae of Sagely Beneficence*, following the pattern of the other sections of that text. The remaining sections are substantially shorter than the imperial edition of the *Treatise*. Like the Tang edition, the Gao Jichong edition does not contain the first three chapters found in the imperial edition. The remaining lines are broadly in the same order as the imperial edition, but there are many differences, often grouping lines on a given formula which are widely scattered in the imperial edition.

While most of the lines are easily recognizable as variations of lines or fragments of lines found in the imperial edition, there are thirteen lines which do not occur there, and the variations in lines which are cognate between the two editions are sometimes substantial. Like the Tang edition, the Gao Jichong edition is generally clearer than the imperial edition in those lines where they differ. Most strikingly, the formula recommended by a given line of the Gao Jichong edition often differs from that recommended in the cognate line of the imperial edition. In numerous cases, a line which in the imperial edition does not contain a formula recommendation does contain one in the Gao Jichong edition:

> [Gao Jichong Edition] The external signs of yang-brightness disease: fever and sweating but no aversion to cold, only aversion to heat. Bupleurum decoction is appropriate.[85]
> 陽明病外證:身熱汗出, 而不惡寒, 但惡熱, 宜柴胡湯.

[84] Qian Chaochen, *Shanghan lun wenxian tongkao*, 477–482.
[85] *Juan* 8, *bian yangming xingzheng*, p. 12b, in Wang Huaiyin, ed., *Taiping shenghui fang* (Taibei: Xinwenfeng Chuban gongsi, 1980), 648.

> [Imperial Edition] Question: What are the external signs of yang-brightness disease? Answer: Fever, spontaneous sweating, and no aversion to cold, but rather an aversion to heat.[86]
> 問曰:陽明病外證云何？答曰:身熱, 汗自出, 不惡寒, 反惡熱也。

A final difference between the two editions is found in the formulae the two texts include. The Gao Jichong edition describes nine formulae which are not mentioned in the imperial edition and uses different names for thirteen other formulae which are found in the imperial edition.

The Gao Jichong edition is substantially shorter than the imperial edition, containing only 127 lines in the six channel diseases section and fifty formulae. Overall, the Gao Jichong edition gives the impression of being an abbreviated version of the *Treatise*. It is also the most divergent of the extant editions, which are generally far closer to one another than to the Gao Jichong edition. The differences between this edition and the Tang edition, the only definitively pre-Song editions of the *Treatise* which have survived in their entirety, show not only that the *Treatise* was circulating in several editions prior to Song, but also that these editions were not necessarily in accord with one another.

The Classic of the Golden Coffer and Jade Case

Published in by the Bureau for editing medical texts in 1066, the *Classic of the Golden Coffer and Jade Case* is not technically a pre-1065 edition of the *Treatise*, but was obviously based upon a pre-1065 text which the Bureau edited and published. On the basis of textual evidence, Qian Chaochen has argued that the text must originally date to the 5th or 6th centuries.[87] Furthermore, judging from the absence of the annotations found in many of the Bureau's other publications, it appears that the Bureau's editors made few changes to the *Classic of the Golden*

[86] *Juan* 5, *pian* 8, p. 6b, line 182, in Zhang Ji, *Zhongjing quanshu*, 424.
[87] Qian Chaochen, *Shanghan lun wenxian tongkao*, 89–90.

Coffer and Jade Case. The resulting text may therefore be seen as another source for understanding the diversity of the editions of the *Treatise* in circulation prior to 1065.

The structure of the *Classic of the Golden Coffer and Jade Case* is very similar to the imperial edition, but it is grouped into eight fascicles rather than ten. Of the three initial chapters found in the imperial edition, it only includes one, "Method of Differentiating the Pulse (*Bianmai fa* 辨脈法)," as its second chapter. The first chapter of the *Classic of the Golden Coffer and Jade Case*, "Summary of Patterns and Treatments (*Zhengzhi zongli* 證治總例)," is not found in the imperial edition. The six channel disease chapters have the same structure and, with small variations, line order as the imperial edition.

The wording of the *Classic of the Golden Coffer and Jade Case* shows definite differences from the imperial edition, closely approximating the Tang edition and the portions of the *Treatise* excerpted in the *Classic of the Pulse*. Like both the Tang and Gao Jichong editions, passages which are obscure or difficult in the imperial edition are often clearer in this text.

The *Classic of the Golden Coffer and Jade Case* is slightly longer than the imperial edition of the *Treatise*. The six channel disease chapters contain seven lines not found in the imperial edition, but lack four lines which are found there, for a total of 384 lines, three lines more than the imperial edition. The *Jade Case* also lists 115 formulae, two more than the imperial edition.

Evidence for the Existence of Other Editions of the *Treatise on Cold Damage* before 1065

In addition to the several editions of the *Treatise* which are known to have been circulating in the Song before 1065, there is evidence in other surviving texts of yet other pre-1065 editions of the *Treatise*. The imperial edition of the *Treatise* itself contains abundant

evidence to this effect. Though they are often omitted in later editions of the text, the original imperial edition, as preserved in the Zhao Kaimei edition, contains numerous annotations in smaller print made by the Song editors. A small number of these notes—introduced by the phrase, "The humble officials, [Lin] Yi et al. … 臣乙等…"—are opinions of the editors on points of interpretation and treatment, but the majority are notes on variations in a given line which the editors found in other editions of the *Treatise* while compiling the imperial edition (I have placed the text in small characters in parentheses):

> As for yang-brightness being ill, this is the stomach domain being replete (one [edition] says, "cold").[88]
> 陽明之為病, 胃家實(一作寒)是也。

> In visceral bind, when there is no yang pattern, there are no alternating fever and chills (one [edition] says, "there is cold but no heat"), contrary to expectations the person is quiescent, and there is a slippery coat on top of the tongue, one cannot forcefully purge [the patient].[89]
> 藏結, 無陽證, 不往來寒熱(一云寒而不熱), 其人反靜, 舌上胎滑者, 不可攻也。

Some of the variations referred to in these notes can be found in the extant editions mentioned above. The variation mentioned in the first quote, for instance, can be found in both the Tang edition and the Gao Jichong edition. On the other hand some of the variations, such as that in the second quote, cannot be found in any known edition, indicating that the Bureau's editors had access to editions of the *Treatise* which are no longer available.

The *Illustrated Classic of Materia Medica* (*Bencao tujing* 本草圖經), also contains citations from the *Treatise* which match none of its extant editions. The *Illustrated Classic* was the second text produced by the Bureau, in 1063, two years before the imperial edition of the *Treatise*. In the discussions following the entries for 47 medicinals, the *Illustrated Classic* mentions 47 formulae by Zhang Ji, but some of these formulae do not tally with known editions

[88] *Juan* 5, *pian* 8, p. 6, line 180, in Zhang Ji, *Zhongjing quanshu*, 424.
[89] *Juan* 4, *pian* 7, p. 6, line 130, in ibid., 403.

of the *Treatise*. In some cases, the formulae differ in ingredients from the versions listed in extant editions. Others differ in the quantities of ingredients prescribed or the instructions for preparing and taking the formula. Fifteen formulae differ in name, though otherwise identical with formulae found in extant texts by Zhang Ji. Other formulae differ in the quantifier used for counting medicinals.[90] Finally, three formulae which the *Illustrated Classic* attributes to Zhang Ji are found in none of his extant works.[91]

Though written after 1065, Cheng Wuji's (成無己, ca. 1063-1156) *Annotated Treatise on Cold Damage* (*Zhujie Shanghan lun* 註解傷寒論, 1144) also contains indications that Cheng was drawing upon editions of the *Treatise* that have since been lost. In the "Explanation of Pronunciation (*shiyin* 釋音)" sections which he places at the end of every fascicle, Cheng explains the pronunciation of several characters which are not found in any extant edition of the *Treatise*: 人葭 for 人參 (*renshen,* ginseng root) and 茈胡 for 柴胡 (*chaihu*, bupleurum root).[92] As the early 20th century physician Lu Yuanlei (陸淵雷, 1894-1955) observed, "[We] thus know that the Cheng edition preserves many ancient characters 則知成本多存古字."[93] Cheng came from a family of physicians. It would not be surprising if he had access to editions of the *Treatise* circulating among non-elite physicians. The existence of such otherwise unknown medical texts

[90] Prior to the Tang it was typical to use the character *wu* 物, "thing," to count medicinals in a formula; after the Tang it was customary to use the character *wei* 味, "flavor."
[91] Guo Xiumei et al., "*Bencao tujing* yin Zhongjing fanglun kaoyi," in *Zhang Zhongjing yanjiu jicheng*, by Qian Chaochen and Wen Changlu (Beijing: Zhongyi Guji Chubanshe, 2004), 895–98; see also, Su Ying and Zhao Gongyan, Bencao tujing *yanjiu* (Beijing: Renmin Weisheng Chubanshe, 2011), 44–103; and scattered comments on individual medicinals in, Mori Tatsuyuki, *Honzōkyō Kōchū* (Shanghai: Shanghai Kexue Jishu Chubanshe, 2005).
[92] *Juan 3*, *shiyin*, in Cheng Wuji, *Cheng Wuji yixue quanshu*, ed. Zhang Guojun (Beijing: Zhongguo Zhongyiyao Chubanshe, 2004), 89.
[93] Lu Yuanlei, *Shanghan lun jin shi* (Beijing: Renmin Weisheng Chubanshe, 1955), 2.

is supported a comment by Pang Anshi (龐安時, 1042-1099), also from a family of physicians, praising one such text passed down in his family.[94]

The *Treatise on Cold Damage* in the Song prior to 1065: A Text in Diverse Editions

This part of the chapter has shown that, though circulated in manuscript form and certainly in far fewer numbers than after 1065, the *Treatise on Cold Damage* was not only extant prior its imperial publication, it was extant in several, varying editions.[95] As with the pre-Song cold damage tradition, the image presented by this data is not of a text which has been neglected, but rather of a text whose popularity and methods of transmission have led to the production of numerous editions differing to varying degrees.

Asaf Goldschmidt has argued that the decision to edit and print the *Treatise on Cold Damage* was an unusual choice by the Bureau's editors to revive a largely forgotten Han medical text which was at odds with the medical standards of their times.[96] The data presented here do not support such a view. An unimportant and forgotten text would not be circulating in so many editions. The imperial edition of the *Treatise* was not the revival of a neglected text, but the standardization and promulgation of a text already widely admired.

[94] *Juan* 6, *bianlun* and *shang Suzi zhanduan mingbian Shanghan lun shu*, in Zhu Gong and Pang Anshi, *Zhu Gong, Pang Anshi yixue quanshu*, ed. Tian Sisheng (Beijing: Zhongguo Zhongyiyao Chubanshe, 2006), 201–202.
[95] For discussions of many of the specific points on which these editions differed, see Okada Kenkichi et al., *Sō izen shōkanron kō*.
[96] Goldschmidt, "Epidemics and Medicine," 78, 86–87; Goldschmidt, *Evolution*, 92–95.

Part III: Cold Damage Studies After 1065

When the Bureau's editors sat down to produce an imperial edition of the *Treatise on Cold Damage*, they had at their disposal a large number of divergent editions of the text. The notes in small characters, discussed above, reveal the thoroughness with which they compared these editions. The first edition of this text published in 1065 was a bulky and expensive large-print edition and appears to have circulated in very small numbers. A second, small-print edition, was published in 1088, reached a far wider audience, and was followed by a massive transformation in the cold damage studies tradition.[97]

Following the publication of the imperial edition, the number of texts written on cold damage soared. Prior to 1065, only eleven texts devoted to cold damage are known. Between 1065 and the end of the Song dynasty in 1279, 75 such texts were produced. Unlike the pre-Song cold damage studies tradition, however, post-1065 cold damage texts were all focused on the *Treatise* to the near exclusion of all other pre-Song sources. Even the *Inner Classic* corpus, though it continued to be cited by way of explaining difficult passages in the *Treatise*, ceased to be an important source for cold damage studies in its own right. No cold damage text written after 1065 relied upon the *Inner Classic* as its primary content. Most of the other texts in the pre-Song tradition were preserved only in the large compendia of the Tang and early Song, where they served as sources of formulae not found in the *Treatise*, but were subordinated to the *Treatise's* doctrinal framework.

At least as important as the number of texts written on the *Treatise* was a change in their types. If compendia and compilations overwhelmingly dominated the cold damage studies tradition prior to the Song, from 1065 onward books devoted exclusively to cold damage were

[97] *Shanghan lun*, *Guozilan* preface, in Zhang Ji, *Zhongjing quanshu*, 309.

the norm. Before 1065, no text except the *Inner Classic* corpus had been the subject of commentary or had entire books devoted to it. After 1065, explications, expansions, and commentaries on the *Treatise*—all three were often included in a single text—became the dominant form of cold damage literature, and the number of texts devoted exclusively to the *Treatise* far exceeded those devoted to any other medical text. In contrast to the 75 texts written on the *Treatise* between 1065 and 1279, a mere nineteen were composed on texts in the *Inner Classic* corpus.

Besides writing new kinds of texts, cold damage authors began to speak to one another via their texts in new ways. In the pre-Song cold damage tradition, references to other medical texts were confined to citation, either of formulae or doctrinal points. In my survey of pre-Song cold damage texts, I have found only four references to medical texts which were not citations: Chen Yanzhi's discussion of which texts constituted the "great works (*dapin* 大品)" of medicine,[98] Sun Simiao's list of works which physicians ought to study,[99] Huangfu Mi's discussion of the history of Zhang Ji's works,[100] and Tao Hongjing's complaint that Zhang Ji changed the names of the formulae found in *Canonical Methods of Decoction*.[101] Of these four, only Tao's complaint is a response to the content of another text, and even Tao does not debate with the *Treatise*, merely noting Zhang Ji's actions without formulating an argument against them.

From 1065 onward, however, a genuinely intertextual dialogue and debate began among cold damage texts. These arguments covered a wide variety of topics. One of the earliest such

[98] *Jingfang xiaopin*, *juan* 1, *shu kan fangjue*, in Yan Shiyun and Li Qizhong, *Sanguo liang Jin Nanbeichao yixue zongji*, 785.
[99] *Qianjin yaofang*, *juan* 1, *dayi xiye diyi* in Sun Simiao, *Sun Simiao yixue quanshu*, 17.
[100] *Zhenjiu jiayi jing*, author's preface, in Huangfu Mi, *Zhenjiu jiayi jing jiaozhu*, 16–17.
[101] *Fuxingjue zangfu yongyao fayao*, in Ma Jixing, *Dunhuang Yiyao Wenxian Jijiao*, 193.

debates centered on the meaning of a rare character found in two lines of the *Treatise*. The original lines in the *Treatise* read,

> In greater yang illness, if the nape and back are stiff and rigid, but contrary to expectations there is sweating and aversion to wind, cinnamon twig decoction with kudzu root added governs it.[102]
> 太陽病, 項背強几几, 反汗出悪風者, 桂枝加葛根湯主之。

> In greater yang illness, if the nape and back are stiff and rigid, there is no sweating, and there is an aversion to wind, kudzu root decoction governs it.[103]
> 太陽病, 項背強几几, 無汗無風者, 葛根湯主之。

The center of the dispute was the meaning and, to a lesser extent, pronunciation of the characters "几几."[104] In discussing one of his case histories, Xu Shuwei (許叔微, 1080-1154) argued against two other authors:

> What does "几几" mean? It is like the form of a short-feathered bird. Although [its neck] is stretched out, it is also rigid. Xie Fugu says that this means the ill person is emaciated and weak and must lean on a table in order to stand up. This is incorrect. [My explanation] is [also] not the same as that of Mr. Cheng.[105]
> 何謂几几, 如短羽鳥之狀, 雖屈而強也。謝復古謂病人羸弱, 須憑几而起, 非是。此與成氏解不同。

Xie Fugu (謝復古, fl. N. Song) is otherwise known only for his *Commentary on the Classic of Difficulties* (*Nanjing zhu* 難經注), which is no longer extant, but Mr. Cheng (*Cheng shi* 成氏) refers to Cheng Wuji. His commentary on the *Treatise* presents a very different interpretation of these characters:

> "几几" is the appearance of an outstretched neck. When [the ill person] moves, he stretches out his neck, shakes his body, and then moves.
> 几几者, 伸頸之貌也。動則伸頸, 搖身而行。

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[102] Line 14, *juan* 2, *pian* 5, p. 14b, in Zhang Ji, *Zhongjing quanshu*, 361.
[103] Line 31, *juan* 3, *pian* 6, p. 8b, in ibid., 375.
[104] Nowadays, following Cheng Wuji, these characters are normally pronounced "*shūshū*," see Li Peisheng and Liu Duzhou, eds., Shanghan lun *jiangyi* (Shanghai: Shanghai Kexue Jishu Chubanshe, 1985), 21; and Cheng Wuji, *Zhujie Shanghan lun*, *juan* 2, *pian* 5, in Cheng Wuji, *Cheng Wuji yixue quanshu*, 69.
[105] *Shanghan jiushi lun*, *gegen tang di'ershi*, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 62.

Xu's references to these two texts is neither mere citation—he does not even attempt to paraphrase Cheng Wuji—nor a simple listing of other relevant medical texts. He directly refers to the content of these two texts and engages in an intertextual argument with them. For the first time in Chinese history, medical authors were truly in dialogue with one another.

As this example demonstrates, the imperial edition of the *Treatise on Cold Damage* served to establish both a common point of reference and a common set of problems among medical authors. Intertextual dialogue and debate were possible in part because everyone involved was looking at the same text. Han Zhihe (韓祇和, fl. late 11th c.) devoted a large section of his cold damage text to the treatment of yin jaundice (*yinhuang* 陰黃) because, although the *Treatise* mentions it, Zhang Ji "… did not further establish separate formulae [to treat it] 即不增別立方藥."[106] Zhu Gong (朱肱, late 11th-early 12th c.) took up the same problem, but came to different conclusions about which formulae should be used.[107] Likewise, discussions of how to treat warm disease —another illness which the *Treatise* names without providing a treatment—are found in the works of Zhu Gong, Pang Anshi, and Xu Shuwei among others.[108] More broadly, the framework of the *Treatise on Cold Damage*—the diseases of the three yin and three yang—became the standard framework for discussions of cold damage, and the terminology of the *Treatise*—the names it uses for diseases, signs and symptoms, treatment methods, etc.—became the standard terminology of cold damage studies. In short, after 1065, cold damage studies became *Treatise on Cold Damage* studies.

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[106] *Shanghan weizhi lun*, *juan xia*, *yinhuang zheng pian*, in Zhu Pangxian and Wang Ruoshui, eds., *Lidai zhongyi zhenben jicheng*, vol. 3 (Shanghai: Shanghai Sanlian Shudian, 1990), 33.
[107] *Nanyang huoren shu*, *juan* 6, question 47 and *juan* 11, question 89, in Zhu Gong and Pang Anshi, *Zhu Gong, Pang Anshi yixue quanshu*, 55, 74–75.
[108] E.g., Zhu Gong, *Nanyang huoren shu*, *juan* 6, question 43, in ibid., 53; Pang Anshi, *Shanghan zongbing lun*, *juan* 5, *tianxing wenbing lun*, in ibid., 189; Xu Shuwei, *Shanghan baizheng ge*, *juan* 2, *di'ershiqi zheng*, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 13–14.

Conclusion: A Narrowing of Vision, a Broadening of Discourse

From its inception cold damage studies was a vital field within pre-Song text-based medicine. Its vitality never abated, and the interest in cold damage studies seen in the first century of the Northern Song was merely a continuation of preexisting trend possibly amplified by the rising number of epidemics during that period.[109] Within this earlier tradition, the works of Zhang Ji, including the *Treatise on Cold Damage* in whatever forms it was circulating, were both well-known and highly valued. The *Treatise* may have been in limited circulation owing to the relatively immature state of a publishing industry, the habit of secrecy among physicians of the time, and a general disdain for medicine on the part of the elite, but the number of editions in which *Treatise* is known to have been transmitted and the number of references to it and its formulae make it clear that it was neither lost nor forgotten.

The sudden upsurge in writing on the *Treatise* that followed its imperial publication in 1065 cannot, therefore, be called a "renaissance" or even a "revival." It was, in fact the narrowing of a once broad and vibrant tradition of cold damage studies to focus on a single edition of a single text. It is this narrowing of focus and its unexpected result—an explosion of discourse—which need to be examined and explained. Why was the *Treatise on Cold Damage* singled out from among other cold damage texts? Why did Song physicians focus on the *Treatise* to a greater degree than any other text—not merely in the cold damage tradition but in the entirety of the medical tradition? Why did the *Treatise* remain so salient for later physicians? These are the questions that must be answered in order to understand the transformation of the

[109] Goldschmidt, "Epidemics and Medicine," 56–78; A. Morabia, "Epidemic and Population Patterns in the Chinese Empire (243 BCE to 1911 CE): Quantitative Analysis of a Unique but Neglected Epidemic Catalogue," *Epidemiology and Infection* 137, no. 10 (June 4, 2009): 1361–68.

status of the *Treatise on Cold Damage* during the Song and its relation to the broader transformations of medicine during that period.

CHAPTER 2
The Song Dynasty: Social, Epidemiological, and Medical Frontiers

As seen in Chapter 1, the *Treatise on Cold Damage*'s transformation into one of the most central texts of Chinese literate began in the Song Dynasty, and in this chapter I turn to the background of that change through an examination of the many important developments that occurred during that era. The Song dynasty has long been recognized as an era of profound change in Chinese society. Some scholars, looking forward from the Tang Dynasty have referred to these changes as the "Tang-Song transition;"[110] others, looking back from the Ming, have incorporated them into the "Song-Yuan-Ming transition."[111] In either case, the Song is widely recognized as having laid the foundations for and set the basic patterns of the remainder of the imperial period.

Robert Hartwell's work was among the first in English-language literature to draw attention to the transformations of the Song.[112] Later work has revealed systemic changes in the composition and self-conception of the elite, family and lineage organization, elite survival strategies, commerce, governance, and intellectual discourse.[113] More recently, research has

[110] Naitō Torajirō, "A Comprehensive Look at the T'ang-Sung Period," trans. Joshua A. Fogel, *Chinese Studies in History* 17, no. 1 (October 1983): 88–99.
[111] Paul Jakov Smith and Richard von Glahn, *The Song-Yuan-Ming Transition in Chinese History* (Cambridge: Harvard University Asia Center, 2003).
[112] E.g., Robert M. Hartwell, "Demographic, Political, and Social Transformations of China, 750-1550," *Harvard Journal of Asiatic Studies* 42, no. 2 (December 1982): 365–442.
[113] For a discussion of changes in the elite see Nicolas Olivier Tackett, "The Transformation of Medieval Chinese Elites (850--1000 C.E.)" (Ph.D., Columbia University, 2006); for changing family and lineage organization, Patricia Ebrey, "Conceptions of the Family in the Sung Dynasty," *Journal of Asian Studies* 43, no. 2 (February 1984): 219–45; and Patricia Ebrey, "The Early Stages of in the Development of Descent Group Organization," in *Kinship Organization in Late Imperial China, 1000-1940*, ed. Patricia Ebrey and James L. Watson (Berkeley: University of California Press, 1986), 16–61; for changes in elite survival strategies, John W. Chaffee, *The Thorny Gates of Learning in Sung China* (New York: State University of New York Press, 1995); and John W. Chaffee, "Status, Family, and Locale: An Analysis of Examination Lists from Sung China," in *Liu Zijian Boshi Songshouji Songshi Yanjiu Lunji*, ed. Kinugawa Tsuyoshi (Kyoto: Dohosha, n.d.), 341–56; for intellectual discourse, Peter Bol, *"This Culture of Ours": Intellectual Transitions in T'ang and Sung China* (Stanford University Press, 1994); and Peter Bol, *Neo-Confucianism in History* (Cambridge: Harvard University Asia Center, 2008); for an overview of social

argued that the Song dynasty also witnessed a major increase in Chinese society's epidemiological burden.[114] All of these changes were deeply interwoven with equally fundamental changes in medical learning, doctrine and practice.

This chapter contextualizes the rising importance of the *Treatise on Cold Damage* within the broader transformations occurring the Song dynasty. Part One begins by examining social changes, focusing on the transformation of Chinese social structure and the composition of the elite, literati social stratum. Part Two examines the evidence for a major epidemiological shift occurring during the Song, and Part Three surveys the changing medical landscape of the Song.

SECTION ONE: Social Change in the Song Dynasty

The elite of the Northern Song were national in both their sphere of activity and their consciousness. They monopolized high office to the exclusion of other social groups, married among themselves even at great distances, and demonstrated little commitment to their natal places once they had achieved high office. By the Southern Song, this national elite had been absorbed into the far larger local elite and this amalgamated elite pursued predominantly, though not exclusively, localist strategies: they rarely obtained office but actively participated in the examinations, married primarily within the same county, maintained extensive social ties to their

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change in the Song genreally Robert Hymes, *Statesmen and Gentlemen: The Elite of Fu-Chou Chiang-Hsi, in Northern and Southern Sung* (New York: Cambridge University Press, 1987) and his forthcoming chapter in this dissertation 2 of the Song volume of the Cambridge History of China; for a summary of medical change during the Song, see Goldschmidt, *Evolution*; and Angela Ki-che Leung, "Medical Learning from the Song to the Ming," in *The Song-Yuan-Ming Transition in Chinese History* (Cambridge: Harvard University Press, 2003), 374–98; for changes in elite attitudes to medicine, see Hymes, "Not Quite Gentlemen?"; and Chen Yuanpeng, *Liang Song de "shangyi shiren."*

[114] Goldschmidt, "Epidemics and Medicine"; Alfredo Morabia, "Epidemic and Population Patterns in the Chinese Empire (243 BCE. to 1911 CE): Quantitative Analysis of a Unique but Neglected Epidemic Catalogue.," *Epidemiology and Infection* 137, no. 10 (2009): 1361–68.

natal place even if they rose to high office, and focused to a greater degree on maintaining their status in the eyes of their local peers through local charity and local leadership.[115]

In addition to these changes in the nature of their own social group, the Song elite faced unprecedented challenges arising from the spread of printing and commerce in books. As printed books became more readily available and less prohibitively expensive, a wider social stratum than even the expanded literati was able to afford both literacy and books. This allowed for the proliferation of new social groups comprising individuals who were literate and made their living by means of their literacy but to varying degrees lacked the culture, learning, and social networks of the elite. Robert Hymes terms this group the "*lumpenliterati*" and includes in their number primarily religious specialists, litigation masters, and physicians. As a group, they aroused anxiety on the part of the literati, who saw them as destabilizing forces with the potential to encroach on literati privileges and powers.[116]

Along with changes in the composition of the literati stratum came changes in both the ideas the literati expressed and how they expressed those ideas. Peter Bol describes three fundamental changes that occurred in the eleventh century and heavily influenced the ideas and ideologies of Song thinkers. First, learning became politicized because of the increasing importance of the examinations in official careers. Political factions came to identify with particular styles of learning and attempted to enforce their style as the standard for the examinations and thereby for everyone who wished to participate in the examinations. Second, the previously accepted justifications for empire were gradually undermined as the conceptions of history, the cosmos, and humans' place in both changed. The search for new formulations of a person's place in the world and the proper role of empire inspired much of the intellectual fervor

[115] Robert Hymes, "Sung Society and Social Change," in *The Cambridge History of China, Vol. 5, Part 2: Sung China, 960-1279*, ed. John Chaffee and Dennis Twitchett (New York: Cambridge University Press, 2015), 621–642.
[116] Ibid., 557–562, 650–652.

of the Song. Third, just as learning became political, government became ideological. In addition to driving the extreme factionalism of the later Northern Song court, this climate of ideological government contributed to a level of government activism never seen in any Chinese dynasty before or since.[117] Significantly, Bol argues that the core of these intellectual changes were, "redefinitions of what it meant to be a good shih,"[118] revealing one of the links between social and intellectual change in this period.

SECTION TWO: The Song Dynasty's Epidemiological Frontiers

For this dissertation, one of the most significant changes that occurred in the Song was the rise in the frequency and severity of epidemics. Such epidemics were more than a physical threat to the well-being of the state and its people. Epidemics were one of several natural phenomena that were traditionally held to indicate moral failings on the part of a ruling house, and the possibility that they had lost the "mandate of heaven," which granted them the right to rule. Epidemics were therefore an existential threat to the state and its supporters.[119]

Historical epidemiology is always problematic. This is all the more true when studying a place like China, where radically different views of health, illness, and healing complicate the interpretation of the already limited number of surviving records. Nonetheless, recent research has provided persuasive evidence for an increase in the epidemiological burden of the Chinese populace during the Song. Asaf Goldschmidt, following the work of Miyashita Saburō, has shown that there was a decided increase in the number of epidemics recorded during the Northern Song and that the Song government was both aware of and concerned by this increase. Goldschmidt argues persuasively that the fear of epidemics was part of the motivation behind the

[117] Bol, *Neo-Confucianism*, 43-44.
[118] Bol, *This Culture of Ours*, 334.
[119] Goldschmidt, "Epidemics and Medicine," 76.

publishing of the *Treatise on Cold Damage*.[120] Cold damage was the primary rubric under which epidemic febrile illnesses were understood in the Song, and the *Treatise* was the preeminent text on cold damage. The imperial publication of the *Treatise* further added to its luster, and its popularity is no doubt in part due to the perception that it was particularly useful in dealing with epidemic illness.

An important question is what led to these epidemics. The causes of any particular epidemic cannot be pinned down, but two factors have been highlighted as likely causes of the increased frequency of epidemics in general: the southward migration of the Chinese population and the absolute increase in population under the Song.

The southward migration of the Song population has been long recognized,[121] but it is only more recently that the potential epidemiological significance of this shift has been fully explored. Southern China—usually defined as the region south of the Huai and Han rivers—has a far warmer and wetter climate than North China. The summer monsoon brings warm moist air up from the South China Sea, resulting in high levels of rainfall across the Yangtze delta and other parts of South China. The mountainous nature of most of South China ensures that little of this moisture reaches North China, resulting in a sharp climatic divide between the two regions. The differing climates produce very different disease profiles as well. Southern China is characterized by far higher levels of febrile illnesses than northern China, and illnesses such as malaria were historically much more common there.[122]

The Song Chinese were well aware of the higher disease burden of South China. From very early times, a divide between the north and south or northwest and southeast had been part of the Chinese geographical imagination. One of the earliest versions of this divide tells how

[120] Goldschmidt, "Epidemics and Medicine"; Goldschmidt, *Evolution*, 69–102; Miyashita Saburō, "Sō Gen no iryō."
[121] Hartwell, "Demographic, Political, and Social Transformations of China, 750-1550," 365–366.
[122] Goldschmidt, *Evolution*, 70, 85; William H. McNeill, *Plagues and Peoples* (New York: Anchor, 1977), 102–103.

during a mythical battle, the northwestern pillar of heaven was broken causing the earth and heaven to come closer together in the northwest and grow farther apart in the southeast. In the *Inner Cannon*, the resulting tilting of the earth was used to explain the different types of illnesses that characterized the northwest and southeast.[123] During the Northern Song, the far south was a place of exile. It was characterized by strange diseases, strange peoples, and strange customs. Exile to the distant south was the most extreme punishment an official could receive, in part because of the number of northerners who succumbed to disease while there.[124]

In spite of the awareness of the risks of living in the south, from the 8th century onward a steady stream of migrants relocated there from the north. At the outset of the dynasty, roughly two-thirds of the Song population lived north of the Huai and Han rivers. By the end of the 11th century—prior to the loss of north China, but during a period of escalating conflict with the Jurchen forces—fully 75% of the Song population lived south of them. As the population of North China recovered, this ratio decreased, but from this point up to the end of the empire, roughly two-thirds of China's population lived in South China.[125]

The dramatic rise in southern population that occurred in the Song meant far more people were exposed to the diseases prevalent there. Furthermore, as the population increased, so did interregional commerce and transportation. Water transport—common in the south—was far faster than land transport, making it easier for diseases to spread from region to region. Taken together, these two factors offer a compelling explanation of the increased disease burden of the Song population, but a second factor has long been ignored: the absolute increase in population

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[123] Marta Hanson, *Speaking of Epidemics in Chinese Medicine: Disease and the Geographic Imagination in Late Imperial China* (Routledge, 2011), 30–35.
[124] T.J. Hinrichs, "The Medical Transforming of Governance and Southern Customs in Song Dynasty China (960--1279 C.E.)" (PhD Dissertation, Harvard University, 2003), 64–72; Ari Daniel Levine, *Divided by a Common Language: Factional Conflict in Late Northern Song China* (University of Hawaii Press, 2008), 21–22.
[125] Dieter Kuhn, *The Age of Confucian Rule: The Song Transformation of China*, 2011, 73–75; Hartwell, "Demographic, Political, and Social Transformations of China, 750-1550," 365–366.

during the Song. By the early 13th century, the combined population of the Southern Song and Jin is estimated at 120 million, meaning that somewhere between one-third and one-half of the world's population lived in China at this time.[126] Absolute population is a critical factor in determining the spread of epidemic diseases. In small populations, epidemics appear and cause high levels of mortality. Individuals either survive the illness, becoming immune to it, or die. After exhausting the supply of susceptible individuals, the disease itself disappears. After a generation or two, the majority of resistant individuals have died of other causes, and if the disease is reintroduced, the cycle repeats itself again. In a sufficiently large population, on the other hand, even a highly virulent disease can sustain itself indefinitely by cycling through the population region by region, generation by generation. Under these conditions, not only do many diseases become endemic diseases of childhood—so that all individuals who survive to adulthood are immune—but the capacity of the population to generate and sustain large-scale epidemics also increases dramatically. Using the catalogue of major epidemics prepared by Joseph H. Cha and included in the appendix to William McNeil's *Plagues and Peoples*,[127] the epidemiologist, Alfredo Morabia, has recently demonstrated that the pattern of epidemics seen in Chinese history matches that predicted by current epidemiological models for a growing agricultural population. Of particular interest for this study, his work reveals a sharp climb in the frequency of epidemics as the population begins to increaase dramatically in the Song dynasty.[128]

During the Song dynasty the population of China thus crossed two important epidemiological frontiers. The first was geographical, the shift of the center of population density

[126] Kuhn, *The Age of Confucian Rule*, 73–75; Valerie Hansen, *The Open Empire: A History of China to 1600* (New York: Norton, 2000), 411.
[127] McNeill, *Plagues and Peoples*, 297–306. As the authors admitted, this list is not without flaws. It is undoubtedly incomplete and spotty in its coverage. It was produced by checking and correcting an earlier list based on Sima Guang's *Comprehensive Mirror for Aid in Government* (*Zizhi tongjian* 資治通鑑 and the Qing Imperial Encyclopedia (*Gujin tushu jicheng* 古今圖書集成).
[128] Morabia, "Epidemic and Population Patterns in the Chinese Empire (243 BCE to 1911 CE)."

to southern China, the second was demographic, the increase of the absolute population to a level capable of sustaining more frequent epidemics. As a result, an upsurge in epidemics occurred that prompted doctors, officials, and even emperors to seek means of improving the situation. Many of the medical reforms attempted by both the government and private individuals were explicitly aimed at improving the treatment of epidemic febrile illnesses, but it is likely that many of their other activities—such as the condemnation of common physicians[129]—were also driven in part by these epidemiological shifts.

SECTION THREE: Medical Change in the Song

As in other areas of Chinese culture, the Song Dynasty witnessed important changes in medicine and healing. Recent research has highlighted a number of important areas of change: the rise in status of the *Treatise on Cold Damage*; increasing elite involvement in medicine; efforts on the part of the Song state to use medicine as a tool of government; and new patterns of knowledge transmission largely due to the growing printing industry. The first of these areas—the changing place of the *Treatise* in textually based medicine—is the topic of this dissertation as a whole. The remaining areas of change are discussed below.

Elite Involvement in Medicine

One of the earliest changes scholars noticed in Song-Dynasty medicine was the increasing participation of members of the literati elite. Writing in 1935, Xie Guan (謝觀, 1880-1950) observed:

> In Chinese medical arts, the Tang and Song should be taken as an important boundary. Up through the Tang, most doctors clung to specialized learning transmitted [from master

[129] See Chapter 3.

> to disciple]. The literati among them who loved the study of formularies … numbered only a few. From the Song onward, medicine suddenly became a job for the literati. If [a doctor] was not a scholar physician, he was not worthy of recognition in the world.[130]
> 中國醫術，當以唐宋為一大界。自唐以前，醫者多守專門授受之學，其人皆今草澤鈴醫之流，其有士大夫而好研方書 … 代不數人耳。自宋以後，醫乃一變為士大夫之業，非儒醫不足見重於世。

More recent research by Robert Hymes has shown that the transformation was not as sudden as Xie presents it, but it was nevertheless quite striking. Examining Fuzhou prefecture from the Northern Song to the Yuan, Hymes shows that few elite men took up medicine as a career during the Song, but a large number did so in the Yuan. [131] Chen Yuanpeng 陳元朋 suggests that Hymes is overly conservative in his evaluation of the number of elite doctors, but the examples he cites are all famous doctors of the Song who authored well-known texts. His data-set is far too limited to evaluate the behavior of ordinary elite living away from the capital.[132]

Hymes argues convincingly that the rise in the number of elite physicians was caused by the disappearance of the civil service examinations—which were temporarily suspended under the Yuan—and the resulting decrease in demand for teachers—traditionally the fall-back job for elite men unable to pass the exams.[133] Reiko Shinno, examining the Yuan Dynasty's medical policies—which continued and expanded upon those of the Song—contends that it was the Yuan government's valuation of doctors, an attitude derived from Mongol culture, that was most influential in encouraging elite men to consider medical careers.[134] Shinno fails, however, to present comparable local data to demonstrate how the administrative changes she has discussed were actually impacting the elite away from the capital. All of her examples are drawn from

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[130] *Origins and Development of Medicine in China* (*Zhongguo yixue yuanliu lun* 中國醫學源流論, 1935), *lingyi mifang*, in Xie Guan, *Zhongguo yixue yuanliu lun* (Fuzhou: Fujian Kexue Jishu Chubanshe, 2003), 101.
[131] Hymes, "Not Quite Gentlemen?"
[132] Chen Yuanpeng, *Liang Song de "shangyi shiren,"* 31–33.
[133] Hymes, "Not Quite Gentlemen?"
[134] Reiko Shinno, "Promoting Medicine in the Yuan Dynasty (1206-1368): An Aspect of Mongol Rule in China" (PhD Dissertation, Stanford University, 2002), 198–204.

high-ranking officials and places intimately associated with them. While she provides persuasive evidence that Yuan government actions contributed to the rise in elite involvement in medical practice, she does not show that this influence was decisive. Moreover, the lack of access to official positions and teaching jobs would have directly and rapidly affected the vast majority of the literati-elite. The Yuan administrative changes were more limited in scope, and it remains unclear how long they were in effect, given the short period of time during which the Yuan wielded effective control over all of China.

Regardless of its timing or causes, however, all of these researchers agree that a major shift in elite occupational strategies occurred between the Song and Yuan dynasties. By the end of the Yuan, a large number of elite men were practicing medicine as a career and medicine was widely seen as a field only a literatus could properly master.

Medical Governance

No doubt tied to the growing sense that only the educated elite could practice medicine correctly, the Song government also took a far greater interest in medicine than had previous dynasties. Apart from providing medical care to the imperial family and high officials, previous dynasties, involvement in medicine had been limited to distributing medicine during epidemics. Under the Song, however, the government took a more activist stance regarding medicine. Not only was it concerned to provide both qualified doctors and effective medicines to the empire, but it made use of medicine in its efforts to transform the customs of the people. T.J. Hinrichs has coined the term "medical governance" to refer to the numerous ways in which medicine became a tool of government during the Song. The key components of Song medical governance

were establishing medical schools and imperial pharmacies, using medicine to transform southern customs, and publishing medical texts.[135]

The Medical Schools

In its early years, the Song government maintained Tang Dynasty medical institutions such as the Imperial Medical Office (*Taiyi shu* 太醫署) which was primarily responsible for the health of the imperial family, but they rapidly broadened the responsibilities of this office. In 992, the Imperial Medical Office was renamed the Hanlin Physician Service (*Hanlin yiguan yuan* 翰林醫官院). The use of the prestigious name "Hanlin"—long associated with the imperial academy for the study of literature and the classics—reveals that even at this early point in the dynasty, the Song government was acting to strengthen the reputation of medical practice among the elite.

An important front in the Song effort to raise the status and improve the quality of medical practice was medical education. Education of physicians to serve the imperial family and officials was the responsibility of the Imperial Medical Bureau (*Taiyi ju* 太醫局). Students treated soldiers, fellow students, and the people of the capital and were evaluated on the basis of their success rate. During the Qingli Reforms of the 1040s, an attempt was made to establish medical schools throughout the empire, though it is unclear how successful these efforts were. Under the New Policies reforms of 1069-1085, the system of medical schools was further expanded. At its height, the Imperial Medical Bureau in the capital was training 300 physicians, divided into three "halls." The curriculum included a combination of famous older texts, more recent *materia medica* compilations and formularies, and texts determined by a students

[135] T. J. Hinrichs and Linda L. Barnes, eds., *Chinese Medicine and Healing: An Illustrated History* (Cambridge: Harvard University Press, 2013), 99–100.

specialty: "formulae and pulses (*fangmai* 方脈)," "acupuncture (*zhen* 鍼)," or "medicine for sores (*yangke* 瘍科)."

In addition to actively training more physicians, the Song government also expanded the number of medical posts, providing career opportunities for its graduates and incentive for elite men to study medicine. The hierarchy of physician-officials was likewise refashioned to resemble that of other government officials. More than any dynasty before or after, the Song made a concerted effort to make medicine an appealing career for elite men.[136]

The Imperial Pharmacies

Before the Song, the distribution of medicines to the populace had occurred on an ad hoc basis during epidemics and was often limited to the capital. The imperial offices that existed for the purchase and processing of medicinals were intended to supply the needs of the imperial family and did not serve the broader community even within the capital. Even in the early years of the dynasty, the Song government took steps to strengthen the provision of medicines to the people. The second emperor, Taizong (r. 976-997) included funds for the purchase of medicines for distribution within the state budget. He also assigned ten doctors to tend to the people of the capital. While these measures were no doubt helpful, they were only enacted during epidemics and they remained limited to the capital. In 1076, as part of the New Policies, these measures were expanded dramatically. The various offices responsible for procuring and preparing medicinals were consolidated in the newly created Pharmacy Service (*Heji ju* 和劑局), later renamed the *Taiping huimin ju* 太平惠民局). Though initially limited to the capital, the program

[136] Hymes, "Not Quite Gentlemen?," 44–47; Miyashita Saburō, "Sō Gen no iryō," 139–141; T.J. Hinrichs, "The Song and Jin Periods," in *Chinese Medicine and Healing: An Illustrated History*, ed. T.J. Hinrichs and Linda L. Barnes (Cambridge: Harvard University Press, 2013), 100–101; Goldschmidt, *Evolution*, 44–57.

was ultimately expanded to include offices in many prefectures. Although we have no way of verifying how thoroughly this imperial order was carried out, the fact that it was necessary to cut back the program during the war with the Jurchen armies and that the prefectural pharmacies were reestablished early in the Southern Song suggests that a significant number of offices must have been in operation.

The offices of the Pharmacy Service fulfilled two related functions. The first was economic. The Song witnessed a dramatic rise in the cost of raw medicinals. The imperial pharmacy sold both its stock of raw herbs and its prepared medications at below market prices in an effort to stabilize them. The second was medical. The Pharmacy Service produced medicines that were distributed free during epidemics but were available for purchase at other times. Unlike other pharmacies, which largely compounded medicines to order on the basis of a doctor's prescription, the imperial pharmacy sold specific, prepared medicines, usually in the form of powders or pills. This made it possible for a doctor to send a patient to the imperial pharmacy office to purchase a cheap, ready-made remedy and also allowed individuals to purchase medicinals for themselves without consulting a doctor. To facilitate this process, from 1078 to 1107 to the Pharmacy Service produced a series of books listing its formulae. Called *Formulae of the Imperial Pharmacy Service for the Benefit of the People in the Era of Great Peace* (*Taiping huimin heji jufang* 太平惠民和劑局方, final edit ca. 1241, hereafter *Formulae of the Imperial Pharmacy*).[137] These books listed each formula with a brief indication of the signs and symptoms of the illness it treated. The final edition also included a short introduction to medical practice. References to this book as late as the Yuan Dynasty indicate that it remained popular and widely consulted even after the demise of the Pharmacy Service at the end of the Song.

[137] Miyashita Saburō, "Sō Gen no iryō," 139–141; Goldschmidt, *Evolution*, 123–128; Hinrichs, "The Song and Jin Periods," 100–102.

Transforming Southern Customs

As it engaged more actively in epidemic relief—by training doctors, distributing medicines, and publishing medical books (see below)—the Song government claimed a stake in the medical marketplace and put the weight of its prestige behind China's literate tradition of medicine. In so doing it came into conflict with health-related beliefs and practices in the increasingly populous and important regions of southern China, in particular with the southern ritual healers government officials referred to as "spirit mediums (*wu* 巫)."[138]

Southern popular customs were generally looked down upon by the predominantly northern-oriented officials of the Northern Song. North China was seen as the ancestral source of Chinese culture and the seat of its ancient capitals. By contrast, the customs of southern Chinese were viewed as backward or even barbaric. Good magistrates, it was believed, should guide their southern charges away from these uncivilized customs and toward the correct and upright customs of North China. The consultation of spirit mediums during illness was one of the customs singled out for eradication. According to officials' reports—the only source that survives—spirit mediums encouraged a number of behaviors that were repugnant to the government's representatives. One of these was the avoidance of the medicines that the government was working so hard to promote. Spirit mediums advised patients to depend entirely on ritual and religious cures. The custom that elicited the greatest opprobrium, however, was the isolation or abandonment of the sick. Spirit mediums were said to encourage healthy family

[138] T.J. Hinrichs translates *wu* as "shaman," as do many other scholars, though acknowledging the problems with that term, see Hinrichs, "The Medical Transforming of Governance and Southern Customs in Song Dynasty China (960--1279 C.E.)," 11; I have chosen to avoid using the term, "shaman," not out of deference to Mircea Eliade's distinction between shamans and spirit mediums, but rather because I consider the word hopelessly problematic. For a diiscussion of these problems see Alice Beck Kehoe, *Shamans and Religion: An Anthropological Exploration in Critical Thinking* (Prospect Heights: Waveland Press, 2000).

members to stay distant from sick ones, to burn their clothes and blankets, and generally to keep them isolated. This practice was justified in terms of demonic theories of illness in which contagion played a large role. Abandoning one's relatives when they were suffering was seen as a gross violation of Confucian norms, and although the custom actually had a long history even in North China, southern spirit mediums were blamed for encouraging it.[139]

It was not the concept of contagion itself that officials—with a few exceptions—opposed. Contagion had long been recognized in China, and even Zhu Xi—whose interpretation of Learning of the Way (*Daoxue* 道學) Confucianism ultimately became state orthodoxy—cautioned that attempting to deny something that so clearly existed would only make the people doubt you. The problem was that by refusing medicines the government promoted and abandoning relatives in contradiction to the moral principles the government supported, southern Chinese were in effect defying government authority.[140] If the imperial bureaucracy was going to engage in medical governance, it had to insist on recognition of its authority in this sphere just as it did in others. Spirit mediums and their practices were widely accepted in southern society and represented a form of religion deemed undesirable by the Song state. They were singled out as the principal targets in government campaigns to reform southern customs.

The efforts of Song officials were by no means uniform. Some officials took no action whatsoever against spirit mediums. Others took a moderate approach, publishing and distributing medical texts in an attempt to reduce people's dependence on spirit mediums. Yet others took harsher measures, destroying spirit mediums' shrines and ordering them to stop their practices or

[139] Hinrichs, "The Medical Transforming of Governance and Southern Customs in Song Dynasty China (960--1279 C.E.)," 20–60, 76–100.
[140] Ibid., 203–226.

even publicly flogging them as a demonstration of the magistrate's superior power and authority.[141]

The most intense period of confrontation between spirit mediums and officials was the Northern Song. In the Southern Song, as the government backed away from the activist reform efforts of the late 11th and early 12th centuries, magistrates intervened in these matters with much less frequency. This pattern is also seen in other aspects of medical governance. Neither the Southern Song nor later dynasties attempted to restore the Northern Song's full array of tools for transforming the populace through medicine. Nevertheless, the impact of these efforts extended far beyond the period of time in which they were active. While the Song elite largely continued to see occupational medical practice as something of low status, the seed of the idea that elite men could also be doctors had been planted, and would eventually bear fruit. The Song government's medical publications, discussed below, contributed greatly to the medical transformations witnessed from the Song through the Yuan dynasties.

Medical Publishing

Arguably the most significant change in the medical landscape of the Song Dynasty was the vast increase in the trade in medical books. The growth of the book trade resulted in a vast increase in the number of books that were written, the number in circulation, and the number that survived to modern times. The number of books published on medicine increased along with those on other topics. These books had a profound impact on the learning and practice of medicine from the Song onward.

The two main sphere's of medical book production in the Song were government publications and publications by private individuals—whether an individual without government

[141] Ibid., 21–26, 76–80, 218, 227–231.

position or an official writing in a private capacity. These two spheres differed in the types of books they produced and in the way those books were received.

Song Government Publishing

Before the Song, it was rare for the court to commission the creation of medical texts. A total of five medical books that we know of were produced for the court in all of the pre-Song dynasties. From its inception the Song broke with this precedent, and the state continued to commission and distribute medical books throughout the Northern Song. T.J. Hinrichs has identified three approaches found in different government medical publications: inclusive, exclusive, and pragmatic. Inclusive texts attempted to gather all the knowledge on a given topic within a single book. Key examples of these projects were the various *materia medica* texts that strove to include all known medicinals throughout the empire. Likewise, early government formularies like *Formulae of Sagely Beneficence for the Era of Great Peace* were massive attempts at describing all of medical therapeutics in a single book. By contrast, exclusive texts reflected a focus on orthodox knowledge. These texts were usually much shorter than the inclusive projects and for the first time in Chinese medical history distinguished between medical forms of healing and ritual or other non-medical forms of healing. The *Treatise on Cold Damage* itself was the most significant exclusive text produced by the government but other examples included the texts from the *Inner Classic* corpus. Pragmatic texts were of a more miscellaneous character. These were generally formularies designed to simplify medical knowledge in a way that made it easier to apply.[142]

The height of Song government medical publishing occurred between 1057 and 1069, when Emperor Renzong established the Bureau for Editing Medical Texts. The Bureau was

[142] Hinrichs, "The Song and Jin Periods," 102–108.

founded in yet another effort to benefit the people by improving the quality of medical practice. It was the first—and almost the only—time a Chinese court used medical publication expressly for this purpose. The court was concerned that most important medical texts were in limited circulation in numerous, often erroneous, editions. The Bureau was to correct this problem by producing and distributing accurate editions of these books. Over the course of twelve years, the Bureau produced fourteen books, all of which rapidly became among the most widely cited medical texts in Chinese history.[143]

Medical texts produced by the government carried a type of authority that other medical texts lacked. They were more widely cited than other texts and seem to have received a more ready reception. It is difficult to discern whether this authority derived from the reflected authority of the government itself or from the fact that the government saw to it that its texts were widely distributed—and private reprinting of government texts no doubt spread them even further. It is also possible that their use in the curriculum of the medical schools may have been a factor in their popularity. Whatever its source, their authority and popularity did not completely prevent medical authors from critiquing them. During the Song, however, such critiques were relatively mild and limited in scope. It was only after the Song that any government medical text was condemned in its entirety.[144]

Private Medical Publishing

It is difficult to gauge how much private medical publishing took place during the Song. Undoubtedly there were many texts of which no trace now survives. Nonetheless, the fact that

[143] Miyashita Saburō, "Sō Gen no iryō," 135–138; Goldschmidt, *Evolution*, 87–93.
[144] For an example see the discussion of Zhu Zhenheng's (朱震亨, 1281-1358) attack on the *Taiping huimin heji ju fang* in Chapter 5.

some 257 privately produced medical texts are known from the Song indicates that the market for private medical publishing must have been quite large.[145]

Private individuals during the Song authored all three of the types of texts described by Hinrichs for government publications, but the nature and emphasis of their writing differed. Private authors were far less likely than the government to produce inclusive texts. No doubt the amount of time and effort required for such massive texts was more than most individuals were willing to undertake. Nonetheless, privately produced *materia medica* and comprehensive formularies—such as Liu Fang's *New Book on Children* (*Youyou xinshu* 幼幼新書, 1150) which collected a vast number of formulae for treating children—were produced. Privately produced exclusive texts included two distinct genres. On the one hand, some of them, such as Luo Longyan's (駱龍言, fl. late 13th c.) *Formulary Supplementing Omissions in the Inner Classic* (*Neijing shiyi fanglun* 內經拾遺方論, 1279) were commentaries or explanations of canonical texts, but others, such as Shi Song's (史崧, fl. mid 12th c.) edition of the *Numinous Pivot* (*Lingshu* 靈樞, 1155)—part of the *Inner Classic* corpus—were canonical texts without commentary. Pragmatic publications were by far the most common privately produced medical text. The exceptionally numerous private formularies written during the Song are the key example.

Some privately produced texts enjoyed widespread popularity and authoritative status. Zhu Gong's *Nanyang Book for Saving Lives* (*Nanyang huoren shu* 南陽活人書, 1118) inspired three other works that supplemented it or simplified it for ease of memorization and was regularly cited in most Song books on cold damage.[146] No privately produced work, however,

[145] This count is based on data in Wang Ruixiang and Wei Wang, *Zhongguo guyiji shumu tiyao*.
[146] See *Yiji Xulu Ji*, 99–101.

enjoyed the universal appeal of the government publications, and detractors were generally both more numerous and harsher in their criticism.

The Consequences of Medical Publishing

The increasing availability of medical books, both authoritative ancient texts and modern medical books of all sorts, had a number of important consequences for the study and practice of medicine during the Song. As noted in Chapter 1, the circulation of authoritative texts in standard editions meant that medical authors could debate the meaning of these texts with a precision not possible when variant editions made it unlikely that any two authors held exactly the same text. The ability to publish one's ideas more readily also made intertextual dialogue simpler and more common. Another significant change brought about by the medical book trade was the ability of elite men and others to study medicine from books. The phenomenon of book-educated physicians is first seen in the Song, and even those doctors who had studied with a teacher undoubtedly learned a great deal from reading as well. The availability of books fundamentally changed the process of learning medicine.[147]

Conclusion: The Song as a Watershed in Medical History

Scholars have long appreciated that the Song laid the foundations for many of the developments in the late imperial period. By contrast, until the last fifteen years or so, most evaluations of medicine in the Song and the succeeding Jin and Yuan dynasties have presented it as an anomalous period distinct from the periods before and after it. This impression may be the result of carrying over traditional ideas about the history of Confucian thought—in which the

[147] Chen Yuanpeng, *Liang Song de "shangyi shiren,"* 56–62; Leung, "Medical Learning from the Song to the Ming," 391–392.

Song came to be seen as an exceptional period—into histories of medical thought. Recent research, however, has suggested that the Song was profoundly influential on the development of Chinese medical thought and practice up to today. In this dissertation, I will argue that the Song represents a major point of rupture in Chinese medical history, shaping the broad outlines of much that followed, and that the changing status of the *Treatise on Cold Damage* was precisely due to its role in these momentous changes.

CHAPTER 3
The Problem with Common Physicians and its Solutions in the Northern Song

> These five [difficulties in the practice of medicine] are [here] merely stated in outline. Their subtlety reaches the point that speech cannot express it; their details reach to the point that writing cannot record them. How can vulgar people easily speak of medicine!
> 此五者, 大概而已, 其微至於言不能宣, 其詳至於書不能載, 豈庸庸之人而可以易言醫哉！
>
> —Shen Gua (沈括, 1031-1095), *Excellent Formulas of Su and Shen* (*Su Shen liangfang* 蘇沈良方, early 11th c.)[148]

> As for where medicine comes from, it all has its source in the two books of the Divine Farmer and the Yellow Emperor. It is profound and subtle. There is nothing which does not tally with the principle of yin and yang, the five phases, dissolution and growth, nor fail to accord with the mutually complementary ways of ruler and minister. Therefore, it is not something into which the vulgar or common can delve.
> 夫醫藥之來, 皆源於農黃二書。其奧博微妙, 莫不符契陰陽五行消長之理, 胎合君臣相與之道, 則固非庸流俗輩所能鉤索之也。
>
> —Meng Zhen (孟震, fl. late 11th c.), *Essential Formulae for Travelers* (*Lüshe beiyao* 旅舍備要方, 1093)[149]

The two authors quoted above are typical of Northern Song elite writing on medicine. Central to elite thought on medicine at the time was anxiety regarding the extreme complexity of illness and healing and a conviction that the typical medical practitioner of their day was hopelessly inadequate to face that complexity. This anxiety and conviction were not new. Northern Song writers on medicine could look back to a long tradition of similar complaints; however, Northern Song medical anxiety differed from its predecessors both in the frequency with which it was voiced and in the sustained nature of the efforts made by both the imperial government and private individuals to remedy the situation.

The Northern Song elite were experiencing a crisis of trust in the learned medicine of

[148] Author's preface, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, 3. This preface comes from the no longer extant *Excellent Formula Collected by Shen* (*Shen cunzhong liangfang* 沈存中良方) which dates to ca. 1090. All translations and punctuation of Chinese texts my own unless otherwise specified.
[149] Preface, in *Siku Quanshu*, 4.

their times, and their efforts to solve this crisis reshaped the medical landscape of their society in profound ways. The solutions developed by Northern Song medical authors envisioned radical and to varying degrees incompatible reworkings of medical thought and practice, which would continue to interact with one another until the Yuan dynasty.

This chapter falls into two parts. Part One begins by presenting the medical worries and complaints that troubled the Northern Song literati, and the figure around which their anxiety clustered: the common physician.[150] I then examine the broad intellectual crisis of the Northern Song of which the medical crisis of trust was but one facet. Part Two opens with an analysis of the three methods proposed to solve the medical crisis of trust. I argue that these solutions offered radically different proposals for the reformation of medical learning and practice and the elite's relation to both. While not wholly incompatible, the three proposals differed sufficiently to render any simple synthesis of them impossible. In the absence of any means of deciding between the solutions offered, the Northern Song bequeathed to succeeding eras three separate, though interacting, approaches to learned medicine

[150] The traditional translation of this term as "hereditary physician" is clearly incorrect. Many such physicians were not members of medical family lineages. Authors often urged their readers not to trust a physician whose family had been practicing medicine for less than three generations, attesting to the fact that many physicians did not have such pedigree. The translation "occupational physician" is also overly specific since some members of the Song elite took up medicine as an occupation, but were never called *shiyi*. I chose the translation "common physician" to avoid these errors and capture the conflation, common among the Song elite, between social status and medical skill. E.g., physicians like Qian Yi (錢乙, ca. 1035-1117) and Pang Anshi, whose families were *shiyi*, were no longer referred to as such once their status as learned doctors was accepted among the elite, and I have found no instance of a literatus who practiced medicine being referred to as a *shiyi* even in heated disputes.

SECTION ONE: The Northern Song Crisis of Trust in Medicine

Northern Song Elite "Interest" in Medicine

It has become something of a historical cliché that the Song elite were interested in medicine. Qing dynasty (1644-1911) observers were already aware of this anomaly in elite intellectual activity.[151] More recently it has become the subject of an entire book, and a key issue in others.[152] This interest has generally been read as a sign of the high or at least rising status of text-based medicine among the elite,[153] but social historical research has tended to question such conclusions.[154] An examination of the motives behind those statements and actions which are seen as reflecting a rise in the status of medicine reveals a more complicated picture: medicine, as a topic of curiosity or even of serious study, had become more interesting to Song intellectuals; physicians, on the other hand, were generally despised.

Some of the evidence for the high status of medicine in the Song results from misreading later stories backward into the Northern Song. One such story, which in fact dates from the Southern Song, purports to relate an incident from the childhood of the Northern Song prime minister, Fan Zhongyan (范仲淹, 989-1052). In this story, Fan is said to have asked an oracle whether he will be able to rise to the position of prime minister. On receiving a negative answer, he proceeded to ask if he would be able to become a good physician. On again receiving a

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[151] Jiang Chaobo (蔣超伯, 1820-1875), *Nanchun Kuyu* 南漘楛語, *juan* 6, in Tao Yuefeng, ed., *Biji zazhu yishi bielu* (Beijing: Renmin Weisheng Chubanshe, 2006), 2.
[152] E.g., Chen Yuanpeng, *Liang Song de "shangyi shiren"*; Goldschmidt, *Evolution*.
[153] Joseph Needham and Lu Gwei-Djen, "Medicine and Chinese Culture," in *Clerks and Craftsmen in China and the West* (Cambridge: Cambridge U.P., 1970), 265; Joseph Needham and Lu Gwei-Djen, "China and the Origins of Qualifying Examinations in Medicine," in *Clerks and Craftsmen in China and the West : Lectures and Addresses on the History of Science and Technology* (Cambridge: Cambridge U.P., 1970), 391–395; Goldschmidt, *Evolution*, 19.
[154] Hymes, "Not Quite Gentlemen?"

negative answer he became despondent about his future. When questioned by his relatives as to why he wished to become a physician, he responded,

> The ancients had a saying, "[The Sage is] always good at rescuing people, and therefore no one is forsaken; always good at rescuing the world, and therefore nothing will be cast aside."[155]… As to being able to reach the great and the small among the people, admittedly, only a prime minister can do so, but that was already unattainable. So, for being able to realize the intention of rescuing people and benefiting the world, none compare with a good physician.[156]
> 古人有云:"常善救人, 故無棄人, 常善救物, 故無棄物。"… 能及小大生民者, 固惟相為然, 既不能得矣。夫能行救人利物之心者, 莫如良醫。

Later authors would summarize the moral of this story with the phrase "If you cannot be a good minister, then be a good physician (不為良相, 則為良醫, or variations to that effect)."[157] This phrase has since been attributed to Fan by several modern scholars.[158] It does not, however, appear in his collected works.

The more substantive argument for a rising status of medicine during the Song is based largely on the actions of the imperial government and some of its chief representatives. The early emperors of the Song dynasty were said to possess not only interest in medicine but also competence in its practice. They sponsored the composition of several medical texts, on some of which they bestowed imperial prefaces.[159] As discussed in chapter 2, later Northern Song emperors sponsored the editing and publication of famous medical texts, the composition of a

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[155] This is a quote from the *Daode jing*, chapter 27. A more literal translation would read, "[The Sage is] always good at saving people, and therefore no one is rejected; always good at saving things, and therefore nothing is rejected," e.g. Laozi, *The Way of Lao Tzu (Tao-Tê Ching)*, trans. Wing-tsit Chan (Indianapolis: Bobbs-Merrill, 1963), 146. Other Song authors, however, use the phrase "*jiushi* 救事" to indicate ensuring that situations turn out as positively as possible, e.g. "Since I already made rescuing the world my intention… (予既以救物為心…)," *Puji benshifang*, author's preface, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 83).

[156] Wu Zeng 吳曾, *Neng gaizhai manlu* 能改齋漫錄, *juan* 13, in Yufeng Tao, ed., *Biji zazhu yishi bielu* (Beijing Shi: Renmin Weisheng Chubanshe, 2006), 738.

[157] E.g., Wu Weiye 吳偉業, 1609-1671, *Meicun jiacang gao* 梅村家藏稿, 44.2a, in *Sibu Congkan*, Electronic ed. (Beijing: Beijing Shutongwen Shuzihua Jishu Youxian Gongsi, 2010).

[158] E.g., Charlotte Furth, *A Flourishing Yin Gender in China's Medical History, 960-1665* (Berkeley: University of California Press, 1999), 63; Goldschmidt, *Evolution*, 44.

[159] Goldschmidt, *Evolution*, 22–26.

number of innovative medical texts, and the establishment official medical schools, an imperial pharmacy, a medical examination system, and a hierarchy of imperial medical officials designed to parallel the prestigious civil bureaucracy with its schools and examination system.[160]

These developments clearly reveal that medicine was an important preoccupation of the Song imperial government, but they do not of themselves demonstrate that the status of medicine was high. On the contrary, had the status of medicine already been elevated, there would have been no need for government intervention. The Northern Song government's[161] persistent concern with medicine indicates, rather, a desire to raise the status of medical practice and therefore suggests that medicine remained a low-status occupation in the eyes of the elite.

In the case of the establishment of medical schools, a medical examination, and medical officials, surviving evidence indicates that the government's intention was indeed to raise the status of medicine in order to attract elite men to its practice. Fan Zhongyan, under whose auspices the medical schools were first established, mentioned the deplorable state of doctors in the memorial suggesting their establishment:

> At the present, the capital's population is one million, [with only] a thousand some-odd physicians. Most of them learned their skills informally, and have not undergone instruction by a teacher. Their errors, harming human lives, occur on a daily basis.[162]
> 今京飾生人百萬, 醫者千數, 率多道聽, 不經師授, 其誤傷人命者, 日日有之。

Furthermore, from its inception, application to the medical school required an official statement on the applicant's family background. Although the exact purpose of this statement is not specified, a similar system was used in the civil service examination to exclude sons of

[160] Ibid., 31–40, 46–57; Miyashita Saburō, "Sō Gen no iryō," 134–157.
[161] The medical reforms were actually instituted by activist regimes and were opposed by the conservative faction at the time; nevertheless, since the medical reforms were among the few reforms which were not completely dismantled under conservative regimes—perhaps due to their appeal to emperors and regents alike—I will consistently refer to these reforms as the actions of the Song imperial government as a whole.
[162] *Fan Wenzhenggong ji*, *zhengfu zouyi xia*, 40a, in *Sibu Congkan*.

merchants, peasants, and criminals.[163] The medical schools were therefore not created to improve the status of existing non-elite physicians, but rather to encourage elite men to become physicians. By the late Northern Song, the government's desire to attract literati to the study and practice of medicine is even more apparent. A number of changes in the schools were introduced to ensure that their structure and position within the administrative hierarchy were as close as possible to the more prestigious schools associated with the civil service.[164]

The Song government was not alone in its concern about the poor quality of physicians. Complaints about doctors' errors abound in Song dynasty literature. The claim that an author became interested in medicine due to watching an incompetent physician kill a relative is so frequent in the prefaces of Song medical works that one would be tempted to discount it as a literary motif were it not for the extreme personal detail in which these stories are often told. The story Wang Gun (王袞, fl. 1047-1082) included in the preface to his formulary is typical:

> In the past, I accompanied my father, (Wang) Ren, who, on the road to Huatai, became ill at a stopover. He encountered a vulgar physician who, without investigating the pattern of his pulse, recklessly prescribed a medicinal decoction, and ultimately he did not recover from the illness. Also, my mother was frequently sick. Since this went on for many years, I devoted my leisure time to the study of medical techniques.[165]
> 袞曩侍家君任, 滑台道次得疾, 遇醫之庸者, 不究其脈理, 妄投湯藥, 而疾竟不瘳。復又母氏多病, 續有年所, 袞遂因公暇潛心醫術。

It is not medicine as a field of knowledge that elicits Wang's concern. On the contrary it is precisely the complexity and subtlety of medicine that makes "vulgar physicians" so problematic. As Wang had already observed:

> Thus, people's illnesses being many and varied, the Way of medicine cannot be grasped by means of one path alone either… Those who are ignorant of the Way [of medicine],

[163] Goldschmidt, *Evolution*, 48; Chaffee, *Thorny Gates*, 53, 60–61; Hymes, "Sung Society and Social Change," 641–650.
[164] Goldschmidt, *Evolution*, 51–57.
[165] *Boji fang* 博濟方, author's preface, in *Siku Quanshu*, 6.

> do not meticulously grasp the symptoms. When using [medicine] clinically, they are always mistaken.[166]
> 然人之疾狀多端, 醫道又不可一途取也… 昧於道者, 乃不詳其證候, 迨乎臨用, 有誤十全。

For both the Northern Song government and members of the elite with an interest in medicine, the problem was not that medical knowledge itself was inadequate, but that the wrong kind of people were learning and practicing medicine in the wrong way.

The Status of Physicians through the Northern Song

The treatment of illness in China was never monopolized by any one group of healers or any single therapeutic method. Home remedies, often under the direction of senior household women, were usually the first resort of a sick person. Various forms of ritual healing, whether performed by spirit-mediums, unordained specialists in various Daoist or Buddhist ritual techniques, or officially ordained clergy, remained popular among both commoners and elite in spite of the odium they occasionally attracted from the government and its representatives. A plethora of itinerant healers practicing a variety of therapies were also in regular demand. At the top of the medical status hierarchy, however, was textually based medicine (*yi* 醫), which claimed descent from the legendary sage-kings of antiquity and had a textual tradition of its own to bolster its respectability.[167]

Throughout imperial Chinese history, however, the status of medicine as an occupation was at best debatable. Before the Song dynasty, the vast majority of the elite considered the practice and study of medicine beneath their dignity. Even learned medicine, in spite of its "classics (*jing* 經)" and "treatises (*lun* 論)," remained overwhelmingly the province of

[166] *Boji fang*, author's preface, in ibid.
[167] Christopher Cullen, "Patients and Healers in Late Imperial China: Evidence from the Jinpingmei," *History of Science* 31 (June 1993): 100–104.

commoners. Medical texts written by literati during this period, almost the only medical texts that have survived, serve only to confirm the rarity of their authors' interest in medicine. The preface to the *Treatise on Cold Damage* opens with regret and puzzlement over the elite's lack of interest in medicine and their resulting reliance on common physicians:

> I am puzzled that the literati[168] living in the world today never pay attention to medicine or thoroughly study the art of [prescribing] formulae … They take their hundred years of life, the most valuable of the important things they hold, and entrust it to common physicians who are reckless in what they do. Alas![169]
> 怪當今居世之士, 曾不留神醫藥, 精究方術 … 賫百年之壽, 持至貴之重器, 委付凡醫, 恣其所措, 咄嗟嗚呼！

The famous Tang dynasty literati medical author, Sun Simiao, complained of the same situation:

> Decadent and petty men [practicing medicine] usually act deceitfully. They rely upon the teachings of the sages to make a duplicitous profit, thus causing the literati whether of court or county one and all to scorn the name of medical practice… It is puzzling. Alas! This is profoundly contrary to the original intent of the sages and worthies.[170]
> 末俗小人, 多行詭詐, 依傍聖教而為欺給, 遂令朝野士庶咸恥醫術之名…可怪也。嗟乎！深乖聖賢之本意。

Like their Song counterparts, literati medical authors before the Song harbored a tremendous antipathy toward common physicians, but unlike Song medical authors, their interest in and desire to reform medicine were shared by few among their contemporaries.

In the Northern Song, common physicians were part of a social stratum that Robert Hymes has termed the *lumpenliterati*. This stratum formed as a result of profound social and technological changes occurring during the Song. As printed books became more readily available and less prohibitively expensive, a wider audience than before was able to afford both literacy and at least some books. In part this allowed the rapid expansion of the literati social

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[168] The translation "literati" may not be appropriate for the term *shi* 士 in the Han dynasty, but even at that time it referred to a social elite who this dissertationicipated in government. Song elite readers, at any rate, would have read it as referring to people like themselves.
[169] *Shanghan lun* 傷寒論, author's preface, in Zhang Ji, *Zhongjing quanshu*, 6.
[170] *Qianjin yaofang* 千金要方, author's preface, in Sun Simiao, *Sun Simiao yixue quanshu*, 11.

stratum, but it also allowed for the development of a new social stratum comprising individuals who were literate and made their living by means of literacy, but to varying degrees lacked the culture, learning, and social networks of the elite. Hymes has pointed to religious specialists, litigation masters, and common physicians as examples of this stratum. As a group, they aroused anxiety on the part of the literati, who saw them as destabilizing forces with the potential to encroach on literati privileges and powers.[171]

Unlike other members of the *lumpenliterati*, doctors were able, under the right circumstances, to mingle with and befriend the elite, many of whom demonstrated a new-found amateur interest in medicine.[172] Su Shi's (蘇軾, 1037-1101) friendship with and admiration of Pang Anshi is well known from Su's own jottings (*biji* 筆記),[173] and Su's medical writings were posthumously collected together with those of Shen Gua to form the *Excellent Formulae of Su and Shen*. Numerous other members of the elite also produced medical books or made extensive notes on medical matters in their jottings.[174] In spite of this increasing openness to medicine as a field of study, a willingness to associate with suitably cultured physicians, and even increasing numbers of literati men practicing medicine, it remained a largely undesirable choice of profession for the literati throughout the Song. Robert Hymes's research on Fuzhou demonstrates that medicine as a literati *career* remained rare there until the Yuan dynasty. Chen Yuanpeng has questioned the general applicability of this conclusion, noting that this research was focused on only one prefecture.[175] However, Hymes's argument is supported by the disparaging attitudes towards medicine found in the jottings literature and popular drama as well as the very efforts

[171] Hymes, "Sung Society and Social Change," 557–562.
[172] Ibid., 558–559; Chen Yuanpeng, *Liang Song de "shangyi shiren."*
[173] E.g., Su Shi, *Su Shi sanwen quanji* (Jinri Zhongguo Chubanshe, 1996), 1702.
[174] Chen Yuanpeng, *Liang Song de "shangyi shiren,"* 133; Tao, *Biji zazhu yishi bielu*.
[175] Chen Yuanpeng, *Liang Song de "shangyi shiren,"* 32–33.

made by those seeking to increase the status of medicine, whether private individuals or government officials.[176]

The Northern Song Crisis of Trust

Medicine was not the only field in which Northern Song thinkers displayed anxiety, doubt, and a sense of a need for new principles and practices in a changed world. The elite of the Northern Song were aware of many of the transformations discussed in Chapter 2, and some of its memebers sought to develop new responses to the new situations in which they found themselves. They recognized the differences separating them from their Tang dynasty forebears which made a return to the institutions, policies, and customs of the past impossible. Though often looking to the past for inspiration and guidance, they argued against slavishly imitating past solutions when dealing with present problems and actively put forward new solutions to the difficulties of their times.[177] The activist mentality and the many innovative reform efforts of the Northern Song have rightly been seen as indicative of an optimistic sense of the possibility of making the world better, but the roots of that mentality and those efforts lay in an anxious awareness of the presence of new and unprecedented challenges to both state and society.[178]

This awareness of something fundamentally new in their era is reflected most clearly in Northern Song elites' concerns regarding their identity. As discussed in chapter 2, the changing nature of the literati social stratum destabilized elite identity, raising questions about what it meant to be a literatus and what his appropriate role was within society. Peter Bol has argued that

[176] Hymes, "Not Quite Gentlemen?," 51–56. My own research, as seen in this chapter, has revealed further confirmation of the Northern elites' distrust of common physicians.
[177] Bol, *Neo-Confucianism in History*, 7–8; Robert Hymes and Conrad Schirokauer, eds., "Introduction," in *Ordering the World: Approaches to State and Society in Sung Dynasty China* (Berkeley: University of California Press, 1993), 40; Thomas H. C. Lee, ed., "Introduction," in *The New and the Multiple: Sung Senses of the Past* (Hong Kong: Chinese University Press, 2004), xxi–xxiv.
[178] Hymes and Schirokauer, "Introduction," 1–3.

the prodigious, innovative, and contentious output of Song statesmen and social thinkers was in large part driven by these questions, and that the ultimate success of the Learning of the Way movement (*Daoxe* 道學) was primarily due to its ability to provide satisfactory answers.[179] Furthermore, the limits of acceptable elite activities were in flux to such an extent that even those in the highest echelons of the elite had difficulty knowing where the boundaries might lie. If Ouyang Xiu's (歐陽修, 1007-1072) experiments in novel forms of elite involvement in the arts and literature were largely successful,[180] his experiments, with Fan Zhongyan, in justifying novel forms of political organization among officials collided disastrously with boundaries which proved far more solid than he anticipated.[181] Even the question of elite membership itself was more problematic than before. Novel social institutions, such as charitable estates to help maintain a lineage's elite position, and the revival of older social practices, such as genealogy-writing to prove a family's pedigree, reveal the degree of anxiety the elite felt about justifying and maintaining elite status.[182] Disputes over the elite status-claims of families, and the privileges that went with such claims, reached the courts of local magistrates, and examination candidates protested the participation of men whose family background they deemed unfit—whether the sons of wealthy merchants or members of the *lumpenliterati* trying to edge their way in.[183] The dangers and opportunities produced by these uncertainties stimulated both anxiety and a remarkable outpouring of efforts to resolve the pressing questions surrounding elite identity.

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[179] Bol, *This Culture of Ours*, 1994, 334.
[180] Ronald C. Egan, *The Problem of Beauty: Aesthetic Thought and Pursuits in Northern Song Dynasty China* (Harvard University Asia Center, 2006), 7–59, 109–161.
[181] Levine, *Divided by a Common Language*, 10, 47–56.
[182] Chaffee, *Thorny Gates*, 161–162; Hugh R. Clark, "Reinventing the Genealogy: Innovation in Kinship Practice in the Tenth to Eleventh Centuries," in *The New and the Multiple: Sung Senses of the Past*, ed. Thomas H. C. Lee (Hong Kong: Chinese University Press, 2004), 237–86; Robert Hymes, "Marriage, Descent Groups, and the Localist Strategy in Sung and Yuan Fu-Chou," in *Kinship Organization in Late Imperial China, 1000-1940*, ed. Patricia Buckley Ebrey and James L. Watson (Berkeley: University of California Press, 1986).
[183] Hymes, "Sung Society and Social Change," 643–645.

Solutions, however, were more easily conceived than agreed upon. Peter Bol describes what he terms a "crisis of culture" beginning in the late 8th century. At the core of this crisis lay a separation between cultural forms (*wen* 文) and the Way (*Dao* 道) or moral values. A series of failures on the part of the Tang government, most notably the disastrous An Lushan rebellion and the government's inability to reestablish effective central rule thereafter, convinced many scholars that imitating ancient and revered cultural forms did not necessarily bring the desired results. The scholars who sought to remedy this situation turned to a personal understanding of the Way as the missing component in restoring the efficacy of cultural forms—in particular, of writing (*wenzhang* 文章)—in transforming the individual and society. In emphasizing the importance of personal understanding, however, these thinkers undermined the possibility of the shared values necessary to their goal of restoring a normative social order.[184] The ramifications of this collapse of shared norms reverberated throughout the Northern Song, with each social thinker or statesman identifying a different source for shared values. As Conrad Schirokauer and Robert Hymes have noted, a common feature of Song social thought was a concern for the "nature and locus of authority."[185] More specifically, this issue resolved into two related questions: what were the sources or grounds of authority and in what type of individual or group could this authority be vested.[186]

The crisis that Bol describes, however, was not limited to revered cultural forms, debates held at court, or the highest echelons of society. The quotes from elite medical texts cited above display anxiety over the grounds of medical authority and the qualities of the proper doctor. Likewise, the arguments over who was and was not a member of the elite reveal similar concerns

[184] Bol, *This Culture of Ours*, 1994, 109.
[185] Hymes and Schirokauer, "Introduction," 36.
[186] Ibid., 37.

about the grounds of elite identity and the characteristics which should distinguish the elite from others. Moreover, worries about the grounds of trust and the identification of trustworthy individuals even reached into mundane aspects of life. In an analysis of material found in the jottings of Hong Mai (洪邁, 1123-1202), Robert Hymes finds such worries in discussions of religion, marriage, business transactions, and many other areas. The frequency of these anxieties led him to argue for a "pervasive concern with truth, falsity, fakery, and pretense in Song elite and commoner culture."[187] My own study of the medical jottings literature supports this suggestion: the most common medical jottings from the Song are complaints about betrayals by doctors and pretense on the part of the new medical officials.[188] The crisis of culture that Bol discusses was a pervasive feature of Song intellectual life at least among the literati elite, and perhaps reaching into the lower social strata as well. Why were the issues of trust, doubt, and the need for authoritative knowledge so prevalent in Song writing?

The importance of trust in social order has been remarked upon since antiquity.[189] Discussions of the role of trust in the production of knowledge, though far more recent, are by no means new. Writing in the 19th century, Georg Simmel observed,

> … existence rests on a thousand premises which the single individual cannot trace and verify to their roots at all, but must take on faith. Our modern life is based to a much larger extent than is usually realized upon the faith in the honesty of the other. Examples are our economy, which becomes more and more a credit economy, or our science, in which most scholars must use innumerable results of other scientists which they cannot examine.[190]

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[187] Robert Hymes, "Truth, Falsity, and Pretense in Song China: An Approach through the Anecdotes of Hong Mai," in *Zhongguo Shixue Di 15 Juan*, 2005, 23.
[188] E.g., Shen Gua, *Mengxi biji*, *juan* 1, in Tao, *Biji zazhu yishi bielu*, 1; Hong Mai, *Yijian zhi* 夷堅志, *ding zhi*, "*Wu zhi sha ren*," in ibid., 739–740; *Yijian zhi*, *geng zhi*, "*Yongyi sha ren*," in ibid., 740–741.
[189] Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: The University of Chicago Press, 1995), 8–15.
[190] Georg Simmel, *The Sociology of Georg Simmel* (New York: Free Press, 1964), 313.

Likewise, the pragmatist philosopher, William James, noted that, "Truth lives, in fact, for the most part on a credit system."[191] More recently, the trust-dependent nature of knowledge has become an important issue in science studies. Speaking form a philosophical point of view, John Hardwig argues that, since it is impossible for any individual to verify all of the data upon which any but the simplest conclusions rest, "The trustworthiness of members of epistemic communities is the ultimate foundation of much of our knowledge," and therefore, "In order to qualify as knowledge (or even as rational belief), many epistemic claims must meet ethical standards. If they cannot pass the ethical muster, they fail epistemologically."[192] In the words of Steven Shapin, speaking from the point of view of social history, knowledge depends on a "moral economy" of trust, and such a moral economy can only be created and maintained by a community.[193]

Communities, however, are dependent for their existence upon social order, and social order, in its turn, is dependent upon trust. Trust is thus constitutive of and produced by the community, and any serious disruption to social order threatens production of knowledge by disrupting the moral economy of trust.[194] Solutions to such crises of trust must address both social order and the validity of knowledge. A new moral economy of trust must be formed by creating a community which shares a consensus about what sources of knowledge are reliable and which individuals or groups are trustworthy wielders of those sources; hence, as Shapin and

[191] William James, *Pragmatism and The Meaning of Truth* (Cambridge: Harvard University Press, 1978), 100.
[192] John Hardwig, "The Role of Trust in Knowledge," *The Journal of Philosophy* 88, no. 12 (December 1991): 694, 708.
[193] Shapin, *A Social History of Truth*, 22–27, 34–36.
[194] Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*, Reprint (Princeton: Princeton University Press, 2011), 283–298; see also Diego Gambetta, "Mafia: The Price of Distrust," in *Trust: Making and Breaking Cooperative Relations*, ed. Diego Gambetta (New York, NY, USA: B. Blackwell, 1988), 158–75, which discusses the consequences of a breakdown in trust, but focuses on issues other than knowledge-production.

Simon Schafer observe, "Solutions to the problem of knowledge are solutions to the problem of social order."[195]

The momentous changes occurring in all areas of life from the late Tang through the Song—particularly the radical changes in the composition, status, and justification of the elite social stratum— disrupted the economy of trust within Chinese elite society. The resulting crisis was felt in many different sectors of society, and the attempts to remedy this crisis created a period of intellectual and social foment. In view of breadth of this crisis, I follow Shapin and term it a crisis of trust, rather than a crisis of culture.

In the sphere of medicine, the crisis of trust among the elite was as severe as it was in spheres of literary learning and statecraft. Northern Song medicine witnessed a period of intense competition as differing approaches were put forward by elite authors to resolve the crisis of trust. The solutions offered differed in fundamental ways, but they were in agreement on one point: the condemnation of common physicians.

The Problems with Common Physicians and their Medicine

In the case of medicine, the Song elite's anxiety was no doubt heightened by the increasing numbers of epidemics with which they were threatened, as discussed in chapter 2. The perceived inability of common physicians to deal with the new illnesses may have increased the opprobrium with which they were viewed by the Song literati, but while elite authors were aware of certain aspects of their new epidemiological situation, they placed responsibility for the failure of medical treatment squarely at the feet of common physicians.

[195] Shapin and Schaffer, *Leviathan and the Air-Pump*, 332.

Lumpenliterati physicians might look (to an outsider) quite similar to members of the literati. They were literate, and their medical practice was based on the study of texts, but their literacy, their relationship with texts, and their ethical standards all differed from those of the literati as they were coming to define themselves. It was on precisely these points that Song elite medical authors criticized them. Not only were their medical practices and understanding impugned, but their methods of learning, business practices, and personal character were also maligned.

Unfortunately, while traces of what appear to be common physician practices and formulae are found in Northern Song elite medical texts, they are never explicitly identified as such.[196] Furthermore, physicians like Qian Yi (錢乙, 1035-1117) and Pang Anshi, who may have come from a *lumpenliterati* background, only wrote books after they had been accepted in elite society. Both what they chose to write and how it was received were therefore altered. The only surviving evidence of Northern Song common physicians' ideas and practices, therefore, are the criticisms elite medical authors leveled against them. While such sources must be used with caution, there are reasons to believe that what they report is basically accurate. First, many of their criticisms are not found in elite criticisms of physicians before the Song; second, the criticisms are consistent without repeating one another; third, they are consistent with what little we do know of the practices of physicians prior to the Song; and fourth, they are consistent with some of the idiosyncrasies found in medical texts from the first century of the Song (before the Bureau for editing medical texts began its publications) and texts by figures like Qian Yi and Pang Anshi. Finally, even if these criticisms are not accurate portrayals of how common

[196] In the Southern Song (1127-1279), some texts explicitly claimed common physician provenance, such as *Effective Formulae from Common Physicians* (*Shiyi dexiaofang* 世醫得效方), but their contents were at the very least framed by the doctrines of the new medical canon, discussed below. It is doubtful that they are truly reflective of common physician practice, though they may have been important avenues by which certain formulae or other practices of common physicians gained entry into the new elite medicine.

physicians practiced in the Song, they are accurate depictions of how the elite viewed the practice of common physicians. Since the actors responsible for the medical changes I am examining were all members of the elite, it is the viewpoints of the elite which are important for this argument.

The most frequent accusation made by elite medical authors was that common physicians' approach to medicine was too facile. As suggested by the quotes which opened this chapter, the elite were deeply impressed by the overwhelming complexity of illness and healing. Illnesses came in myriad forms, diagnosis required tremendous skill and experience, knowing which medicinal to use required long study, and variations in the environment due to location, the seasons, and the particular climate of a given year further muddied the picture. According to elite authors, common physicians' approach to medicine was too simple to take account of this mass of complexity.

In treating cold damage illnesses, for example, common physicians often made use of only two treatment methods, sweating and purging, and determined which was to be used according to how many days had passed since the illness commenced:

> Of old, people had a saying, "For the first two days, [the illness] is in the skin. By the fourth or fifth days, it has transmitted to the organs." Therefore, when it is in the skin one can promote sweating; when it has transmitted to the organs, one can purge. Among those who today study [medicine], there are none who do not revere this as a fixed doctrine. Thus they do not realize that just as there are people who are vacuous or replete, so there are illnesses which are mild or severe; just as there are illnesses that are mild or severe, so there are transmissions which are slow or fast… Those who are good at practicing medicine should thoroughly examine the pulse in order to precisely locate the illness. That is all.[197]
> 古人有言 "一日二日在於皮膚, 四日五日傳之藏府" 故皮膚之間可汗, 傳藏府之間可下。世之學者未嘗不宗之為定論。然不知人之有虛實則病之有輕重, 病之有輕重則傳之有遲速… 善為醫者當審察其脈, 審其病之所在而已。

[197] Shi Kan (史堪 late 11th-early 12th c.), *Shi Zaizhi fang* 史在之方 (early 12th c.), *juan shang*, in Qiu Peiran, ed., *Zhongguo yixue dacheng sanbian*, vol. 4 (Changsha Shi: Yuelu Shushe, 1994), 468.

The famous doctor and official, Zhu Gong, also complained of this practice:

> One cannot inflexibly use day-counts [in prescribing]. Sweating, vomiting, and purging should be used according to the pattern [presented by the ill patient].[198]
> 不可拘以日數, 發汗吐下, 隨證施行。

For literati medical authors, the complexity of illness demanded a more subtle approach.

According to elite authors, proper diagnosis required distinguishing many aspects of an illness, but common physicians seldom went beyond the most basic differentiations. Xu Shuwei, one of the most ardent critics of common physicians, provides a taste of the complexity of illness as seen by literati medical authors and the failure of common physicians to meet their standards:

> I see common physicians treating cold damage and only naming it a yin pattern or a yang pattern. But Zhongjing had three yin and three yang [patterns]. Even within a single pattern there are also those that lean to surfeit and those dominated by dearth. It is necessary to clearly differentiate the character [of the illness] and in which channel is it located… Moreover, as in greater yin and lesser yin [patterns], even within a yin pattern there are [differences of] supplementing and draining. How can one stop at saying [an illness] is a yin pattern![199]
> 予見世醫論傷寒, 但稱陰證陽証, 蓋仲景有三陰三陽, 就一證中又有偏勝多寡, 須是分明辨質, 在何經絡… 且如太陰、少陰, 就陰証中自有補瀉, 豈可止謂陰証也哉。

At stake in the subtlety of diagnosis was the determination of correct treatment. Misdiagnosis or failure to understand the doctrines that should guide diagnosis and treatment not only made treatment ineffective, it could also directly harm the patient:

> Commonly, when doctors treat cold damage illness, if they encounter [a case where] the evil *qi* is in the exterior, they do not distinguish whether the evil *qi* is shallow or deep or whether the pattern of the pulse is vacuous or abundant. They just rely on the [presence of a] floating pulse, seize on an exterior-effusing medicine, and prescribe it. Should the strength of the medicine exceed the measure, then it causes nosebleeds, spitting-up of blood, a macular rash, or contraction of the four limbs…[200]
> 凡醫者治傷寒病, 遇其邪氣在表, 並不分邪氣之輕重, 脈理之虛盛, 只憑脈浮, 便將發表藥一例投之, 務期汗多為快, 藥力過劑, 遂致衄血、吐血、發斑、四肢居攣…

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[198] *Nanyang Book for Saving Lives* (*Nanyang huroren shu* 南陽活人書, 1118), *juan* 6, question 46, in Zhu Gong and Pang Anshi, *Zhu Gong, Pang Anshi yixue quanshu*, 54.
[199] *Shanghan jiushilun* 傷寒九十論, *zheng* 23, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 62.
[200] Han Zhihe 韓祇和 (fl. 11th c.), *Shanghan weizhi lun* 傷寒微旨論, *juan xia*, "*Bian hanxia yaoli qingzhong pian*," in Zhu Pangxian and Wang Ruoshui, *Lidai zhongyi zhenben jicheng*, 1990, 3:21.

In the eyes of their opponents, the simplistic diagnoses and treatments of common physicians could never adequately manage the immense complexity and subtlety of illness and healing.

A similar problem noted by elite authors was the tendency of common physicians to use formulae without an adequate grasp of when those formulae should or should not be used. Shen Gua recorded that the formula, Minor Bupleurum Decoction (*xiao chaihu tang* 小柴胡湯), was used to treat cold damage indiscriminately:

> Common people merely know that Minor Bupleurum Decoction treats cold damage. Without asking what pattern [the patient presents] they just take it. Not only does it have no positive effect, there are also those whom it harms…[201]
> 世人但知小柴胡湯治傷寒, 不問何證便服之, 不徒無效, 兼有所害…

At the other end of the spectrum, one of Xu Shuwei's case records complains of common physicians' resistance to using a formula when it was appropriate:

> A strong boy in the village contracted cold damage. His body was hot and his eyes ached. His nose was dry and he could not sleep. He was constipated, and all positions of his pulse were large. He had already [been sick] for a number of days. The previous evening he began to sweat profusely. I said, "Quickly use Major bupleurum Decoction to purge him. The assembled doctors were shocked, saying, "In a yang-brightness illness with spontaneous sweating, his body fluids are already exhausted. A honey enema should be used. Why would you use Major bupleurum Decoction?"[202]
> 鄉里豪子得傷寒, 鼻乾不眠, 大便不通, 尺寸俱大, 已數日矣。自昨夕, 汗大出。予曰:"速用大柴胡湯下之。"众醫駭然曰:"陽明自汗, 津液已竭, 當用蜜兑, 何故用大柴胡藥？"

Major bupleurum Decoction is a powerful purgative formula. The other doctors' concern is that forceful purging will harm the boy, whose body fluids they believe have already been desiccated by the combination of severe fever and profuse sweating. Xu Shuwei, however, does not back down from his position:

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[201] Shen Gua, *Su Shen liangfang*, *juan* 3, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, 86.
[202] *Shangha jiushi lun*, *zheng* 14, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 61.

> I said, "This is one of Zhongjing's miraculous points which has not been transmitted. How would you gentlemen know about it?" I argued forcefully. Finally, they used Major bupleurum Decoction. After taking two doses, [the boy] recovered.[203]
> 予曰"此仲景不傳妙處, 諸公安知之。"予力爭竟用大柴胡, 兩服而愈。

Xu accuses his common physician opponents of being overly hesitant due to their ignorance of the correct use of this formula as discussed in its source text.

Xu's rather brusque rebuttal of his interlocutors reveals one of his primary reasons for opposing common physicians: the nature of their medical learning. Common physicians learned medicine by apprenticeship to a master. Initially, learning would take the form of observing the master, receiving oral instructions, and being guided in the memorization of texts. When the master decided the student was ready, he would transmit the actual medical texts to the student, meaning that the student would copy the texts and the master would orally impart explanations of the text's meaning. Texts were not necessarily transmitted in their entirety or in any given order; as a result, the medical texts possessed by common physicians resembled compilations more than treatises, and the full content of a medical text (in this case the *Treatise on Cold Damage*) was seldom available.[204] Xu's comment that, "This is one of Zhongjing's miraculous points which has not been transmitted," accuses his common physician adversaries of faulty and incomplete learning. Xu, on the other hand, based his medical knowledge on study of the original texts themselves. His commentary on this case record makes this point explicit:

> Discussion: In discussing yang-brightness [illness] Zhongjing says that in yang-brightness illness, in the case of those with profuse sweating, urgently purge them. [And yet] people frequently say that when there is already spontaneous sweating, if you further purge [the patient], will this not this make both their exterior and their interior vacuous?… The common people seldom read…[205]
> 論曰:仲景論陽明云:陽明病, 多汗者, 急下之。人多謂, 已自汗, 若更下之, 豈不表裡俱虛也… 世人罕讀…

[203] Ibid.
[204] Sivin, "Text and Experience in Classical Chinese Medicine," 77–86; Keegan, "The 'Huang-Ti Nei-Ching,'" 219–247.
[205] *Shanghan jiushi lun*, *zheng* 14, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 61.

Xu's preferred method of learning is that of the literati: the meticulous study of texts, possibly assisted by a teacher, but ideally resulting in a direct relationship between the student and the texts studied. He holds that the common physicians' approach to learning, in which texts are secondary to a master-disciple relationship, is defective.

A final front in the war on common physicians was their purported ethical standards. The Confucian tradition had long objected to the quest for personal profit, and though Song dynasty merchants could amass great fortunes in the burgeoning economy of the times, their cultural status remained low. Although many literati families were engaged in commercial activity, they were careful to maintain their perceived status through education, marriage, and culturally appropriate displays of wealth. Similarly, elite physicians and their eulogists repeatedly emphasized the altruistic nature of proper medical practice and denounced the practice of medicine as a means of amassing profit. Common physicians practiced medicine as an occupation and, of course, expected to be paid, leaving themselves vulnerable to elite criticism. Hong Mai, writing in the Southern Song, recounts the story of a doctor who, having already been paid 300,000 copper coins for his services—a very substantial sum—insists on further payment before he will complete the treatment.[206] While this story should not be taken at face value as an accurate record of the fees paid to doctors, it does reflect elite anxiety over the possibility of extortion on the part of unscrupulous physicians. Xu Shuwei linked the desire for profit with the decline he perceived in the effectiveness of medicine over the centuries:

> Why were the ancients so ingenious, while contemporary people are unable to reach [their level]? I have pondered this [problem]. The ancients used this [medicine] to save people, so heaven bestowed [medicine's] Way. Later people used this [medicine] to produce profit; therefore heaven was miserly with [medicine's] techniques and did not lightly confer them…[207]

[206] *Yijian zhi*, *dingzhi*, *juan* 10, in Tao, *Biji zazhu yishi bielu*, 741.
[207] *Puji benshifang*, authors preface, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 83.

> 何古人精巧如是, 而今人之不逮也？予嘗思之。古人以此救人, 故天畀其道… 後人以此射利, 故天嗇其術, 不輕畀予…

A further example of the ways in which practicing medicine for profit corrupted common physicians was found in the practices of secrecy surrounding their medical formulae:

> The common people, when they obtain an efficacious formula or acquire an unusual technique, seal it away and keep it secret, cautiously fearing only that other people might learn of it. This is wishing to benefit oneself only, and is not the broadly loving heart of a humane person.[208]
> 今之人，有得一效方，獲一奇術，乃緘而秘之。惕惕然惟恐人之知也。是欲獨善其身，而非仁人泛愛之心也。

Humaneness (*ren* 仁) was considered the cardinal Confucian virtue and the epitome of a true gentleman's character. To accuse a man of lacking humaneness was therefore simultaneously to state that he had no place among gentlemanly society. As Shapin noted, the boundaries of trust are identical with the boundaries of the community.[209] The perceived ethical shortcomings of common physicians placed them outside of the moral community that elite society was defining for itself.

The attacks on common physicians' style of learning and ethical standards reveal that beneath the varied criticisms of elite medical authors, there lay a more fundamental problem with common physicians: they were not members of the literati elite. Their knowledge of medicine was learned in non-literati ways; they held themselves to ethical standards that differed from those which the elite attributed to themselves; and the criteria by which they justified their diagnoses and treatments appeared inadequate to someone with a literati education. How could they be anything but untrustworthy?

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[208] Wang Gun, *Boji fang* 博濟方, author's preface, in Zhu Pangxian and Wang Ruoshui, eds., *Lidai zhongyi zhenben jicheng*, vol. 9 (Shanghai: Shanghai Sanlian Shudian, 1990), 1.
[209] Shapin, *A Social History of Truth*, 36.

SECTION TWO: Solutions to the Crisis of Trust in Medicine

Drawing on Arthur Kleinman's division of modern healthcare in Taiwan into three sectors, Christopher Cullen argues that healing during imperial times was divided into three sectors: literate, classical healers who were physicians of various sorts, folk healers who practiced a wide range of ritual therapies, and a popular sector comprised of practices passed down within and among families, friends, neighbors, etc (figure 3-1). Though he acknowledges the distinction between common physicians and literati who practiced medicine as an occupation, Cullen placed both groups within the literate, classical healers healthcare sector.[210] This portrayal appears to be fairly accurate before the Song dynasty, but the Song elite's concern over the poor quality, as they perceived it, of common physicians resulted in the creation of a new sector of healthcare practices within Chinese society which I term "literati medicine." Literati medicine was medicine by the elite, for the elite, and was designed to remove, as completely as possible, common physicians from elite healthcare. Cullen's principal source, the novel *Plum in the Golden Vase* (*Jinping mei* 金瓶梅, 1612), dates from the late Ming dynasty (1368-1644), by which time it is possible that common physicians had been absorbed as the lowest level of literati medical practitioners. Such was definitely not the case, however, during the Song, Jin, and Yuan dynasties. During this period, not only was animosity against common physicians high, but the very nature of literati medicine also remained contested and uncertain. For these reasons, I propose a modification to Cullen's scheme for the period of the Song through the Yuan, adding a fourth healthcare sector, "literati medicine," and renaming his "literate, classical healers" sector as the "common physician medicine" sector (figure 3-2).

[210] Cullen, "Patients and Healers in Late Imperial China," 100–103.

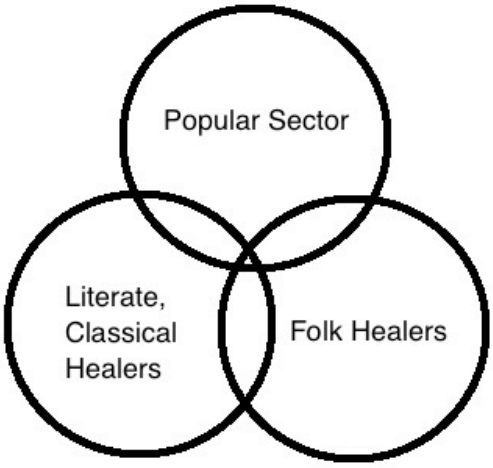

Figure 3-1: Cullen's Chart of the Healthcare Marketplace in Late Imperial China[211]

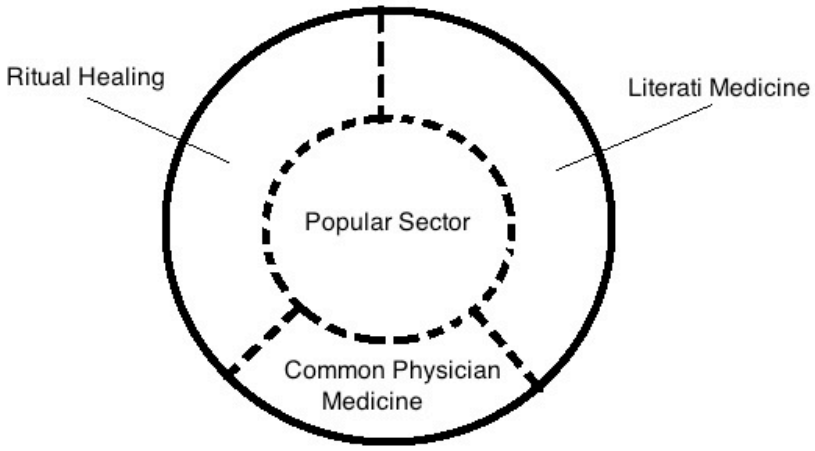

Figure 3-2: My Modification of Cullen's Chart for the Song-Yuan
(In addition to dividing Cullen's "Literate, Classical Healers" sector into a "Literati Medicine" sector and a "Common Physician Medicine" sector, I have renamed his "Folk Healers" sector as a "Ritual Healing" sector in recognition of the fact that practitioners and consumers of ritual healing came from all levels of society.)

[211] Adapted from ibid., 103.

Three Approaches to Resolving the Crisis

Literati medicine was created as a solution to the crisis of trust in medicine, but what form that solution should take was far from clear during the Northern Song. The methods Song elite authors proposed for improving medicine were diverse not only in the range of solutions offered as a whole, but even in the range found within a single text. Broadly speaking, three basic approaches can be found within the medical writing of this period: the collection of proven formulae, the appeal to authoritative sources, and the development of a literati-physician approach to medicine. Far from being mutually exclusive, they were used in varying combinations by most authors, the mixture often varying depending on the topic at hand. In spite of this eclecticism, most authors displayed a preference for one or the other of the solutions—a preference which I argue reflected deeper commitments regarding the ideal medical knower.

The Characteristics of the Proven Formulae Approach

Authors who collected proven formulae held that, given the complexity of illness and its treatment, the only way to be certain of a treatment's usefulness was to have witnessed its efficacy. They therefore collected medical formulae, and occasionally other forms of medical treatment, the effectiveness of which was personally confirmed by themselves or by someone they deemed reliable. The preface to one of the earliest surviving examples, Wang Gun's *Formulae for Abundant Aid*, explains the author's method:

> I abundantly picked out secret formulae for over twenty years. The formulae that I obtained numbered over seven thousand. All of them were passed down in old family books, and I obtained them through relatives and old friends… Since I selected from among them those which are particularly essential, their therapeutic effect can be relied upon. Formularies must be proven.[212]

[212] Author's preface, in *Siku Quanshu*, 6–7.

> 博採禁方, 逾二十載矣。所得方論, 凡七千餘道, 皆傳之於家牒, 得之於親舊… 因於其中擇尤精要者, 理療可憑, 方書必驗。

Wang culled his formulae from old books passed down in the families of relatives and friends. Other authors were more eclectic in the sources of their formulae. Shen Gua, in the preface to his *Excellent Formulae* (*Liangfang* 良方) states his criteria for choosing formulae:

> As for what I call excellent formulae, the proof [of their effectiveness] must have been personally witnessed…[213]
> 予所謂良方者, 必目睹其驗…

An examination of the sources he used includes formulae passed down within his family, formulae reported to him by others he deemed trustworthy, and formulae from well-respected medical texts whose efficacy he felt was well-established. Proof of a formula's effectiveness could be accepted second-hand or even third-hand, provided the ultimate source of the formula was a reliable individual who had personally witnessed the formula's use.

In the individual entries of his formulary, Shen Gua shows us what proving a formula meant to him in actual practice. Following the formula for Aconite and Schizonepeta Pill (*wujing wan* 烏荊丸), Shen states,

> This medicine is particularly miraculous in treating bloody stool. One person after another has obtained good results [using this formula]. Within a single year, I have already seen several people with bloody stool take this [formula] and recover.[214]
> 此藥療腸風下血尤妙, 累有人得效, 予所目見下血人服此而瘥者, 一歲之內已數人。

Longer proof statements could include one or multiple case records of the formula's use or quotations reporting what Shen was told about the formula's effects.

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[213] Author's preface, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, 4; Shen Gua's Liangfang now only exists as a combined text including material by Su Shi 蘇軾 (1037-1101).
[214] *Juan* 2, in ibid., 72.

Generally, collections of proven formulae eschewed discussions of medical doctrine. Each formula was preceded by a description of the conditions for which the formula was useful. These descriptions were often quite short:

> To treat nosebleed: Japanese Thistle Powder[215]
> 治鼻衄: 刺薊散

They could, however, be far more detailed. In any case they are notable for the relative absence of attempts to explain the cause of the illness in terms of yin and yang, the five phases (*wuxing* 五行),[216] and the functions and interrelationships among organs. Precisely this sort of explanation was of great importance to proponents of the literati-physician approach, and its absence in proven formulae collections is the clearest distinction between these two approaches. A comparison between the explanations provided by a proven-formulae text and a literati-physician text will help to clarify this distinction. The first example is taken from *Essential Formulae for Travelers,* by Dong Ji (董汲, fl. Late 11th c.). The second example is taken from Xu Shuwei's *Efficacious Formulae for Universal Aid* (*Puji benshifang* 普濟本事方, mid-12th c.), which, though it included proof statements for many of its formulae, remained strongly committed to a literati-physician style of learning and practice.

> Pinellia Transform Phlegm Pill: Treats phlegm repletion [causing] nausea and vomiting, dizziness and a muddled feeling, heart palpitations, a cold back, soreness of the arm, coughing up of spittle, and discomfort of the epigastrium.[217]
> 半夏化痰丸　治痰實，噁心嘔吐，頭目昏暈，心悸背寒，臂病涎嗽，膈不快。

> Job's Tears Powder: Treats dampness that damages the kidney, [causing] it to fail to nourish the liver. The liver then spontaneously generates wind, thus forming wind-

[215] Su Shi and Shen Gua, *Su Shen liang fang*, *juan* 7 in ibid., 181.
[216] The five phases—metal, water, wood, fire, and earth (*jin, shui, mu, huo, tu* 金、水、木、火、土)—represented five archetypal classes of activity arranged in two cycles—one of generation and one of conquest. All things could be categorized into one of the five and the relations among the five were then held to govern the relations of the things classified as well. The system was commonly applied to the relationships among organs in the body.
[217] *Lüshe beiyao*, in *Siku Quanshu*, 7.

> dampness, which pours into the tendons and bones of the four limbs or enters the shoulder bone,[218] causing extreme pain in flesh, and gradually enters into the fingers.[219]
> 薏苡仁散　　治濕傷腎, 腎不養肝, 肝自生風, 遂成風濕, 流注四肢筋骨, 或入在肩髃, 肌肉疾痛, 漸入在指中。

The proven formulae text provides more detail on symptoms, but doctrinal and causal explanation are limited to the initial statement that the illness is due to "phlegm repletion (*tanshi* 痰實)." By contrast, the literati-physician text provides slightly less detail regarding symptoms but explains causation in great doctrinal detail.

A lack of reverence for famous pre-Song medical texts often accompanied proven formulae authors' disinterest in medical doctrine and causal explanation. Of the surviving authors Shen Gua was the most outspoken in this regard, rejecting the famous Tang dynasty medical texts by Sun Simiao and Wang Tao, though even Shen quoted with approval and occasionally at length from the Han dynasty works of Zhang Ji, which were highly revered by both common physicians and advocates of a literati-physician medicine.[220]

Finally, all proven formulae texts take the form of a formulary: a listing of formulae and the conditions they treat. This choice of genre reflected both the authors' lack of interest in doctrinal discussions and their focus on what they perceived as the practical task of amassing a large number of useful formulae. Unlike the other two approaches, advocates of this approach self-consciously used the term "proven formulae (*yanfang* 驗方)" to label it, often including this term in the titles of their formularies.

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[218] "Shoulder Bone (*jianyu* 肩髃)" is also the name of an acupuncture point (LI-15) located near the prominence of the acromion. I am inclined to read it more generally in this instance since "In the fingers (*zhizhong* 指中) is not the name of any acupuncture point.
[219] *Puji benshifang*, *juan* 3, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 107.
[220] *Su Shen Liang Fang*, preface and *juan* 3, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, 3, 82–83.

The Characteristics of the Authoritative Source Approach

Authors who relied on the authoritative source approach, as the name conveys, attempted to produce trustworthy medical texts by taking all their information from a source or sources which in their judgement possessed impeccable credentials. The precise authority chosen varied widely, but three broad categories can be distinguished: famous medical texts, respected family lineages, and imperial medicine.

Texts which relied upon famous medical works took the form of a digest, selecting those formulae which the author considered the most effective or the most practical. Guo Si's (郭思, fl. 1082-1125), *Precious Essentials of Formulae worth a Thousand Gold* (*Qianjin baoyao* 千金寶要, 1114), selected what he considered the most useful formulae from the Tang dynasty *Essential Formulae worth a Thousand Gold*. No preface for the text survives, but the selection of formulae reflects an interest in simple, easily prepared treatments.[221] Appeals to the authority of family lineages of medicine were apparently common. The *New Book on Children*, for example, lists twelve books with titles in the form *Mr. X's Family Transmission* (*X shi jiachuan* X 氏家傳) and three others with titles in a different form but also attributed to particular families.[222] More such texts are known from other sources, but very few have survived, making it difficult to generalize about their content. The final category of authoritative source—appeals to imperial authority—is known only through titles preserved in bibliographies and other sources. Judging from the relatively small number of titles recorded, it seems to have been the least common type of authoritative source text. This may be due to the fact that the Northern Song government

[221] Guo Si and Sun Simiao, *Qianjin Baoyao, Sun Zhenren Haishang Fang*, ed. Su Li, Yang Chengzu, and Jiang Xiao, Zhongyi Guji Zhengli Congshu (Beijing: Renmin Weisheng Chubanshe, 1986).
[222] Liu Fang 劉昉, *juan* 40, "*Shidafu jiachuan*," in Qian Yi and Liu Fang, *Qian Yi, Liu Fang yixue quanshu*, 975.

published a large number of texts on its own initiative, making the claim to possess the "secrets" of imperial medicine ring hollow.

Due to their low rate of survival, it is difficult to generalize about texts which primarily relied on the authoritative source approach. On the basis of the small number of extant Northern Song representatives and the rather larger number of surviving Southern Song texts of this type, it is likely that their content varied widely, adhering for the most part to a format and style similar to the proven formulae texts, but sometimes invoking the doctrines and explanations found in literati-physician texts.

The Characteristics of the Literati-Physician Approach

At the heart of the literati-physician approach was a conviction that medicine should be learned and practiced in ways which accorded with literati sensibilities and practices. Medicine was a noble and difficult endeavor both worthy of and demanding the skills of a qualified literatus:

> This humble official has heard that those who thoroughly understand heaven, earth, and humanity are called scholars. Those who thoroughly understand heaven and earth, but not humanity, are called technicians. It is difficult to call this medicine of ours formulas and techniques. Is it not actually an undertaking for scholars? Ban Gu's preface to the bibliographic treatise [of the *History of the Han* (*Hanshu* 漢書)] … also says that those who practice formulas techniques examine illnesses in order to involve themselves in the state and diagnose [illnesses] in order to understand government. How could one who cannot fathom the abstruseness of the three virtues involve himself in the governance of the state?[223]
> 臣聞通天地人曰儒, 通天地不通人曰技, 斯醫者難曰方技, 其實儒者之事乎。班固序《藝文誌》…又云方技者論病以及國, 原珍以知政, 非能通三才之奧, 安能及國之政哉。

[223] Song editors preface to Huangfu Mi, *Systematic Classic of Acupuncture* (*Zhenjiu jiayi jing* 針灸甲乙經, 280 [1069]), in Huangfu Mi, *Zhenjiu jiayi jing jiaozhu*, 2.

Medical learning, like other domains of literati learning, was fundamentally textual. Unlike supporters of proven formulae, for whom all texts were created equal, and proponents of authoritative sources, who might choose a single text as particularly reliable, advocates of literati-physician medicine formed a canon of medical classics parallel to the canon of classical learning (*ruxue* 儒學) and composed of surviving pre-Song medical works. They saw these texts as links between themselves and the origins of medicine in the writings of the sage-emperors of antiquity—particularly the Yellow Emperor (*Huangdi* 黃帝) and the Divine Farmer (*Shennong* 神農).[224] Like Northern Song scholars of literary and Confucian texts, however, supporters of the literati-physician approach did not value the medical classics as mere cultural forms for imitation; rather, they sought to use the concepts and principles contained in these texts to help them uncover the root (*ben* 本) or source (*yuan* 源) of an illness, knowledge of which made a successful treatment possible:[225]

> Therefore, those who are good at practicing medicine must, once an illness has appeared, first investigate its source, determine how it was transmitted and contracted, scrutinize its generation and conquest [according the five phases],[226] distinguish its coolness and heat, coldness and warmth, differentiate whether it is above or below, interior or exterior, whether the true [*qi*] or the evil [*qi*] predominates, whether it is vacuous or replete… Each of these has its standard and one cannot err in the slightest.[227]
> 故善為醫者, 一病之生, 必先考其根源, 定其傳授, 審其刑剋, 分其冷熱寒溫, 辨其上下內外, 有真有邪, 有虛有實… 各有其常而不可差之分毫也。

Literati-physician texts are thus distinguished by a combination of reverence for the medical classics and an emphasis on doctrinal explanation for illnesses.

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[224] See, for example, *Shanghan lun*, Song editors' preface, in Zhang Ji, *Zhongjing quanshu*, 303.
[225] The formation of the literati-physician canon is described in chapter 4. Literati physicians' understanding of how the texts were to be read and used is discussed in chapter 5.
[226] All editions of this text read "punishment and conquest (*xingke* 刑剋)," a term which I have been unable to locate. I have translated it here as "generation and conquest (*shengke* 生剋)," the closest term which would fit the context, though a scribal error of *xing* 刑 for *sheng* 生 seems unusual. For more on the five phases see note 54 above.
[227] Shi Kan, *Shi Zaizhi Fang*, *juan xia*, "*Weiyi zonglun*," in Qiu Peiran, *Zhongguo yixue dacheng sanbian*, 4:482.

In terms of genre and style, the literati-physician approach's commitment to a textually and doctrinally rich form of medical learning led to far more variety than was characteristic of the other two approaches. In addition to formularies, the supporters of literati-physician medicine composed treatises on subtle points of doctrine,[228] collections of questions and answers for pedagogical use,[229] commentaries on the medical classics,[230] mnemonic rhymes to help students memorize the essence of the classics,[231] and even—for the first time in Chinese history—collections of case histories to illustrate the process of diagnosis and treatment.[232] In their literary diversity and sophistication, as in other ways, literati-physician texts sought to meet the standards of elite learning and culture.

Literati Dilettantes or Literati Physicians: The Ideal Medical Knower

Throughout the Northern Song, the three approaches to resolving the medical crisis of trust coexisted in harmony. Their supporters did not attack one another; instead, they all participated in the joint attack on common physicians. Moreover, as noted above, there was a large degree of interpenetration among the three. Shen Gua authored what might be considered the paradigmatic collection of proven formulae but cited some of the same texts literati-physician advocates included in their canon. Xu Shuwei was a fervid supporter of the literati-physician approach but cited case records in support of his arguments in all but one of his four extant texts.

The overlap of the three approaches was made possible by a set of assumptions they shared: (1) medicine is both important and abstruse, (2) common physicians are unreliable, and

[228] E.g. Cheng Wuji 成無己, *Shanghan mingli lun* 傷寒明理論, in Cheng Wuji, *Cheng Wuji yixue quanshu*, 151–192.
[229] E.g., Zhu Gong, *Nanyang huoren shu*, in Zhu Gong and Pang Anshi, *Zhu Gong, Pang Anshi yixue quanshu*, 1–139.
[230] E.g., Cheng Wuji, *Zhujie shanghan lun*, in Cheng Wuji, *Cheng Wuji yixue quanshu*, 1–150.
[231] E.g., Xu Shuwei, *Shanghan baizheng ge* 傷寒百證歌, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 1–36.
[232] E.g. Xu Shuwei, *Shanghan jiushi lun*, in Ibid., 51–80.

(3) some new foundation of authority must be sought to validate medical knowledge and practice. The third assumption was the point on which the three approaches differed one from another, each relying on a different source of authority to resolve the medical crisis of trust. The proven formulae approach insisted that experience alone should arbitrate the value of therapeutic technique. The authoritative source approach, more modestly, looked to various widely valued authorities—famous texts, family lineages, or the imperial government—as arbiter. The literati-physician approach chose to rely on a set of texts, the medical canon they were in the process of forming. As shown by the examples of Shen Gua and Xu Shuwei, however, even on this point it remained possible to harmonize the three approaches. Experience could be shown to validate the formulae in the revered texts of the literati-physician canon, which, owing to their long-standing fame and more recent imperial publication, could easily claim to be authoritative sources of medical knowledge.

If a community of trust in medicine was to be formed, however, in addition to agreeing upon an authoritative foundation for medical knowledge, it was also necessary to agree upon what type of person could be trusted to produce medical knowledge on that basis. Who was an ideal medical knower? On this point, the proven formulae and authoritative sources approaches differed irreconcilably with the literati-medicine approach.

Supporters of the first two approaches assumed that common physicians would remain the primary occupational practitioners of textually based medicine, though they were far from the ideal medical knower. The formularies produced within these two approaches were intended as guides for home use, to avoid as much as possible the risks of consulting common physicians. Like the pre-Song medical compendia discussed in chapter 1, the formularies produced by advocates of these two approaches were often lengthy and made no effort to facilitate retention

of the contents by a student. Instead, these texts were usually organized topically—grouping formulae by the illness they treated—to facilitate searching for a remedy when it was needed, and they emphasized simple, easily prepared remedies. For the authors of these texts, the ideal medical knower was a literatus with enough knowledge of medicine to make use of formularies to treat his family and friends but who did not practice medicine as an occupation, in short, a medical-dilettante literatus. Medicine might be a dignified and even laudable interest for a literatus to cultivate, but the practice of medicine as an occupation was still beneath the dignity of the elite.

By contrast, the proponents of the literati-medicine approach were vociferous promoters of the high status of medicine as an occupation. They argued that medical practice was not only an acceptable occupation for members of the elite but also a noble choice which provided a means of benefiting the people. The story of Fang Zhongyan's youthful desire to become a doctor, recounted above, aptly expresses the convictions of literati-physician medicine's supporters. Xu Shuwei, characteristically, surpassed even that story in his praise of the virtues of medical practice:

> The Way of medicine is great. With it, one can nourish life, complete the body, fulfill [one's allotted] years, and benefit all under heaven and generations to come…[233]
> 醫之道大矣。可以養生，可以全身，可以盡年，可以利天下與來世…

The generic breadth and innovative features of literati-physician texts reflect their authors' commitment to medicine as an occupation. They are often explicitly pedagogical elucidating fine points of theory or providing easily memorized summaries of the medical classics. The proponents of literati-physician medicine envisioned a new kind of physician, a literatus who brought the education, textual practices, and ethical commitments of the elite to the study and

[233] *Puji benshifang*, author's preface, in Ibid., 83.

practice of medicine. I call such doctors literati physicians. They simply called themselves physicians (*yi* 醫 or *yizhe* 醫者),[234] for they saw themselves the only practitioners of the authentic medicine passed down from antiquity. Those who did not meet their standards they denigrated as vulgar doctors (*yongyi* 庸醫), common physicians, or medical workers (*yigong* 醫工). Medicine was a literati occupation, and anyone who did not at least conform to the norms of elite learning and behavior was unqualified as a physician.

At the same time, literati-physician medicine's emphasis on textual learning also produced a radical change in the way physicians learned medicine. If medical learning, like the more well-established field of literary learning, was rooted in texts, it became possible to study medicine by oneself.[235] Even if one studied with a teacher, the relationship between the teacher and the students was no longer that of master and disciple, but rather that of a classical teacher and his students. The teacher helped to explain and supplement the texts, but the primary act of learning occurred between the students and the texts themselves. It was therefore possible to study with multiple teachers simultaneously, and no bonds of secrecy were laid on the material learned.[236] By altering the nature of medical learning, the supporters of the literati-physician approach made the practice of medicine more palatable to the elite, for whom textual learning was the norm.

The sharpness of the distinction between the three approaches on this point is made clear by a comparison of the authors of extant Northern Song formularies (see table 3-1).[237] Not one

[234] In the late Northern Song, a new term *ruyi* 儒醫 would be developed. It may be translated as "literati physician" and was used to indicate a physician with the literary learning expected of a literatus, but the term was not widely used at this time, Goldschmidt, *Evolution*, 56–57.
[235] Chen Yuanpeng, *Liang Song de "shangyi shiren,"* 116–127.
[236] Leung, "Medical Learning from the Song to the Ming," 387; Yiyi Wu, "A Medical Line of Many Masters: A Prosopographical Study of Liu Wansu and His Disciples from the Jin to the Early Ming," *Chinese Science*, no. 11 (1994): 44–45.
[237] I have limited the comparison to formularies since proven formulae authors did not work in other genres.

author of a proven formulae or authoritative source text was a practicing physician, while all but one of the authors of literati-physician texts are known to have been practicing physicians as well as literati. The exceptional literati-physician author, Shi Kan (史堪, late 11th-early 12th c.), was almost certainly a physician, judging by the section in his text titled, "General Treatise on Practicing Medicine (*Weiyi zonglun* 為醫總論)," but biographical data on him is lacking. The division into three approaches on the basis of the authority chosen as the foundation for medical knowledge thus conceals a more basic partition into two approaches characterized by the choice of ideal medical knower. If the three approaches were reconcilable in terms of their preferred source of medical knowledge, they were absolutely irreconcilable on this issue.

Formulary	Author	Approach Used	Physician?
Formulae for Abundant Aid, 1047 博济方	Wang Gun 王衮	proven formulae	no
Shi Zaizhi's Formulae, 1085 史載之方	Shi Kan 史堪	literati-physician	probably
Oral Instructions and Formulae for Pulses and Patterns from the Secret Treasure of the Family Transmission, 1085 傳家秘寶脈證口訣並方	Sun Shang 孫尚	literati-physician	yes
Essential Formulae for Travelers, 1093 旅舍備要方	Dong Ji 董汲	proven formulae	no
The Sagely Powder Formula, ca. 1100* 聖散子方	Su Shi 蘇軾	proven formulae	no
Excellent Formulae of Su and Shen, early 12th c.* 蘇沈良方	Su Shi, Shen Gua 蘇軾, 沈括	proven formulae	no
Precious Essentials from Formulae Worth a Thousand Gold, 1124 千金寶要	Guo Si 郭思	authoritative source	no
All-Saving Formulae to Guide the Perplexed, 1127 全生指迷方	Wang Kuang 王貺	literati-physician	yes
Family Treasures for Preserving Life, 1127 衛生家寶	Zhang Yong 張永	literati-physician	yes
Efficacious Formulae for Universal Aid, 1132 普濟本事方	Xu Shuwei 許叔微	literati-physician	yes
Formulae for Universal Aid from Chicken Peak, 1133 雞峰普濟方	Zhang Rui 張鋭	literati-physician	yes

Table 3-1: Extant Formularies by Northern Song Authors

* These medical texts of Su Shi and Shen Gua are difficult to date. They were compiled by others after the authors' deaths. Shen Gua did produce a now-lost text titled *Excellent Formulae Collected by Shen* (*Shen cunzhong liangfang* 沈存中良方, ca. 1090), and a text titled *Literati-Learning Su's Formuale* (*Su Xueshi Fang* 蘇學士方) was compiled ca. 1100.[238]

CONCLUSION: The Unresolvable Dilemma of Song Medicine

Harry Collins has observed that in modern scientific discourse, experiment can only serve as a test to decide between propositions when it is already known what the outcome of the experiment ought to be. Otherwise, there is no way of being certain that the experiment was not invalidated by some error in its performance. If we do not know what a successful outcome to the experiment would look like—as we typically do when we wish to use an experiment to

[238] For further discussion of the problems surrounding these texts see Su Shi and Shen Gua, *Su Shen neihan liangfang*, 263–264; and Ma Jixing, *Zhongyi wenxianxue* (Shanghai: Shanghai Kexue Jishu Chubanshe, 1990), 180.

answer a question—a potentially infinite regress is produced which he terms "the experimenter's regress."[239] As he explains using the example of modern experiments designed to detect gravity waves:

> What the correct answer is depends on whether there are gravity waves hitting the Earth in detectable fluxes. To find this out we must build a good gravity detector and have a look. But we won't know if we have built a good detector until we have tried it and obtained the correct outcome! But we don't know what the correct outcome is until… and so on *ad infinitum*.[240]

The endless loop of the experimenter's regress can only be broken by finding criteria outside of the experiment itself by which to decide which outcomes count as successful. In contemporary scientific practice, the regress is closed by a social process of consensus building in which a small group of interested parties, which Collins calls the "core group," decides how the experimental results will be interpreted. These core groups are private, not because they exclude outsiders by rule, but because outsiders lack both the technical knowledge and the socialization necessary to participate in the discussions of the group. The closed nature of the core group makes resolution of the experimenter's regress possible by limiting the size of the group which will negotiate to determine the meaning of experimental results and by obscuring the socially contingent process by which they did so.[241]

Song medical thinkers did not engage in experiments, but they did rely on experience as a guide to which approach to medicine was the most successful. The supporters of the three approaches genuinely believed that the methods they advocated would yield the best medical results, but it is notoriously difficult to assess the results of therapeutic interventions. The variability of illness, the incorrect actions of patients, the incompetence of the doctor, and the

[239] Harry Collins, *Changing Order: Replication and Induction in Scientific Practice* (University Of Chicago Press, 1992), 83–84, 127.
[240] Ibid., 84.
[241] Ibid., 84, 142–145.

fickleness of climate could explain any given instance of a treatment's failure. Like modern experimenters, Song medical thinkers found themselves in a position where the only way to evaluate the three approaches was to start from an assumption about which one was correct and evaluate therapeutic results accordingly. Unlike modern experimenters, Song medical thinkers did not have recourse to private core sets to resolve this dilemma. Medicine in the Song remained an open subject. Any educated individual could learn enough by self-study to enter the debate, and sick people and their families felt no compulsion to accept a doctor's advice as better founded than their own. The nature of the conflict between the three approaches was such that it could not be resolved on formal or experiential grounds, and the social mechanisms for resolving it were lacking. Ultimately, therefore, it was not possible for Northern Song medical authors to resolve the crisis of trust in medicine, and the Northern Song bequeathed a fractured medical heritage to the periods that followed.

The resolution of this dilemma did not occur until the Yuan, when social and political changes led to large numbers of the literati taking up medicine as an occupation.[242] For this reason, this dissertation takes the late Yuan and early Ming as its closure. In the ensuing roughly two-and-a-half centuries, all three approaches continued to have representatives, but the literati-physician approach grew increasingly dominant, vastly out-producing the other two approaches in terms of medical texts and—of course—well-known physicians. More importantly, for the argument of this dissertation, it was literati physicians who made the *Treatise on Cold Damage* central to their medicine by using it as tool to fashion their identity, their medicine, and their arguments against their opponents. The remaining two chapters of this dissertation therefore

[242] Hymes, "Not Quite Gentlemen?," 64–66.

examine the nature of and reasons for the *Treatise's* appeal to literati physicians and the process by which it was enshrined at the heart of literati-physician medicine.

PART TWO
The Treatise on Cold Damage and Literati-Physician Medicine

The modern secondary literature offers three explanations for the dramatic upswing in writing about the *Treatise on Cold Damage*. The first is primarily found in medical history texts written by Chinese physicians. The extremely influential work of Ren Yingqiu 任应秋 can serve to represent this point of view. Ren presents the development of a literature devoted to the *Treatise* as a natural and logical unfolding of the clinical principles and methods inherent in the text. For Ren the value of the *Treatise* is a given; therefore, no explanation of its attraction to Song medical authors is necessary. These authors simply correctly recognized the *Treatise* as a useful text and set about understanding and explaining it. The gap between the *Discourse's* composition and the Song renaissance of writing on it is presented without explanation as a period of developing ideas.[243] The second explanation is that of Paul Unschuld. He argues that the *Treatise*'s popularity derived from two developments. First, Song dynasty authors favored an approach that makes use of a "restricted etiology," reducing the cause of all illnesses to one pathological factor—cold in the case of the *Discourse*. Second, Song authors saw the *Treatise* as the first medical text that combined the doctrines found in the *Yellow Emperor's Inner Classic* with pharmaceutical therapy as opposed to acumoxa.[244] The third and most recent explanation is that of Asaf Goldschmidt. He provides detailed evidence to show that the Song government published the *Treatise* to combat a rise in the frequency and severity of epidemics that occurred during the mid-eleventh century. Goldschmidt argues, as we saw in Chapter 1, that the *Treatise* and its ideas were not known among contemporary Song physicians. He concludes that the

[243] Ren Yingqiu, Qiu Peiran, and Ding Guangdi, *Zhongyi gejia xueshuo* (Shanghai: Shanghai Kexue Jishu Chubanshe, 1986), 8–9.
[244] Unschuld, *Medicine in China*, 166–169.

decision to publish the *Treatise* was an idiosyncratic decision of the Bureau's editors who were government officials and not physicians. Had they been physicians, they would have chosen some other book to publish. Following its publication, physicians felt a need to reconcile the conflicting theories of the *Treatise* with the medical practices then current, leading to the upsurge in writing on the *Discourse*.[245]

All three of these explanations are lacking in important ways. Ren Yingqiu's discussion offers no real explanation and assumes both a socially unmediated value for the *Discourse* and a teleological line of development. The first part of Unschuld's explanation simply does not accord with the evidence available to us. Unschuld's concept of a "restricted etiology" clearly derives from the work of the "four great masters of the Jin-Yuan era (*Jin-Yuan sidajia* 金元四大家)"—four famous physicians whom later generations credited with founding currents[246] of medical theory focused on particular etiologies. Recent research demonstrates the four great masters did not see their own work in this way, and there is good evidence that Song physicians did not favor such a practice. Consider, for example, the famous Song supporter of the *Treatise*, Zhu Gong, who explicitly criticizes physicians who do not distinguish between hot and cold illnesses, or his younger contemporary Xu Shuwei, who repeatedly emphasized that the essence of Zhang Ji's medical ideas was to distinguish between, "exterior and interior, vacuity and repletion."[247] Unschuld's second argument—that Song physicians saw the *Treatise* as the first text to integrate drug therapy with the theories of the *Inner Classic*—is not refuted by any known evidence, but

[245] Goldschmidt, *Evolution*, 69–72, 171–172.
[246] I am indebted to Volker Scheid for this translation of the Chinese term pai 派, see Volker Scheid, *Currents of Tradition in Chinese Medicine 1626-2006*, 1st ed. (Eastland Press, 2007), 11–13.
[247] E.g., *Book on Saving Lives* (*Huoren shu* 活人書, 1118), authors preface, in Zhu Gong, *Huoren shu*, ed. Wan Yousheng, Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1993), 19; and *Songs on One Hundred Patterns of Cold Damage* (*Shanghan baizheng ge* 傷寒百證歌, mid 12th c.), *diliu zheng biaoli xushi ge*, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, ed. Chen Zhiheng, Zhongyi Guji Zhengli Congshu (Beijing: Renmin Weisheng Chubanshe, 1993), 217.

not supported by any known evidence either. Song authors assume the *Inner Classic* and the *Treatise* are in harmony, but never cite this as a reason for promoting it.

Goldschmidt's explanations for the government's publication of the *Treatise* are compelling, but his explanation for the flood of private authors writing on the *Treatise* is less so. First, his proposal that intellectual dissonance alone was adequate to motivate a large number of people—some of whom were not even practicing physicians—to write at length on the *Treatise* seems highly unlikely in the absence of a broader and more immediate motivation. Dissonance between doctrines has been quite common in the history of medicine in China, and no other case of dissonance has produced a response like that seen in the Song. Second, we have seen that his assumption that Song dynasty medicine prior to the publication of the *Treatise* was radically different from the medicine contained in the *Treatise* is unsupported. We have no texts that indicate the existence of such a diverging medical tradition, and the evidence presented in Chapter 1 indicates that the *Treatise* was well-known, highly valued, and circulating in multiple editions among physicians prior to its imperial publication.

In contrast to these three explanations, I argue that the increased centrality of the *Treatise on Cold Damage* in textually based medicine from the Song onward is due to the formation of literati medicine at this time. In particular, it was the usefulness of the *Treatise* to literati-physician medicine, and the ultimate dominance of that form of literati medicine, which secured the *Treatise*'s position.

As we saw in Chapter 3, literati-physician medicine differed in important ways from both the proven-formulae and authoritative-source approaches to resolving the Northern Song crisis of trust in medicine. Only literati-physician medicine was primarily supported by members of the literati-elite who were practicing physicians and sought to form a medical canon modeled on the

literary canon studied in preparing for the civil service exams. The *Treatise on Cold Damage* was a preeminent part of that emerging medical cannon, and it is the ultimate success of literati physicians in dominating Chinese text-based medicine which secured the *Treatise*'s centrality to later Chinese medical thought and practice. The following two chapters explore the reasons for literati physicians' fondness for the *Treatise*. Writing about the *Treatise on Cold Damage* was neither a natural response to its inherent excellence nor an attempt to resolve intellectual discomfort caused by its supposed divergence from current standards. Rather, it was a conscious argument for a particular kind of medicine, and it was the usefulness of the *Treatise* in making that argument that led Song authors to write about it in such numbers. Chapter 4 examines why the *Treatise* was useful in the formation of the literati physician community and in its interaction with society at large. Chapter five investigates how the *Treatise* was helpful in dealing with the variability and complexity of illness—the central concern of elite medical authors. Before doing so, however, it is necessary to discuss in more detail what literati-physician medicine was and how medical books were used.

Literati-Physician Medicine as a Cultural Tradition and Thought Collective

In his study of European Renaissance natural history, Brian Ogilvie adapted Marshall Hodgson's concept of a cultural tradition to describe European natural history as a phenomenon with continuity over a considerable length of time. He defines a cultural tradition as a "continuity within a group that shares a common commitment to … an evolving problematic and method."[248] This definition includes three parts: a community, a problematic, and a method. The proven-formulae and authoritative-source approaches possessed a problematic and a method, but neither

[248] Brian W. Ogilvie, *The Science of Describing: Natural History in Renaissance Europe* (Chicago: University of Chicago Press, 2006), 10.

of them attempted to create a new community. Their sense of community was extended to the entirety of the elite stratum of society. Only literati-physician medicine envisioned a new medical community—the group of literati physicians—unified by its commitment to addressing a particular problematic—the complexity of illness—with a shared method—individualizing treatment in accord with the theories found in the newly formed medical canon.

The literati physician as the ideal medical practitioner was central to the coherence of the literati physician community. The ideal medical practitioner for the proven-formulae or authoritative-source approaches was simply an elite man. They expanded a preexisting social role in the repertoire of elite men—who had always been expected to be informed consumers in the healthcare marketplace—but they did not create anything new. The literati physician, on the other hand, was a new social being that had never existed previously. This is not to say that elite men before the Song never studied or practiced medicine. Some of them certainly studied medicine, and it is likely that a few of them even practiced medicine as an occupation. Such individuals were literati and physicians (though perhaps not both in the same moment), but they were not "literati physicians" because no such role existed. In describing the coming into being of "possible ways of being a person,"[249] Ian Hacking argues that in the case of humans, new ways of being a person are more than merely new names for old behaviors. Unlike objects, humans make choices about how to behave. Social roles not only define existing behaviors, but also generate new ones: "The category and the people in it emerged hand in hand."[250] The role of literati physician came into being with the first literati physicians, and in doing so opened up new ways of being a physician, a literatus, and a person. The community of literati physicians was, at its most basic level, founded on this new, shared identity.

[249] Ian Hacking, "Historical Ontology," in *Historical Ontology* (Cambridge: Harvard University Press, 2004), 2.
[250] Ian Hacking, "Making up People," in *Historical Ontology* (Cambridge: Harvard University Press, 2004), 107.

The ties holding the literati-physician community together, however, were not merely those of shared identity. The community of literati physicians is most clearly revealed in the intertextual dialogues they engaged in through their books. As we saw in the Song physician Xu Shuwei's response to the Jin doctor Cheng Wuji's commentary on the *Treatise*,[251] even the division of China into two hostile empires did not split the community of literati physicians or dull their interest in one another's writings. Historiographically less durable interactions, in the form of conversations and connections through networks of teachers and students, are also documented in scattered references. The literati physician community functioned as a thought collective, defined by Ludwik Fleck as "a group of persons mutually exchanging ideas or maintaining intellectual interaction" which is the " 'carrier' for the historical development of any field of thought, as well as for the given stock of knowledge" and the "thought style" of that field. A thought style is the distinctive approach to perceiving, understanding, and acting of a given field. Fleck notes, "It is characterized by common features in the problems of interest to a thought collective, by the judgment which the thought collective considers evident, and by the methods which it applies as a means of cognition."[252]

In the following two chapters, I bring these two perspectives—literati-physician medicine as cultural tradition and as thought collective—together to shed light on why literati physicians placed such great emphasis on the *Treatise on Cold Damage*. Chapter 4 focuses on the *Treatise*'s usefulness in producing, promoting, and defending the community of literati-physicians, and Chapter 5 is devoted to understanding the *Treatise*'s role in forming the distinctive thought style of literati-physician medicine.

[251] See Chapter 1 for the full quote.
[252] Ludwik Fleck, *Genesis and Development of a Scientific Fact* (Chicago: University of Chicago Press, 1981), 39, 99.

CHAPTER 4
Fashioning Literati Physicians: Canonization, Competition, and Community

The proponents of literati-physician medicine saw neither their medicine nor the social role of literati physician as a novelty. From their point of view, theirs was a return to the authentic and correct in medicine. They were reestablishing a connection with the medicine of the ancient sages, and as such their medicine was simply "medicine (*yi* 醫)" as it should be learned and practiced. Likewise, the literati physician was simply a "physician (*yi* 醫)" who learned and practiced medicine correctly. Although literati physicians at times distinguished themselves from others by using terms such as "excellent physicians (*liangyi* 良醫)" and, from the late Northern Song onward, "scholar-physicians (*ruyi* 儒醫)," these terms were used for emphasis and contrast, not as names for the role of literati physician, whose novelty was recognized only in contrast to the common physicians against whom they were arguing. In their conception of themselves as champions of the virtues of antiquity against degraded modern customs, literati physicians shared much in common with literary and political thinkers of their time, who also saw themselves as restoring the purity of ancient teachings and practices.

Similarly, literati physicians in the Song, Jin, and Yuan saw the structure of their community in terms familiar to them from their other social relations. They saw the literati physician community as composed of teachers, students, friends, and family members and managed their relationships accordingly. Later authors, however, would discern a new social structure among the physicians of this period: the current (*pai* 派). The term *pai* 派 is more commonly translated as school or group, but recent scholarship has shown that these translations imply a degree of fixity that contrasts with the actual flexibility of the social structures called *pai*.

I follow Volker Scheid both in translating this term as "current" and in using it to denote a "group of practitioners whose members are related to each other by personal association, actual or fictive kinship ties, retrospective histories, or affiliation on the basis of having read or adopted the texts or case records of a deceased physician, and who share ideas, techniques, geographical proximity, stylistic similarities, aesthetic preferences or any combination of these."[253]

Several points in this definition should be clarified. First, currents are self-conscious groups, not retrospective impositions by modern historians. While the currents sometimes defined themselves by appropriating past physicians as lineage heads, there was, at the time the current formed, an actual group of physicians who constituted the current. The notion of currents has been attacked as anachronistic, perhaps because the book which popularized the concept—Ren Yingqiu's influential *Doctrines of the Various Schools of Chinese Medicine*—took an unabashedly modern perspective in defining them.[254] However, as I will show in this chapter, such groups of physicians did exist and were actively recognized by their contemporaries, even if they were never referred to as "currents." Second, the boundaries of currents were always fuzzy. Membership in a current frequently meant no more than having read the central texts of that current and adopted their methods. There were no barriers (save occasional intergroup ill-will) preventing membership in multiple currents. Third, most currents took the form of fictive lineages. The head of the lineage was the founder of the current, though not necessarily its most important figure.

As defined above, a current has both diachronic and synchronic realizations, but in my study I have found similar groups of physicians that lacked diachronic extension. Their members were all contemporaries who knew and interacted with one another in close personal

[253] Scheid, *Currents of Tradition*, 13.
[254] Ren Yingqiu, Qiu Peiran, and Ding Guangdi, *Zhongyi gejia xueshuo*.

relationships. I refer to such groups as "clusters." Some clusters became the putative source of currents—most notably the Yishui current (*Yishui pai* 易水派), but others—such as the Gao Ruona 高若納 cluster—did not. Like the boundaries of currents, the line dividing currents from clusters is fuzzy. The Yongjia 永嘉 cluster continued to be influential for at least 150 years, but there is no evidence that physicians using its methods saw themselves as belonging to an identifiable group.

This chapter breaks into three sections. The first examines the changing ways in which three "generations" of Northern Song physicians promoted both the themselves and the *Treatise on Cold Damage.* The second looks at the usefulness of the *Treatise* in literati physicians' social arguments—whether arguing for their status as members of the elite or attempting to persuade patients and their families to accept the authority of a literati physician and not his competitors. The final section examines how the *Treatise* remained socially useful for literati physicians even as the social context of their medical practice changed during the Southern Song, Jin, and Yuan.

SECTION ONE: The *Treatise* and Three "Generations" of Northern Song Physicians

The change in the status of the *Treatise on Cold Damage* was accomplished during the Northern Song. By the middle of the 12th century, when the last men who were educated and lived most of their lives under the Northern Song passed away, the *Treatise*'s position within literati-physician medicine was already secure.

In this section I outline the process by which this occurred. I divide it into three periods that I term "generations." They are not, strictly speaking, generations. They cover too large a span of time, and I examine only a few physicians and authors from each period. Nevertheless, the authors I discuss in each period were contemporaries and were aware of one another. Judging

from their references to each other and mention of them in the Song bibliographic literature, they were seen, both during their lives and immediately afterward, as among the most important medical writers of their time, and their activities regarding the *Treatise on Cold Damage* were animated by common concerns. I have identified three distinct goals pursued by the members of the three generations respectively: canonization, popularization, and explication.

Although I have framed this discussion in dynastic terms, the dynastic periods do not perfectly match the changes occurring in medicine. Medical tendencies in the first century of the Northern Song closely resemble those of the periods preceding it. Although the imperial government and private gentlemen were already involving themselves in medicine to a greater degree than before the Song, the medical texts published in this period follow the pattern of the Tang dynasty. In particular, the *Formulae of Sagely Beneficence for the Era of Great Peace*—which included the Gao Jichong edition of the *Treatise*[255]—was a medical compendium like those of Sun Simiao though on a grander scale than ever before attempted. The distinctive pattern of government and private medical publishing we now associate with the Northern Song began only in the middle of the 11th century, and I therefore take it as the starting point for this discussion. The end of the Northern Song, with the loss of North China to the Jin, likewise did not cause an immediate change in medical writings. The two members of the third generation published—and probably wrote—all of their books under the Southern Song or Jin, but they were both educated during the Northern Song and lived most of their lives under its rule. Though published under different regimes, their medical writings share both Northern Song optimism about the possibility of activist social reform and a common orientation to the *Treatise on Cold Damage.* They were Northern Song men even though they wrote after its demise. I have

[255] See Chapter 1.

therefore grouped them with the Northern Song authors who were their primary points of reference and interlocutors.

The First Generation (ca. 1040-1070): Canonization

The first generation of Northern Song cold damage authors were all members of a single cluster—the Bureau for Editing Medical Texts. Although posterity has not remembered them as great physicians, they were respected in their time and are arguably among the most influential people in all of Chinese medical history. It is therefore worthwhile to examine who they were as well as the texts they produced.

The Bureau's Editors and Publications

As discussed in Chapter 2, the Bureau was formed by imperial command in 1057. We do not know how the members were selected, but a substantial change in membership occurred following the Bureau's first two publications. The Bureau's first publication, in 1062, was the *Jiayou Materia Medica* (*Jiayou bencao* 嘉祐本草), a large treatise on medicinal substances following in the tradition of comprehensive *materia medica* prior to the Song. All eight known members of the Bureau at the time participated in this project. A second, more innovative, *materia medica* text, the *Illustrated Classic of Materia Medica*, published in the following year, was, for reasons not recoverable today, the work of only one Bureau member. Two years later, in 1065, when the Bureau published the imperial edition of the *Treatise on Cold Damage*, the staff of the Bureau had changed dramatically. With the exceptions of Gao Baoheng (高保衡, fl. mid-11th c.) and Lin Yi (林億, fl. mid-11th c.), all of the editors for this project were new members.

This new group of six editors would remain relatively constant for the remaining eight books produced by the Bureau over the following four years (see Table 4-1).

Title	Year Published
Jiayou Materia Medica (*Jiayou bencao* 嘉祐本草)	1062
Illustrated Classic of Materia Medica (*Bencao tujing* 本草圖經)	1063
Treatise on Cold Damage (*Shanghan lun* 傷寒論)	1065
Essentials of the Golden Coffer (*Jingui yaolue* 金匱要略)	1066
Classic of the Golden Coffer and Jade Case (*Jingui yuhan jing* 金匱玉函經)	1066
Essential Formulae worth a Thousand Gold (*Qianjin yaofang* 千金要方)	1066
Further Formulae worth a Thousand Gold (*Qianjin yifang* 千金翼方)	1066*
Yellow Emperor's Inner Classic: Questions on the Fundamental (*Huangdi neijing: Suwen* 黃帝內經•素問)	1067
Systematic Classic of Acumoxa (*Zhenjiu jiayi jing* 針灸甲乙經)	1069
Classic of the Pulse (*Maijing* 脈經)	1069
Secret Essentials of the Outer Terrace (*Waitai miyao* 外臺秘要)	1069

Table 4-1: Publications of the Bureau for Editing Medical Texts

* The Song preface to the *Qianjin yifang* is not dated. It is usually assumed it was edited at the same time as the *Qianjin yaofang*.

We do not know the reason for the changes in the Bureau's editors, but it is striking that all but two of them had close personal connections to Gao Ruona (高若訥, 997-1055), the father of the editor Gao Baoheng. The chief editor, Lin Yi was Gao Ruona's son-in-law. Sun Zhao (孫兆, fl. 11th c.), a respected physician, studied medicine with him, and Sun Ji (孫奇, fl. 11th c.), also a physician, was Sun Zhao's brother. The remaining two members, Qian Xiangxian (錢象先, fl. 11th c.) and Fan Zhen (范鎮, fl. 11th c.) had no reconstructable personal connections to Gao Ruona, but participated in only two of the reformed Bureau's eight publishing projects.[256] Given their close ties to one another and their shared interest in the *Treatise on Cold Damage*, I refer to those editors with connections to Gao Ruona as the Gao Ruona cluster.

Gao Ruona himself passed the civil service examination in 1024, finishing third in his cohort. He held several high positions in the Song government, but also nourished an interest in medicine and is known to have written a text on the *Treatise* entitled *Categorized Essentials of Cold Damage* (*Shanghan leiyao*, 傷寒類要, date unclear). The majority of the Bureau's editors were therefore familiar with the *Treatise*, and it is likely that Sun Zhao and Sun Ji came to the Bureau sharing Gao Ruona's high opinion of it. It is surely significant that the change in the personnel of the Bureau also coincided with a dramatic shift in the focus of their publishing efforts. The year following the 1065 publication of the *Treatise on Cold Damage*, the Bureau's new editors published both the *Classic of the Golden Coffer and Jade Case*—a variant edition of the *Treatise*—and *Essentials of the Golden Coffer*—the *Treatise*'s sister text devoted to miscellaneous diseases.

The original imperial mandate that created the Bureau appears to have included a list of texts to be edited and published. The editors' memorial on submitting the *Jiayou Materia Medica*

[256] Goldschmidt, "Epidemics and Medicine," 79–83.

to the throne states that Yuxi (禹錫, fl. 11th c.), Lin Yi, Zhang Dong (張洞, fl. 11th c.), and Su Song (蘇頌, 1020-1101) were entrusted[257] with editing:

> [The copies of] the *Divine Farmer's Materia Medica*, *Numinous Pivot*, *Grand Fundamental*, *Systematic Classic* [*of Acumoxa*], and *Questions on the Fundamental*, as well as the formularies *Expansive Aid*, [*Formulae worth*] *a Thousand Gold*, and *Secret Essentials of the Outer Terrace* …[258]
> 所有《神農本草》、《靈樞》、《太素》、《甲乙經》、《素問》之類，及《廣濟》、《千金》、《外臺秘要》等方…

Conspicuously absent from this list are the *Treatise* and the other two works attributed to Zhang Ji whose editing the Bureau undertook once it was dominated by Gao Ruona's friends and relations. It has been suggested that Gao Baoheng, Sun Zhao, and Sun Ji obtained their positions in the Bureau through Gao Ruona's influence. While this cannot be proven, it is clear that Gao's protégés did effectively take over the Bureau and turned it to their own ends. The decision to edit and publish the *Treatise* and related texts came from the editors themselves, not from their superiors in the imperial government.

While acknowledging that their connection to Gao Ruona probably influenced the Bureau's decision to publish the *Treatise*, Asaf Goldschmidt asserts that Gao's interest in cold damage was unusual, since it was "almost an esoteric topic at that time."[259] He argues that the members of the Bureau were influenced by Gao, the rising frequency of epidemics in the 11th century, and the fact that they were officials and not physicians to make a choice—publishing the *Treatise*—that no physician would have made. I have already shown in Chapter 1 that Goldschmidt's characterization of cold damage studies as an "esoteric topic" is inaccurate. Cold damage studies and the *Treatise on Cold Damage* were, on the contrary, well-known and highly

[257] It is worth noting that we do not know who requested this imperial mandate, raising the possibility that the Bureau was, in it is entirety, the creation of a this dissertationicular group of literati-officials.
[258] *Jiayou bencao*, *buzhu bencao zouchi*, in Okanishi Tameto, *Sō izen iseki kō*, 1027.
[259] Goldschmidt, *Evolution*, 94.

valued parts of the textual medical tradition of the time. Furthermore, as Goldschmidt's own research shows, two of the six members of the Bureau—Sun Zhao and Sun Ji—are known to have been practicing physicians. They were also sons of the famous physician Sun Yonghe (孫用和, fl. early 11th c.), and Sun Zhao composed two texts on cold damage—Cold Damage Formulae (*Shanghan fang* 傷寒方, date unknown) and *Mnemonic Verses for Cold Damage Pulses* (*Shanghan maijue* 傷寒脈訣, date unknown). While neither Lin Yi nor Gao Baoheng are known to have practiced medicine, it was not uncommon for elite men to have some medical knowledge and it seems highly unlikely they would be ignorant of a book written by their father-in-law and father respectively. There was no lack of medical knowledge among the members of the Bureau. The decision to edit and publish the *Treatise on Cold Damage* was not only made by the editors, it was made on the basis of a sound knowledge of the learned medicine of the early Song.

Goldschmidt's assertion that the Bureau's publication of the *Treatise* was a result of their ignorance of medicine not only misconstrues the status of the *Treatise* at the time, it also creates the appearance that the medical changes of the Song were the inadvertent result of top-down imperial policies, when in fact they were the intentional result of actions undertaken by members of the literati elite. The Gao Ruona cluster in effect "hijacked" the Bureau for Editing Medical Texts and used it to accomplish their own purposes. Seen in this light, the subsequent centrality of the *Treatise on Cold Damage* is not, as Goldschmidt suggests, a capricious accident of history, but the result of intelligible, purposeful choices made by a group of individuals, and the important question, therefore, is what those purposes were.

Canonization and Lineage

The publications of the Bureau for Editing Medical Texts had a tremendous impact, both during the Song and afterward. The rapidity with which the Bureau's books dominated the medical world is attested by the fact that all later authors used the Bureau's editions in creating their own books. No references to earlier editions of these texts are known after 1065. Even today, although earlier editions have been discovered by researchers—particularly in Japan—the Bureau's texts are the standard editions of pre-Song texts used by clinicians of East Asian medicine. Moreover, while lists of essential medical texts before the Song differed widely one from another, from the Northern Song onward the essential pre-Song medical texts were precisely those texts published by the Bureau between 1065 and 1069. The Bureau's publications became the canon of literati-physician medicine—and were intended to.

It was natural for literati physicians to assume that medicine must have a canon. Literary learning had a well-defined, if open, canon, and Song thinkers regularly attributed the highest value to texts believed to date from the Han dynasty or earlier, particularly those associated with the legendary sages of high antiquity. The claim that medicine possessed a similar canon was both an assertion of medicine's worthiness as a career for elite men and an attempt to improve the quality of medical care by reconnecting medical practice to its perceived roots in antiquity. The assertion that the effective knowledge and practices of antiquity had been lost or neglected, but were now being restored, was common among Song writers, and the relatively poor quality and scanty circulation of medical texts before the Song supported such arguments about medical learning.

Given that they assumed medicine must have a canon rooted in antiquity, why did the members of the Bureau place such great emphasis on the *Treatise on Cold Damage*? It was not

the oldest text they published, but it was clearly the text they were most anxious to canonize—as demonstrated by the fact that they published it in two separate and variant editions. What appeal did it have for them apart from a reputation for clinical efficacy?

The prefaces the Bureau wrote for the *Treatise on Cold Damage* and *Questions on the Fundamental* (*Suwen* 素問) may provide one answer. In these prefaces the editors trace the lineage of medicine from the earliest sage-emperors up to themselves. In both lineage lists, Zhang Ji occupies an important position. Their preface to the *Treatise on Cold Damage* most clearly outlines his role in this lineage:

> Thus, Zhongjing based his work on the method of Yiyin, and Yiyin based his work on the classic of the Divine Farmer. Can [the *Treatise on Cold Damage*] not be called the intent of the great sages? ... From Zhongjing to now, for more than eight hundred years, only Wang Shuhe was able to study it. In the *Kaibao* reign period (968-976), the military commander Gao Jichong[260] did select and edit [an edition of the *Treatise*] and presented it to the throne. Its wording and order contained errors … The state decreed that we scholar-officials should edit and correct medical books … Now we have first revised Zhang Zhongjing's *Treatise on Cold Damage* …[261]
> 是仲景本伊尹之法, 伊尹本神農之經, 得不謂大聖人之意乎…自仲景於今, 八百餘年, 惟王叔和能學之…開寶中, 節度使高繼沖, 曾編錄進上, 其文理舛錯…國家詔儒臣校正醫書… 今先校定張仲景《傷寒論》…

To the editors of the Bureau, Zhang Ji (Zhongjing) was a crucial link in the transmission of the sages' medical knowledge to later humans. Both the Divine Farmer and Yiyin were legendary figures of antiquity, but Zhang Ji was an ordinary, if highly skilled, human. The *Treatise on Cold Damage* was therefore an essential means of communicating the original and correct medical teachings of the sages. Equally important, by revitalizing the teachings of Zhang Ji, the Bureau also reestablished physicians' connection to him and to the sages whose teachings he passed on. Zhang Ji stood at the boundary between the legendary sages and later physicians. He was

[260] Gao was a military commander (*jiedushi* 節度使) under the later Zhou dynasty (951-960) which preceded the Song. The Song emperors permitted him to retain his title and rank but only in an honorary form.
[261] Preface, Zhang Ji, *Zhongjing quanshu*, 5.

therefore a necessary link in the lineage of literati-physician medicine, establishing their connection with antiquity and the social and intellectual value that it possessed in their society. Other figures, such as the Yellow Emperor and his interlocutors in the *Yellow Emperor's Inner Classic* were too distant from ordinary humanity for contemporary physicians to claim any direct link with them. Zhang Ji was distant enough that he could be linked directly with the sages, but close enough that he could also be linked directly with physicians of their own time. In their preface to *Essential Formulae worth a Thousand Gold*, the Song editors explain why worthies (*xian* 賢)—exceptional, but otherwise ordinary humans such as Zhang Ji—are essential to the unfolding of the sages benevolent intentions:

> Long ago, the Divine Farmer tasted the hundred medicinals in order to differentiate the flavors of the five bitters and the six acrids. Only when [this knowledge] reached Yiyin were decoctions prepared. The Yellow Emperor wished to establish [the method of] the nine needles in order to treat the illnesses of the three yin and the three yang. Only upon obtaining [the aid of] Qibo was the method of stone needles and mugwort refined. Even the great sages, intent on saving the people from their ailments, must await [the appearance of] worthy and illumined officials of profound knowledge. Some appear sooner; some appear later. Afterwards, the actions of the sages are able to spread forever.[262]
> 昔神農嘗百藥，以辨五苦六辛之味，逮伊尹而湯液劑備。黃帝欲創九針，以治三陰三陽之疾，得岐伯而砭艾之法精。雖大聲人有意於拯民之瘼，必待賢明博通之臣，或為之先，或為之後，然後聖人之所為，得行於永久也。

Although the sages were the ultimate source of valid medical knowledge, the survival, development, and spread of that knowledge was dependent upon worthies who received and passed on the sages' teachings. Zhang Ji—and through him the Bureau's editors themselves—were thus part of the work of the sages.

The Bureau's formation of a medical canon thus simultaneously created a lineage linking contemporary physicians with the sage-emperors of antiquity. Together, the canon and lineage

[262] Xinjiao beiji qianjin yaofang xu, in Sun Simiao, *Beiji qianjin yaofang jiaoshi*, ed. Su Li et al. (Beijing: Renmin Weisheng Chubanshe, 1998), 9.

established grounds for valid medical knowledge and made a powerful argument that the study of medicine was parallel to the study of literature. Both disciplines were based upon textual study of classics and both traced their lineage back to the origins of Chinese civilization. For the members of the Bureau and the literati physicians who accepted their narrative, Zhang Ji played a role similar to the role Mencius had played in the thought of Han Yu (韓愈, 768-824) and would play in the teachings of Cheng Yi (程頤, 1033-1107).[263] Zhang Ji was the last person to receive the sages' knowledge. He passed it on, but it was lost until it was recovered by the efforts of the Bureau, who were now making it possible for all physicians to reconnect with the authentic and effective medicine of the sages.

The Second Generation (ca. 1080-1120): Popularization

The second "generation" of Northern Song cold damage authors was animated by a desire to reform medical practice by popularizing the *Treatise on Cold Damage*. The texts produced by this cohort of medical writers are characterized by an attempt to present the contents of the *Treatise* in ways that would make them more easily understood and used by both common physicians and people who were not physicians. In this regard, they reveal the influence of the activist, reform-minded climate of the Northern Song.

I will discuss three members of this generation: Han Zhihe, Zhu Gong, and Pang Anshi. Two of the three, Han Zhihe and Zhu Gong, passed the civil service exam and served as government officials. The third, Pang Anshi, came from a wealthy family of physicians. Although later authors consistently refer to Pang as a member of the elite, references to him

[263] For a discussion of Han Yu and Cheng Yi's presentiaton of the transmission fo the sages' teachings, see Peter Bol, *"This Culture of Ours": Intellectual Transitions in T'ang and Sung China* (Stanford University Press, 1994), 126–131, 302–306.

during and shortly after his life—including those by Su Shi and his circle—are far less clear. It seems likely that Pang's family was at best part of the lower rungs of the literati-elite and may well have been a wealthy *lumpenliterati* physician family. Pang is a key example of how sufficiently wealthy and educated physicians could cultivate friendships with even the highest levels of the elite.

Han Zhihe

Han Zhihe's book on cold damage, the *Profound Meaning of Cold Damage* is the oldest surviving book devoted exclusively to cold damage. Little is known about its textual history. References are found in works up to the early Ming,[264] but the text was lost thereafter and reconstructed in the Qing based on quotes in the *Yongle Encyclopedia* (*Yongle dadian* 永樂大典).

Although Han's preface has unfortunately been lost, the opening of the first section of the text gives a clear idea of Han's reasons for composing a text on cold damage:

> As for cold damage illnesses, many physicians have not thoroughly investigated their origin. They merely say, "[The patient] is suffering an illness of cold damage …"[265]
> 夫傷寒之病, 醫者多不審察其本源, 但只云病傷寒…

Like many Northern Song elites, he felt common physicians were ignorant, parroting words without understanding their meaning. His book presents the diagnosis and treatment of cold damage in a straightforward fashion so the elite would not be dependent on or fooled by common-physician quackery. After stating his plaint against contemporary physicians, he proceeded to explain the origins of cold damage, including diseases of warmth and heat that

[264] Wang Lü, *Collection on Returning to the Classics* (*Yijing suhui ji* 醫經溯洄集, late 14th c.), *Zhang Zhongjing shanghan lifa kao*, in Wang Lü, *Yijing suhui ji*, ed. Zhang Shengmao, Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1993), 21.
[265] *Juan shang*, *shanghan yuan pian*, in *Siku Quanshu*.

manifest in the spring and summer respectively.[266] He then discussed his understanding of pulse diagnosis in cold damage. Like many Northern Song authors, Han felt that the system of pulse-taking presented in the *Treatise on Cold Damage* differed from the system used in other illnesses, and he explained his understanding of this system in detail. The remainder of the first fascicle of the text discusses basic medical theory, the modification of formulae to match a patient's illness, errors in using medicinals, and the types of cold damage for which sweating or purging was appropriate. Taken as a whole, his first fascicle of his text presents the basic knowledge a layperson would need to understand, diagnose, and treat simple cold damage illnesses.

The second fascicle describes more complex patterns. It begins by discussing the treatment methods of sweating and purging in more detail, such as the need to distinguish between patients requiring stronger or milder treatments. This is followed by examinations of several more severe developments of cold damage illnesses—cold in the interior of the body, problems with urination and bowel movements, blood accumulation (*xuxue* 蓄血), and yin jaundice—before finally addressing recovery and relapse. The second fascicle thus builds on the first, providing information necessary for treating more complicated cold damage illnesses.

Throughout his text, Han Zhihe showed a concern for supplementing lacunae in the *Treatise on Cold Damage*. His discussions of blood accumulation and yin jaundice flesh out concepts the *Treatise* mentioned but did not develop. Furthermore, in his section on illnesses for which sweating is appropriate, he presented a different formula for each of the seasons, providing clinical applications for the *Treatise*'s doctrine that cold damage manifests differently in different seasons.

[266] See the discussion of this issue in Chapter 1.

Overall, Han's work leaves the impression of a well-crafted, not-too-lengthy summary of the diagnosis and treatment of cold damage. Although he addressed a small number of doctrinal issues, he did so only to clarify diagnosis and treatment. He discussed ideas and methods from the *Treatise on Cold Damage* but did not engage the text of the *Treatise* as a text. His work was neither commentary nor even explanation but merely presentation of the *Treatise*'s useful content in a more accessible form.

Pang Anshi

The arrangement of Pang Anshi's text, the *Treatise on All Types of Cold Damage* (*Shanghan zongbing lun* 傷寒總病論, 1100), is similar to Han Zhihe's. It opens and closes with some doctrinal discussion, but the bulk of the text is organized by disease name. Each disease is described briefly and one or several formulae presented for treating it. Unlike *Profound Meaning of Cold Damage*, Pang's text lacks an obvious didactic progression of material from simple to complex. In this regard it resembles the medical compendia of the Tang and earlier, but it differs from them in its explicit and exclusive focus on cold damage as described in the *Treatise*. It also retains a didactic element in the form of Pang's comments. These are interspersed among paraphrases form the *Treatise*, but rather than explaining the previous line—as would a commentary—they provide additional clinical information:

> In greater yang disease, if there is headache, fever, body aches, aching joints and bones, aversion to wind, aversion to cold, and panting, Ephedra Decoction governs it.[267] … Pang says: … The person will only fear cold, the tips of the hands and feet will definitely have a slight reversal [cold], [but] after some time will again be warm. The center of the palms will not have reversal [cold]. This is a pattern of cold damage without sweating in which you should use Ephedra Decoction.[268]

[267] This is a paraphrase of line 35 of the *Treatise*, *juan* 3, *pian* 6, in Zhang Ji, *Zhongjing quanshu*, 376–377.
[268] *Shanghan zongbing lun*, *juan* 2, *ke fahan zheng*, in Pang Anshi, *Shanghan Zongbing Lun*, ed. Zou Dechen and Liu Huasheng, Zhongyi Guji Zhengli Congshu (Beijing: Renmin Weisheng Chubanshe, 1989), 30–31.

> 太陽病，頭痛發熱，身疼痛，骨節疼煩，惡風，惡寒而喘者，麻黃湯主之 … 龐曰：… 其人但憎寒，手足指末必微厥，久而復溫，掌心不厥，此傷寒無汗用麻黃證。

Like larger medical compendia, Pang's work was intended as a reference and was organized with that aim in mind. However, its focus on the *Treatise* and its inclusion of clinical minutiae rarely seen in compendia mark it as generically distinct from them. It is not a small compendium; it is a text devoted to promoting the *Treatise on Cold Damage* by making that text more accessible to non-specialists.

Zhu Gong

In the preface of his *Nanyang Book for Saving Lives*, Zhu explains his purpose in composing a text on the *Treatise*:

> It is difficult for ordinary people to understand the use of Yiyin's decoctions and Zhongjing's channels and network vessels. The literati, moreover, take it as an accomplishment of skill [as opposed to learning] and lay it aside, disdaining to read it. Frequently, at the time of an emergency, their hands are tied, and they must simply die and return their allotment [of life]. Commoners who know [they should] read this book are also rare. Even if they wish to read it, they do not understand its meaning.[269]
> 持以伊尹湯液，仲景經絡，常人難曉，士大夫又以藝成而下，恥而不讀，往往倉卒之際，束手待盡，卒歸之於命而已。世人知讀此書亦鮮。縱欲讀之，又不曉其義。

Zhu finishes his preface by stating that the members of the literati elite will find his book "easy to understand and enjoyable to read 易曉而喜讀,"[270] thus preventing unnecessary suffering and death. Zhu's concern was that the difficulty of reading the *Treatise*, combined with the elite's disdain for medicine, would leave the *Treatise* a dead text whose potential for benefiting people was never realized. He hoped that by presenting the information in the *Treatise* in a more easily understandable form, he could convince the elite of the importance of this medical work.

[269] *Nanyang huoren shu*, author's preface, in Zhu Gong, *Huoren shu*, 19.
[270] Ibid., 20.

To accomplish his purpose Zhu Gong adopted an innovative format. The *Nanyang Book for Saving Lives* is structured as one hundred questions and answers about cold damage. The questions range from lists of signs and symptoms for diagnosis, to issues relating to pulse diagnosis, to general inquires about the various types of cold damage. The answers vary from quite short to quite lengthy, and frequently include specific medicinal formulae to treat the condition being discussed. The formulae themselves are all listed in detail in the second half of the text.

Zhu also adapted elements of the *Treatise* to accord with contemporary standards. For example, throughout the *Treatise on Cold Damage*, "headache" is written "*toutong* 頭痛" but Zhu consistently uses the synonymous "*touteng* 頭疼"—which was more commonly used in the Song—even when paraphrasing the *Treatise*. The decision to "translate" the text of the *Treatise* in this way—for which Zhu was criticized by later authors—is highly significant.[271] Choosing to value ease of comprehension and familiarity over faithfulness to the original text demonstrates both that Zhu's primary concern was to make the *Treatise* more accessible to a wider audience and that he believed his audience might have difficulty with the more archaic aspects of the *Treatise*. This choice is all the more striking because the term "*toutong* 頭痛" was by no means an abstruse term. It seems likely that Zhu's audience would have understood it with little to no difficulty, but Zhu still chose to use the more commonplace term throughout his book. Later authors would make very different decisions.[272]

[271] For an example of Zhu Gong's use of *touteng* and a later commentator's criticism of it, see *Huoren shu*, *juan* 1, question 1, in ibid., 12.

[272] My point here is very similar to Pierce Salguero's recent arguments about the importance of analyzing the choice of terminology used by Buddhist translators even when they were not technically translating but were composing a text entirely in Chinese; see, C. Pierce Salguero, *Translating Buddhist Medicine in Medieval China* (Philadelphia: University of Pennsylvania Press, 2014), 4–11, 96–97.

Likewise, he altered the method of administration of the *Treatise*'s formulae. The majority of the *Treatise*'s formulae were designed to be prepared as decoctions made from whole or coarsely ground medicinals. By Zhu's time, however, most formulae were prepared in the form known as a "boiled powder (*zhusan* 煮散)." In this preparation, the medicinals are finely ground and boiled briefly before the decoction and the powdered medicinals are drunk together. Boiled powders required a far smaller quantity of medicinals than a straightforward decoction, and they may have become widespread in the Song as a result of a sharp increase in medicinals' prices. Zhu altered the dosages and preparation instructions of the *Treatise*'s formulae to make them boiled powders, bringing their preparation and administration more into line with contemporary expectations.

Finally, like Han Zhihe and Pang Anshi before him, Zhu showed an interest in supplementing gaps he perceived in the formulae found in the *Treatise on Cold Damage*. He provided descriptions of and formulae for a variety of warm diseases and other illnesses whose treatment is not described in the *Treatise*.

Popularizing the Treatise

The second generation of Northern Song cold damage authors strove to make the *Treatise on Cold Damage* more widely known and accepted. As Zhu Gong noted, the *Treatise* was difficult to read, so the members of this generation produced texts that presented the information in the *Treatise* in a simpler form. They structured their texts for easy reference, included greater clinical detail than normally seen in medical handbooks, used contemporary language to explain the *Treatise*, adapted its formulae to meet Song expectations, and supplemented material on

forms of cold damage like warm disease and seasonal *qi*, which were pressing current concerns of the Northern Song elite.

The effort to popularize the *Treatise* and the form that effort took were driven by the concerns and needs of elite non-physicians, and not by any perceived gap between the ideas of the *Treatise* and contemporary medicine. We have no way of knowing the reception of these texts among common physicians, but the prefaces of the texts discussed above make it clear that the literati-elite was their intended audience. The structure and contents of these texts further indicate that their authors expected that most of their readership were not practicing physicians. The *Treatise on Cold Damage* was published and canonized by literati men wielding the machinery of the Song government, and it was popularized by another group of literati men writing as private individuals. From its inception, the ascendency of the *Treatise* was caused by and served the purposes of members of the elite social stratum.

The Third Generation (ca. 1120-1150): Explication

The third generation of Northern Song cold damage authors continued the didactic approach of the second generation but wrote for a different audience. The texts produced by the third generation do not attempt to simplify the presentation of the *Treatise*'s ideas and formulae, nor are they structured as medical reference works. Rather than popularization and simplification, this generation of authors focused on explication of the *Treatise on Cold Damage* in all its complexity. Their intended audience was not lay-people looking for handy medical advice, but rather people who were actively practicing medicine—whether as an occupation or a benevolent avocation. They assumed a great deal of medical knowledge on the part of their readers and designed their texts to provide guidance on how to apply the ideas of the *Treatise* in

clinical practice. The third generation of Northern Song cold damage authors were physicians writing for physicians.

I have identified only two authors in this generation: Xu Shuwei and Cheng Wuji. As I have mentioned, their books were published, and most likely written, in the early Southern Song and Jin, but they were born, educated, and lived most of their lives under the Northern Song. Xu was indisputably a member of the elite, though his parents both died while he was young and he is said to have been poor. He ultimately earned fifth place in the civil service exam in 1132 at the age of 52—a feat that earned him the moniker "Literati Learning Xu (Xu Xueshi 許學士)" and a post in the imperial Hanlin academy. Cheng's background is far less clear. His family is known to have practiced medicine as an occupation, but it is striking that all discussions of his background say specifically that he came from a family of "scholar-physicians (*ruyi* 儒醫)," employing the new term for learned physicians that had come into use several decades earlier.[273] The fact that his biographers felt obliged to note that his family were scholar-physicians—no authors refer to Xu Shuwei by this term—suggests that Cheng Wuji's family were not in fact members of the literati-elite. This inference is supported by the fact that there is no evidence of Cheng sitting for the imperial exams. It is possible that Cheng, like the Sun brothers in the Bureau for Editing Medical Texts, was a member of a physician family that had successfully moved into the lower ranks of the elite, but it is also possible that Cheng Wuji himself was the first of his family to gain acceptance among the literati elite. The ambiguity of his status motivated his biographers to praise him as a scholar-physician, while Xu Shuwei, whose literati status was beyond question, needed no such defense. Regardless, Cheng's writing reveals a well-

[273] The earliest description of Cheng's family as scholar-physicians is found in Yan Qizhi's (嚴器之, fl. mid 12th c.) 1142 preface to Cheng's *Illuminating the Principles of Cold Damage* (*Shanghan mingli lun* 傷寒明理論, 1142), see Cheng Wuji, *Shanghan mingli lun*, ed. Qian Chaochen and Huang Zuozhen (Beijing: Xueyuan Chubanshe, 2009), 5.

educated man with a deep knowledge of the texts of newly formed medical canon. Both Xu and Cheng are known to have practiced medicine. Cheng Wuji practiced medicine as an occupation. It is never explicitly stated that Xu Shuwei accepted payment for his medical services, but he is praised as a literatus who practices medicine, and may well have done so, particularly before his exam success.

Xu Shuwei

Xu Shuwei was the most prolific of all writers on cold damage in the Song. Nine texts are attributed to him, of which at least six are devoted to cold damage. Of the five texts that are still extant, three of them are devoted to cold damage (see Table 4-2). Taken together, these three texts are not among the most specialized and innovative medical texts from this period. More than any other Northern Song writer, Xu's corpus shows clearly his desire to educate people actually practicing medicine.

Songs on One Hundred Patterns of Cold Damage (*Shanghan baizheng ge* 傷寒百證歌, mid-12th c.) is a collection of mnemonic verses describing commonly seen patterns in cold damage illness and their treatment. The verses are rhymed to aid memorization, and commentary, scattered through the verses, clarifies points of potential confusion. While the text provides an admirable overview of the *Treatise on Cold Damage*, it is neither structured for easy reference nor does it attempt to simplify the complexity of the *Treatise*. The rhymed verses are clearly intended for the study of medical practice, not bedside reference, and the commentary not only explains difficult points but also embeds larger and more complex meanings in the pithy text of the verses. These larger meanings include the original lines of the *Treatise* which were abridged

in the verses, quotes from the *Inner Classic*, and references to how other physicians—most frequently Zhu Gong—treated a particular pattern.[274]

Title	**Extant?**
One Hundred Verses on Cold Damage (*Shanghan baizheng ge* 傷寒百證哥)	yes
Expounding the Subtleties of Cold Damage (*Shanghan fawei lun* 傷寒發微論)	yes
Ninety Discourses on Cold Damage (*Shanghan jiushi lun* 傷寒九十論)	yes
Efficacious Formulae for Universal Aid (*Puji benshifang* 普濟本事方)	yes
Zhongjing's Thirty-Six Pulse-Methods (*Zhongjing sanshiliu mafia* 仲景三十六脈法)	no
Addendum to the Treatise on Cold Damage (*Yi Shanghan lun* 翼傷寒論)	no*
Differentiating Categories (*Bianlei* 辨類)	no
Continuation of Efficacious Formulae (*Benshi fang jixu* 本事方繼續)	no**

Table 4-2: Texts Attributed to Xu Shuwei
* Many scholars suspect this is a variant name for *Shanghan fawei lun*.
** This text is first attested in 1924. Most scholars, including myself, doubt its authenticity.

[274] E.g., *juan* 1, *zheng* 4 and 5, and *juan* 2, *zheng* 27, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 19–21, 36.

If *One Hundred Patterns* was Xu Shuwei's most explicitly pedagogical work, *Expounding the Subtleties of Cold Damage* (*Shanghan fawei lun* 傷寒發微論, mid-12th c.) was his most exegetical. The two sections of this short text are composed of brief explanations of particular problems in cold damage studies. Among the problems considered are which variety of herbaceous peony should be used in Cinnamon Twig Decoction, how to reconcile conflicting statements about sweating in lesser yin disease and Xu's objection to one of the comments on the *Treatise* by the Bureau's editors.[275] The text makes no effort to organize these topics in a logical order or to present a comprehensive overview of cold damage. Only a reader already familiar with the *Treatise on Cold Damage* could follow all of the arguments or even understand why the arguments were necessary in the first place. Xu clearly felt that there was not only a need for explication of the *Treatise*'s more subtle points; but also an audience possessing the necessary interest and knowledge to follow it.

Xu's most innovative text was *Ninety Discourses on Cold Damage* (*Shanghan jiushi lun* 傷寒九十論, mid-12th c.). Comprising ninety of Xu's case records with discussion, the text is the earliest Chinese example of a book devoted exclusively to medical case records. The textual history of this book is somewhat obscure. The earliest reference to this title is found in a bibliography dating to 1820, leading some scholars to conclude that it was a lineage text passed down among Xu's descendants and not intended for public consumption.[276] However, several points argue against this interpretation. First, in 1238, Chen Zhensun (陳振孫, ca. 1183-1262) recorded the existence of a book by Xu Shuwei titled *Eighty-One Essays on Treatment Methods*

[275] *Juan shang*, *lun Guizhi tang yong chishao baishaoyao butong*, *juan xia*, *lun yin bude you han* & *lun Lin Yi yi Baihu tang zheng you chahu*, in ibid., 121–122, 130–131.
[276] Charlotte Furth, "Producing Medical Knowledge through Cases: History, Evidence, and Action," in *Thinking With Cases: Specialist Knowledge in Chinese Cultural History*, ed. Judith T. Zeitlin, Ping-chen Hsiung, and Charlotte Furth, vol. 1 (University of Hawaii Press, 2007), 130.

for Cold Damage (*Shanghan zhifa bashiyi pian* 傷寒治法八十一篇), but noted that he had not seen it.[277] Although the titles are not identical, the similarity of the content they describe is striking. It is possible that the *Eighty-One Essays* and *Ninety Discourses* are the same text. The discrepancy in the number of sections mentioned in the title may reflect later additions to the text or an error on the part of Chen Zhensun—who lacked a copy of the text to verify his information. Second, many of the cases included in the *Ninety Discourses* also appear in one of Xu's other books, *Efficacious Formulae for Universal Aid* (*Puji benshifang* 普濟本事方). The printing and circulation of this book is well-attested, making it unlikely that its contents could be seen as a private lineage document. Finally, and most convincingly, the *Ninety Discourses* is a clearly polemical document. Xu is arguing for the literati-physician approach to medicine and—at times with great vitriol—against common physicians. Such a strong polemical stance suggests the text was intended to persuade a broad audience, not merely members of Xu's own family.

Ninety Discourses on Cold Damage comprises ninety case records, each designed to illustrate a particular pattern of cold damage illness. Each is headed by a title indicating the pattern of cold damage being described and followed by a "discussion" (*lun* 論) explaining the therapeutic choices made, justifying them with quotes from the *Treatise* and other important medical texts, or using the case to further Xu's attack on common physicians. The cases are in no particular order and are by no means a complete sample of the various patterns seen in cold damage. The polemical aspect of the text is clear and would have been easily understood by any elite reader in Xu's time, but the arguments recorded in the discussions are not merely polemical: there are also clinical points that would have been both more difficult for non-specialist readers

[277] *Zhizhai's Record of Books with Explication* (*Zhizhai shulu jieti* 直齋書錄解題, 1238), quoted in Okanishi Tameto, *Sō izen iseki kō*, 394–396.

to follow and less useful to them in treating family illnesses.[278] Moreover, the text makes no attempt to introduce readers to its topic. It begins, so to speak, *in media res* and assumes its readers understand the technical language and concepts derived from the *Treatise on Cold Damage*. Once again, Xu is not writing a handbook for laypeople to consult when ill. He is writing a pedagogical text for people who practice medicine seriously.

Taken as a whole, while Xu's writings on cold damage continue to reflect the reformist zeal of authors like Zhu Gong and the desire to extirpate common physicians seen among literati medical authors broadly, they also display a desire to educate people who are actively treating patients and have already taken the time to learn the basics of the *Treatise on Cold Damage*. If authors of the second generation wrote introductory handbooks for laypeople unfamiliar with the *Treatise*, Xu was writing advanced textbooks for serious students of cold damage and its treatment.

Cheng Wuji

Cheng Wuji is the most famous of all the Song cold damage authors. Although his literary output was far smaller than Xu Shuwei's, his influence was far greater. Cheng wrote two texts on the *Treatise*: the *Annotated Treatise on Cold Damage* and *Elucidating the Principles of Cold Damage* (*Shanghan mingli lun* 傷寒明理論, 1142). The final section of the latter book, the *Treatise on Medicinal Formulae* (*Yaofang lun* 藥方論), is often treated as a separate text.

The *Annotated Treatise on Cold Damage* was not merely the first full commentary on the *Treatise*; it was also the first commentary written on a medical text outside of the *Inner Classic*

[278] E.g., Xu's comments on the tretment of warm malaria (*wennue* 溫瘧) that are couched in terms of the medical principles involved and not in temrs of specific treatments, see pattern 65, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 191–192.

corpus. In it Cheng draws on a combination of other texts and general medical doctrine to explain the *Treatise on Cold Damage* line by line. The most frequent texts cited belong to the *Inner Classic* corpus, but other texts are also invoked, particularly those published by the Bureau for Editing Medical Texts. Cheng's commentaries are detailed and assume a strong command of medical ideas and literature. The text is not structured to provide easy reference; neither does it include any direct medical advice. Although the *Annotated Treatise* was no doubt useful for first-time students of the *Treatise on Cold Damage*—it was the most commonly used edition of the *Treatise* from the late Song up to the republication of the imperial edition by Zhao Kaimei in 1599—it was clearly intended for serious students.

Elucidating the Principles of Cold Damage is a far smaller text. It is divided into two distinct sections: the *Treatise on Elucidating Principles* (*Mingli lun* 明理論) and the *Treatise on Medicinal Formulae*. The *Treatise on Elucidating Principles* examines fifty common signs and symptoms of cold damage as described in the *Treatise*. For each one it gives a definition, differentiation of various ways the sign may manifest, an explanation of its etiology, and advice on treatment. While this information could be used as a home medical reference, Cheng went into far more detail than authors of the previous generation, particularly in his explanations of how the various signs and symptoms arise—information of little relevance for non-specialists. The *Treatise on Medicinal Formulae* follows a similar pattern, but instead of discussing signs and symptoms explains the reasoning behind the construction of twenty formulae found in the *Treatise on Cold Damage*. For each formula, Cheng discussed the ingredients and how the combination of their flavors, warmth or coolness, and actions contributes to the overall function of the formula. In his preface, Cheng stated that his purpose in explaining these formulae was to make clear the method composing formulae:

> From the 112 formulae [included in the *Treatise on Cold Damage*], I have chosen 20 formulae that are commonly used by doctors, in order to explain them in terms of the method of constructing formulae. May it manifest in a small way the intention of the ancients!
> 一百一十二方之內, 擇其醫門常用者方二十首, 因以方制之法明之, 庶幾少發古人之用心焉。

The explanation of these twenty formulae was not intended as a handbook for home remedies, but rather as an example of how to understand Zhang Ji's formulae. Like Xu Shuwei, Cheng was not writing for laypeople, he was writing for would-be experts.

Northern Song Medical Authors and the *Treatise on Cold Damage*

The progression seen in the three generations reveals changing factors in their priorities and social context. In part it reflects the growing awareness of the *Treatise* among literati who were not particularly interested in medicine. The first generation focused on getting the word out: "Here's a really useful medical text." While authors of the second generation could assume their readers were aware of the *Treatise*, they still felt the need to explain even the most basic aspects of the *Treatise*'s ideas. By the third generation, however, Xu Shuwei and Cheng Wuji no longer felt this need, and wrote for an audience that was already familiar with the *Treatise*, its ideas, and even its medicinal formulae. The changing nature of their audience affected not only their writing, but also their approach to patients. In the following section, I compare case histories from the second and third generations to show how widespread awareness of the medical canon in general, and of the *Treatise on Cold Damage* in particular, changed clinical interactions to the benefit of literati physicians.

SECTION TWO: The *Treatise* and Clinical Argument in the Northern Song

Medical case records of various sorts are found scattered in other genres of writing from the earliest times in China. The records on oracle bones of the ritual treatments of various maladies during the Shang dynasty (ca. 1600-1046) are the earliest records in China of the treatment of illness. The case records of Chunyu Yi (淳于意 b. 216 or 206 BCE), preserved in *Records of the Historian* (*Shiji* 史記) are another, more detailed, early example. These early examples of healthcare records, however, were preserved for purposes largely unrelated to their medical content. When case records did appear in early medical texts, such as the works of Sun Simiao, they were small in number and scattered throughout the text like anecdotes used to illustrate a particular point the author made.

As a genre, texts devoted completely or largely to medical case records would begin to flourish in the Ming dynasty and would come to be known as, "medical cases (*yi'an* 醫案)".[279] A lesser known forerunner of the Ming medical cases—which were not, however, called *yi'an*—was developed by Song medical authors, exemplified by the two whose work is presented here: Qian Yi and Xu Shuwei

Xu's biography and writings were discussed above. The cases below are taken from the text *Ninety Discourses on Cold Damage*. A variant of the first case also appears in Xu's formulary, *Efficacious Formulae for Universal Aid*.[280] The cases in *Ninety Discourses* share a similar structure. Following the title, each case begins with a description of the patient, but the level of detail varies from highly specific—name and government position—to extremely vague—"a person from my neighborhood 鄉人." This is followed by a narrative describing Xu's involvement in the case and its outcome. The case narratives vary greatly in length and detail,

[279] Furth, "Producing Medical Knowledge through Cases: History, Evidence, and Action," 225.
[280] *Puji benshi fang*, *juan* 8, *Da chaihu tang*, in Xu Shuwei, *Xu Shuwei yixue quanshu*, 143.

but frequently include a high level of social detail not strictly relevant to the medical problem being described—such as the patient's family secretly bringing Xu in for a second opinion.[281]

The background and status of Qian Yi's family are more difficult to reconstruct than Xu's. They claimed descent from an illustrious Tang dynasty clan and were literate; however, the fact that Qian's uncle, who raised him, was a practicing physician suggests that Qian's family may not have been part of the literati elite. The failure of his biographers to mention Qian or any of his relatives sitting for the civil service examination provides further evidence that Qian's family probably belonged to the *lumpenliterati*. Whether they were, as they clearly wished to be perceived, an old elite family on hard times or one of the many non-elite families that were rising into the elite during the Song, is unclear. Qian Yi himself would eventually rise to the status of physician to the imperial household, a high position, but outside of the prestigious hierarchy of civil officials.

Straightforward Guidance on the Essential Patterns of Children (*Xiao'er yaozheng zhijue* 小兒要證直訣), from which the case below is taken, is the only one of Qian's four known texts that is now extant. It was published posthumously in 1119 by an admirer of Qian's medical work, Yan Xiaozhong (閻孝忠, fl. early 12th c.).[282] The text is composed of a combination of materials Yan obtained from Qian himself and others which he obtained from families whose members, like Yan himself, had been Qian's patients. Even this text was eventually lost and reconstructed by Qing dynasty scholars on the basis of quotations preserved in other sources. It is composed of three sections: the first explains Qian's theories about diagnosis and treatment of children, the

[281] Pattern 61, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 189.

[282] All aspects of Yan's life are unclear. Even his name is often reported in later sources as Yan Jizhong 閻季忠. Some scholars identify him with the author of a postface to Xu Shuwei's *Efficacious Formulae of Universal Aid* who also was also named Xiaozhong, but that postface is dated 1185 and in the only edition which provides a surname, attributed to a Zhang Xiaozhong 張孝忠, rendering it unlikely that the two individuals are identical, see Okanishi Tameto, *Sō izen iseki kō*, 722.

second is a collection of 23 cases recording their treatment, and the final section is a list of the medicinal formulae mentioned in the first section. The section containing the case records is titled, "Records of 23 Patterns of Illnesses that were Treated (*Ji chang suozhi bing ershisan zheng* 記嘗所治病二十三證)." The individual case records are not titled, but each begins with an identification of the patient in a fairly standard format. As seen in the cases translated below, Qian stresses the identity and social status of the child patient's representative, usually a father or grandfather. The cases themselves vary a great deal in structure and content.

Box 4-1: Two of Qian Yi's Case Records

From *Straightforward Guidance on the Essential Patterns in Children*:

Li, the fiscal administrator of Capital-East, had an eight year-old grandson who was suffering from cough, fullness of the chest, and shortness of breath. A physician said that there was heat in the lung channel and used Bamboo Leaf Decoction and Bovine Bezoar Paste. Qian [Yi] said, "What is this treatment?" The physician said, "Abating heat and abating drool." Qian [Yi] said, "How is it caused by heat?" [The physician] said, "The lung channel is hot and generates coughing. If prolonged coughing is not eliminated, it generates drool." Qian [Yi] said, "[This is a case] caused by [the patient's] preexisting vacuity and [the invasion of] wind-cold. What heat is there? If you took it to be lung heat, why did you not treat his lungs but on the contrary regulated his heart? For Bamboo Leaf Decoction and Bovine Bezoar Paste are medicinals for treating the heart!" The physician looked abashed. Qian [Yi] treated [the patient] and he recovered.

***

The grandson of Mr. Zhang from the Eastern Capital, 9 years old, suffered from lung heat. Other physicians had used rhinoceros horn, pearl, borneol,[283] musk, and raw bovine bezoar. After one month, he had not recovered. His pattern [included] coughing and wheezing, oppression and derangement,[284] constant drinking of water, and a complete inability to eat. Mr. Qian used Quisqualis Pill (*Shijunzi wan* 使君子湯) and Boost the Yellow Decoction (*Yihuang tang* 益黃湯). Zhang said, "There is already heat. Why are you using warm medicinals? Other physicians used cool medicinals to attack [the illness]. After one month, there is still no result." Qian [Yi] said, "[If one takes] cool medicinals for a long time, then there will be cold and an inability to eat. When a child is vacuous and cannot eat, one should supplement the spleen. Afterwards, when eating and drinking are normal, then one drains the lung channel, and [the patient] will certainly recover from the illness." [The grandson] took medicinals that supplement the spleen for two days and then desired to eat and drink. Qian [Yi] used Drain the White Decoction (*Xiebai tang* 瀉白湯) to drain his lungs, and afterwards he recovered. Zhang said, "Why did he not become vacuous [when you used cold medicinals to drain his lungs]?" Qian [Yi] said, "I first replenished his spleen and afterwards drained his lungs; therefore, he did not become vacuous."[285]

[283] The text abbreviates the name of these medicinals, in this case it says only "dragon (*long* 龍)," which could indicate a number medicinals whose names include this character. I have chosen the translation "borneol (*longnao* 龍腦)," because borneol, like all of the other medicinals in this list, was held to act primarily on the heart and is found in several formulae included in this text.

[284] The precise meaning of this symptom is unclear, but, judging from the cooling medicinals used by previous physicians, it may have indicated a combination of a sense of tightness in the chest and deranged behavior.

[285] *Xiao'er yaozheng zhijue*, *juan zhong*, in Qian Yi and Liu Fang, *Qian Yi, Liu Fang yixue quanshu*, 25.

Box 4-2: Two of Xu Shuwei's Case Records

From *Ninety Discourses on Cold Damage*:

14. An Urgently Purging Yang-brightness Pattern

A strong boy in the village contracted cold damage. His body was hot and his eyes hurt. His nose was dry and he could not sleep. He was constipated, and all positions of his pulse were large. He had already [been ill] for a number of days. The previous evening he began to sweat profusely. I said, "Quickly use Major Bupleurum Decoction (*Da chaihu tang* 大柴胡湯) to purge him." The assembled doctors were shocked, saying, "In a Yang-brightness disease with spontaneous sweating, his body fluids are already exhausted. Why would you use Major Bupleurum Decoction?" I said, "This is one of Zhongjing's miraculous points which has not been transmitted. How would you gentlemen know about it?" I argued forcefully. Finally, they used Major Bupleurum Decoction. After taking two doses, [the boy] recovered.

Discussion: In discussing Yang-brightness [disease] Zhongjing [in the *Treatise on Cold Damage*] says, "In Yang-brightness disease, in the case of those with profuse sweating, urgently purge them." [Yet] people frequently say that when there is already spontaneous sweating, if you further purge [the patient], won't this make both the exterior and the interior vacuous? In discussing Lesser Yin [disease, Zhongjing] says, "In Lesser Yin illness that is one to two days old, in those with [signs and symptoms of] dryness, urgently purge them." [Yet] people frequently say that if [an illness] develops in the yin, it has only been a few days, and you only see dryness, then if you further purge [the patient], how can their [pathological] yin *qi* not become even stronger? The common people seldom read. I regard [this situation] otherwise. Zhongjing calling this urgently purging [a patient], is similar to [the situations in which he says one] should urgently rescue the exterior or should urgently rescue the interior. He terms all of these emergencies. There are three places [in the *Treatise on Cold Damage*] where [Zhongjing calls for] urgently purging [the patient]. From these, one can realize that when there is profuse sweating but it has not reached the point of drying out the body fluids, it is expedient to quickly purge [the patient]. This will avoid the necessity of using a honey suppository. For when one uses a honey suppository, it is already a case of waiting too late to purge. It is simply that one has no other alternative. If you understand this clearly in your heart, what danger is there?

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23. A Greater Yin Pattern

Cao Sheng initially suffered from cold damage. After six or seven days, his abdomen was full and he was vomiting. He couldn't get food down. He had a fever, and his hands and feet were hot. His abdomen ached, and he was nauseated. The physicians called it excessive yang. [His family] still had misgivings about his hands and feet being hot, fearing that heat had amassed in the stomach causing vomiting and nausea, or, seeing the vomiting and diarrhea, took it to be sudden turmoil [disease]. [They] asked me to diagnose [him]. His pulse was fine and sunken. I evaluated him saying, "This is a greater yin pattern. In greater yin disease, there is abdominal fullness and vomiting, inability to get food down, severe spontaneous diarrhea, and occasional spontaneous pain of the abdomen." I used Regulate the Center Pill (*Tiaozhong wan* 調中丸) to stop [the illness]. I used five or six pills the size of an egg yolk per day. Then I used Five Accumulations Powder. After several days [Cao] recovered.

Discussion: I see common physicians diagnosing cold damage and only labeling them yin patterns and yang patterns. Zhongjing has three yin and three yang [diseases]. Even in one pattern, there are also leanings toward exuberance or insufficiency. What is necessary is to clearly differentiate in which channel [the illness is present]. The formula must correspond to the signs, and there are standards for the use of medicinals. Moreover, in the case of greater yin, lesser yin, and reverting yin, they have [situations which demand] either supplementing or draining. How can [they] stop at naming [the disease] a yin pattern![286]

Medical Learning and Technologies of Persuasion

The most striking similarity in Qian and Xu's case records is the attention given to acts of persuasion. In the first case, Qian Yi is presented as debating with and ultimately shaming the physician who is his opponent. In the second case, Qian must persuade a doubting grandfather that his treatment, which differs from that of previous doctors, is correct. In the third case, Xu Shuwei is positively belligerent in the dealing with the other physicians present, and states forthrightly that he "argued forcefully," to win the argument over how the patient should be treated. In the final case, Xu is summoned because the family doubts the diagnoses of other physicians, and he proceeds to convince them to follow his advice. I refer to these debates as "clinical arguments." As the second and fourth cases demonstrate, the families of the patients were the final arbiters of what treatment would be used, and clinical arguments among the physicians present were ultimately aimed at gaining the family's agreement.

[286] Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 158–159, 164–165.

As any modern clinician can tell us, convincing a patient and a family to cooperate with a proposed treatment remains an extraordinarily important part of clinical practice in the 21st century. In 11th to 12th century China, however, winning the support of patients and their families was both more difficult and more important. The healing marketplace of pre-modern China was not only far more diverse than that of most modern societies, it was also unregulated. No one group of healers could dominate the marketplace by legal fiat.[287] High-status physicians such as Qian Yi and Xu Shuwei had to compete on a more or less level playing field with ritual healers of all kinds, popular medical customs, devotional forms of healing, and, of course, common physicians. All of these methods of healing could claim legitimacy and were widely accepted as efficacious. The arts of persuasion were therefore essential to clinical success.

Doubtless, all of these healers had methods to secure patients' trust. When these methods were improvised on the spot to deal with specific situations, I call them tactics. When these tactics become more routinized and established, I refer to them as technologies.[288] The division between tactics and technologies is not rigid, and they are best thought of as two poles of a continuum. In the case records presented here, we see Qian Yi and Xu Shuwei drawing on a variety of tactics and technologies. The differences in the tactics and technologies they use reflect the changes that had occurred in the highest echelons of text-based medicine between Qian's and Xu's generations.

Case Records and the Northern Song Healing Marketplace

Before examining the details of the case records, a word should be said about the publication of such records, in general, and the presentation of the clinical argument, in

[287] See Cullen 1993 for an excellent discussion of this issue.
[288] I am drawing on a distinction developed in Biagioli 1993 and 2006.

particular, as literary devices. The authoring and publication of case records is itself a technology of persuasion, but one aimed at a reader rather than a patient and his family. If the tactics and technologies which Qian and Xu are shown using serve the purpose of winning the clinical argument, what purpose does this literary technology of persuasion—the publication of case records—serve?

The answer is to be found in the detailed descriptions of clinical arguments themselves, which are not only the most notable similarity between Qian and Xu's case records but also a feature far less prominent in the later case record literature. Why were Northern Song medical authors so concerned with the process of clinical argumentation? If the healing marketplace of imperial China was always characterized by diversity and competition, that of the Northern Song was even more fraught than had been customary. As seen in Chapter 3, the widespread skepticism on the part of the elite regarding common physicians led to debates over the form medicine should take, who was qualified to be a physician, and what sources of authority could guarantee medical knowledge and practice. In such an environment, physicians had to argue not only for the correctness of the treatment they were proposing, but also for the correctness of their whole approach to healing. This polemic is clear in the discussions Xu appended to his case records, and although Qian's cases reveal a less coherent agenda, they still betray a deep anxiety over the validity of knowledge—whether in terms of accurate diagnosis or correct understanding of medicinals. Northern Song case records were not merely arguments about the superiority of a particular doctor's skills, but also arguments about what medicine should be, how it should be learned, and who should practice it. Publishing them was one means of persuading a broader audience to accept the physician's point of view.

Tactics and Technologies in Clinical Argument

Although Qian and Xu share concerns about the validity of medical knowledge and treatment, their responses to these anxieties are by no means identical. Xu's arguments are more programmatic and his polemic more overt. He clearly identifies both his opponents—common physicians—and the sources of medical knowledge he deems reliable—the newly canonized medical classics. Qian Yi, on the other hand, never identifies a coherent group against whom he is arguing. He is implicitly disputing with any and all physicians who hold differing views, but there is no sense in his case records that these physicians constitute a social group. Likewise, he draws upon more diverse sources of authority than Xu, eschewing Xu's almost exclusive preference for the medical classics as a source of authority.

Xu uses the medical classics not only to persuade his readers, but also to argue down his physician opponents. In his first case, "An Urgently Purging Yang-brightness Pattern," the only argument he uses against his opponents is an accusation that they are ignorant of the text of the *Treatise on Cold Damage*: "This is one of Zhongjing's miraculous points which has not been transmitted. How would you gentlemen know about it?" In his second case, "A Greater Yin Pattern," Xu quotes directly from the *Treatise on Cold Damage* to justify his diagnosis. The sentence "In greater yin disease, there is abdominal fullness and vomiting, inability to get food down, severe spontaneous diarrhea, and occasional spontaneous pain of the abdomen" is the opening line of the *Treatise's* chapter on greater yin disease.[289] In his discussion of this case, although Xu does not quote from the medical classics, he relies completely upon the content of the *Treatise* for his argument.

These two case records are fairly representative of Xu Shuwei's cases. Citation of medical classics is his primary, and often only, form of argument. Notably, Xu takes the

[289] *Juan* 6, *pian* 10, line 273, in Zhang Ji, *Zhongjing quanshu*, 441.

existence of the medical canon as a given for which he does not have to argue. By Xu's time, the canon was sufficiently established that its contents did not require justification, even if the necessity of relying upon them did. We may therefore say that, in Xu's work, referring to the medical classics has become routinized to the point that it may be considered a technology of persuasion rather than a tactic deployed in response to a particular situation.

In contrast to this, Qian Yi's cases, as reflected in the two translated here, never cite the medical classics directly and only rarely refer to them indirectly. It is not that Qian was unfamiliar with these texts. He wrote an entire book on the *Treatise*, *Guidance to the Subtle in Cold Damage* (*Shanghan zhiwei lun* 傷寒指微論, now lost).[290] He simply chooses not to invoke them. In the first of his cases translated here, Qian baldly contradicts another physician's diagnosis and makes no effort to justify his opposing diagnosis. Instead, he attacks his opponent's knowledge of medicine by observing that the medicinal formulae the physician gave the patient do not agree with the diagnosis the physician himself put forward. In the second case record, when questioned by the patient's grandfather, Qian's reply appeals to a basic understanding of medical principles that he seems to assume are shared by at least the literate elite. Qian's statement that, '[If one takes] cool medicinals for a long time, then there will be cold and an inability to eat,' certainly could be justified by reference to several of the medical classics, but Qian does not bother to do so.

Furthermore, unlike Xu Shuwei, who relies on classical authority almost to the exclusion of all other tactics and technologies, Qian Yi draws upon a far wider variety of arguments to support his opinions: the properties of medicinals, the actions of formulae, the functions of organs, and the differences between adults and children are all invoked without citing textual

[290] Also known as *Guidance to the Perplexed on Cold Damage* (*Shanghan zhimi lun* 傷寒指迷論).

authority to support Qian's claims. Qian Yi uses these varied arguments as tactics to respond to specific situations and none of them is adequately routinized to be called a technology.

Qian Yi was born 45 years before Xu Shuwei, and died 37 years before him. Little more than two generations separated them, but their methods of clinical argumentation and self-justification differed in fundamental ways. Some of the differences may be idiosyncratic, but they also reflect the profound transformations that were occurring in textually based medicine over the course of the two physicians' lives. The formation of the medical canon only began in 1065, when the Bureau for Editing Medical Texts initiated the series of publications that would establish the medical classics. By this time Qian was already 30 years old and an established doctor. Moreover, the initial publications of the Bureau were printed in large, expensive, difficult-to-carry editions and appear to have had little circulation. Only in 1088, when the government printed small-character editions of the texts, did circulation increase.[291] Qian was therefore probably in his late fifties before the medical classics were widely available. Given his status as an imperial physician, Qian no doubt could have obtained copies earlier, but the value of these texts for polemics and clinical argumentation depended on their circulating widely enough to become recognized authorities among educated non-physicians. Born in 1080, Xu, by contrast, would have come of age when the medical classics were both readily available and widely accepted. Xu therefore could routinize the citation of the medical classics as a technology of persuasion in a way that was not feasible for Qian.

[291] Private small-character editions seem to have been in circulation earlier, but the extent of their circulation is unclear.

The Superiority of Xu's Technology of Persuasion

Access to an established medical canon alone, however, cannot explain Xu Shuwei's choice to rely on that canon as the mainstay of his argumentation. Rather, Xu chose this technology of persuasion because of the advantages it offered him. It was not only more routinized than Qian Yi's tactics, but also more powerful.

Only the decision of the patient's family could definitively end the clinical argument. However, if a doctor could force his opponents to concede their own ignorance of any aspect of the case, he gained a significant advantage in the dispute. Moreover, if an opposing doctor could be shown ignorant of a text the patient's family accepted as authoritative, the clinical argument was all but won.

We see one such victory in the first Qian Yi case. Qian's final argument accuses his opponent of ignorance of the function of the medicinal formulae he had used: "[Qian Yi said,] 'If you took it to be lung heat, why did you not treat his lungs but on the contrary regulated his heart? For Bamboo Leaf Decoction and Bovine Bezoar Paste are medicinals for treating the heart!'" Following this broadside, we are told not only that Qian was able to treat the patient as he saw fit, but also that his opponent "looked abashed." While the uses of formulae were open to a certain degree of discussion, their basic functions were described in the many formularies that catalogued them and could also be deduced from the functions of their ingredients, as recorded in *materia medica* (*bencao* 本草) compilations. Both formularies and *materia medica* texts were long-established genres by Qian's time, with numerous representatives published by the Song government. In this case Qian's tactics resemble Xu's technology: he is drawing on established textual authorities that are difficult for his opponents to dispute, in order to prove their ignorance incontestably.

Xu's technology of citing the medical classics, however, had several advantages over Qian's appeal to formularies and *materia medica* literature. In the first place, formularies and *materia medica* texts were numerous and potentially conflicting and constituted an open set; more of them were always being produced. The medical classics, though by no means free from internal contradiction, were a much smaller selection of texts and, after their canonization, were a closed set. No new classic could be produced to question the authority of the others. More importantly, the classics could claim antiquity, exalted authors, imperial support, and a long history of valorization. These qualities—widely valued in Song culture—gave the medical classics greater weight in an argument and made it nearly impossible to reject their authority outright. Finally, if we accept Xu's characterization of common physicians as lacking knowledge of classical texts like the *Treatise on Cold Damage*, then his opponents were in a decidedly unfavorable position when arguing with him. Another, more educated physician might have been able to cite passages from the classics to support his point of view against Xu, but a physician who had not studied them would have no rejoinder. Knowledge of the medical classics was therefore a more effective means of demonstrating opposing physicians' ignorance and thereby winning the clinical argument.

In the highly contentious healing marketplace of the Northern Song, sustainable accusations of ignorance were one way of closing the potentially infinite regress of the clinical argument. Following the formation of a medical canon in the late 11th century, appeal to the medical classics became a standard, routinized form of medical argument. We may therefore call it an established technology of persuasion. In Qian Yi's cases, we see only momentary hints of this technology and its potential, but in Xu Shuwei's cases the argumentative and polemical potential of this approach is fully manifest.

Social Interventions and Medical Technologies

The formation of a medical canon as a basis for medicine strengthened the position of those physicians who embraced it vis-à-vis their opponents both in the context of clinical arguments and in the broader context of Chinese society and the Northern Song debates on medicine. However, while they may have been aware of this advantage, it was not the purpose for which proponents of this type of medicine chose to emphasize the medical classics. Their writings are unanimous in the view that the medical classics are the embodiment of correct medicine. In arguing for the centrality of these classics to medical practice, they saw themselves as restoring the effectiveness of medicine that had been lost due to neglect of the classics. In short, stressing the importance of the medical classics was all about improving the results of medical treatment. It was therefore both a technology of persuasion and a technology of practice.

This should not surprise us. The role played by evidence-based medicine (EBM) among modern biomedical healthcare providers closely parallels the role the medical classics played for Northern Song physicians like Qian and Xu. Like the medical classics, EBM serves roles in clinical decision-making, in persuading patients to comply with a treatment, and in justifying biomedicine within society at large. Furthermore, both phenomena emerged as reform movements within medicine that sought to bring medical practice into greater harmony with socially valued standards of knowledge production and evaluation. In the case of EBM, the physical sciences are the socially esteemed model of valid knowledge that doctors seek to emulate. In the case of literati-physician medicine, literary learning —with its ancient classics and textually rooted learning—was the paradigm physicians wished to embody.

As discussed in the previous chapter, there is an indissoluble link between trust and the production and validation of knowledge, but the economy of trust is inherently a social economy and the social element of knowledge is therefore irreducible. Any effort at reforming the production and verification of knowledge—whether in medicine or any other field—must therefore involve social interventions as well. The case records of Qian Yi and Xu Shuwei are remarkable precisely because of the social detail they provide. In so doing they give us an insight not only into the social realities of Northern Song medical practice, but also into the social components of all medical practice.

SECTION THREE: The *Treatise* and Literati Physicians in the Southern Song-Jin-Yuan

The Southern Song, Jin, and Yuan dynasties differed in important ways from the Northern Song. Although the examination system continued to be supported by both the Southern Song and Jin governments, the competition for exam success became more intense as the transformation of the literati from national bureaucratic elite to local gentry became a reality. Under the Yuan, a temporary halt to the civil service examinations combined with systematic government discrimination against southern Chinese—by this time long-established as the largest and most intellectually prolific segment of the elite—caused substantial changes in the careers elite men deemed acceptable for themselves.

Within literati-physician medicine, a new form of social organization emerged: the current. As discussed in the introduction of this chapter, currents were self-selected groups of physicians who shared allegiance to a particular founding figure and a set of texts, ideas, and practices. Currents stretched out across time and were usually conceived of as lineages of teachers and students, but belonging to a current did not mean you had studied with any of its

members. We have no means of knowing with certainty, but it is likely that most of a current's members learned its teachings through books alone.

Under the Jin and Yuan dynasties we can recognize two major currents of medical thought and practice: the Yishui current—which traced its teachings to Zhang Yuansu (張元素, fl. late 12th-early 13th c.)—and the Hejian current 河間派—centered on the ideas of Liu Wansu (劉完素, ca. 1120-1200). No currents are identifiable during the Southern Song; however, a cluster of medical authors surrounding the famous physician Chen Yan (陳言, ca. 1131-1189) was active in the Wenzhou region and enjoyed substantial popularity.[292] I refer to this group as the Yongjia cluster. Finally, during the Yuan dynasty, the Danxi current 丹溪派 formed around the teachings of Zhu Zhenheng (朱震亨, 1281-1358) and went on to dominate most of literati medicine in the early Ming Dynasty.

The soft borders and lack of organization within currents have led some scholars to dispute their historicity,[293] but a number of contemporary sources from this period indicate that these groups, and even rivalries between them, were very real. Some of our best information on this is found in the writings of Wang Haogu (王好古, ca. 1200-1265), a famous physician and member of the Yishui current:

[292] I describe these groups and their ideas in greater detail in Chapter 5. Liu Shijue describes the *Yongjia* cluster as the *Yongjia* current, but since there is no evidence of a sense of membership and no later texts claiming to present this groups ideas, I prefer to describe them as a cluster, see Liu Shijue, *Yongjia Yipai Yanjiu* (Beijing: Zhongyi Guji Chubanshe, 2000).

[293] E.g., Fabien Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine" (PhD Dissertation, Princeton University, 2010), 131–132. Simonis is correct, however, to refute the notion that these currents were "schools" of medical thought or practice. Their structure was far too loose to merit that name.

> Nowadays among those who discuss medicine, there are those who advocate [the Heijian current of] Mr. Liu, from Hejian and those who advocate [the Yishui current of] Mr. Zhang from Yizhou.[294]
> 今世之論醫，有主河間劉氏，有主易州張氏者。

Wang's implication that the medical world of his time was divided into two camps is strengthened by the evidence that famous physicians could draw large numbers of students to themselves. As one observer noted of Chen Yan, "… more than seventy young men followed the gentleman in his travels … 鄉之從先生游者七十餘子."[295] Further evidence of the contemporary influence of these currents is found in the sheer number of books that claim to propound their teachings and—even more tellingly—the number of their contemporaries who referred to them in their medical writings. While these currents were never rigid, fixed, or institutionalized, they were powerful forces shaping the medical practice of their time.

It is not entirely clear why currents began developing at this point in time, but a key factor seems to have been the increased competition among literati physicians. As the number of literati physicians increased, they were increasingly in competition with one another rather than with common physicians. The ability to claim affiliation with a famous physician was potentially very lucrative, a fact that may explain the large gifts of cash that came to be customary for the privilege of studying with a well-known physician.[296] The preface to one of Zhang Yuansu's books tells the story of how Liu Wansu, founder of the rival Hejian current, fell ill and attempted to treat himself using his own signature approach—cooling and draining medicinals. Since his condition worsened, Zhang Yuansu was called in to diagnose him. Zhang examined a reluctant Liu and explained that it was Liu's own methods that were at the root of his illness. After

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[294] *These Things are Difficult to Know* (*Cishi nanzhi* 此事難知, 1264), *juan xia*, *Xu xiansheng lun guanzhong liangkuan fuzheng*, in Wang Haogu, *Wang Haogu yixue quanshu*, ed. Sheng Zengxiu (Beijing: Zhongguo Zhongyiyao Chubanshe, 2004), 159.
[295] Lu Tan (盧檀, fl. late12th-early 13th c.), *Correcting Errors in Simple and Easy Formulae* (*Yijian fang jiumiu* 易簡方糾謬, date unclear), *juan* 1, *yangwei tang*, in Liu Shijue, *Yongjia Yipai Yanjiu*, 242.
[296] Leung, "Medical Learning from the Song to the Ming," 387–389.

receiving the treatment Zhang was famous for—warming and supplementing medicinals—Liu recovered. While it is unlikely that Zhang ever actually treated Liu, the story—which was written in the 13th century—reveals that even shortly after their lifetimes, the currents of Zhang and Liu were perceived as competitors with differing styles of practice.[297]

Another factor that may have increased the appeal of currents was the appearance, within Learning of the Way Confucianism, of master-disciple relationships and lineages. Zhu Zhenheng was a fourth generation disciple of Zhu Xi (朱熹, 1030-1100), the famous systematizer of the Learning of the Way. The title of his most famous text, *Insightful Views Produced by Investigating Things and Extending Knowledge* (*Gezhi yulun* 格致餘論, 1357), reveals the influence of the Learning of the Way by its invocation of the important technical term, "investigating things and extending knowledge (*gezhi* 格致)." Once the Yuan court made Zhu Xi's version of the Learning of the Way the curriculum for the civil service examinations, the prestige of their precedent must have become great indeed.[298]

Regardless of what led to their emergence, one characteristic shared by all these currents was the high esteem in which they held the *Treatise on Cold Damage*. Liu Wansu wrote at least one book on the *Treatise*, and several others claimed to present his teachings on it (see Table 5-1 in Chapter 5). Li Gao (李杲, 1182-1251), Zhang Yuansu's most famous student and the true center of the Yishui current, was famous for his knowledge of cold damage and composed a text

[297] *Awakening to the Origins of Medicine* (*Yixue qiyuan* 醫學啟源, date unclear), preface, in Zhang Yuansu, *Yixue qiyuan*, ed. Ren Yingqiu (Beijing: Renmin Weisheng Chubanshe, 1978), 1–2.
[298] Charlotte Furth, "The Physician as Philosopher of the Way: Zhu Zhenheng (1282-1358)," *Harvard Journal of Asiatic Studies* 66, no. 2 (December 2006): 423–59, doi:10.2307/25066820; Leung, "Medical Learning from the Song to the Ming," 387–389; Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 136–201; Wu, "A Medical Line of Many Masters."

on it that is no longer extant.[299] Although neither Chen Yan nor Zhu Zhenheng authored texts on the *Treatise*, they frequently cited its formulae and drew on its doctrines in their own work.[300] Thus, while their interpretations and emphases differed, all of these currents placed great importance on the *Treatise on Cold Damage.*

In some ways, the *Treatise* retained the argumentative value it held for Northern Song physicians. Even if you could not accuse your opponents of ignorance of the *Treatise*, you could still accuse them of failing to understand it correctly. All of the cold damage texts attributed to Liu Wansu and the two cold damage texts written by Wang Haogu, a student of both Zhang Yuansu and Li Gao, present distinctive interpretations of the *Treatise*'s ideas and treatments. As we saw in the story about Zhang treating Liu, these differing interpretations could be turned to polemical advantage. Wang's case histories illustrate this well (see Box 4-3).

Whereas Xu Shuwei sought to demonstrate his opponents' outright ignorance of the *Treatise*, Wang merely accuses them of failing to understand it adequately. Both White Tiger Decoction and Bupleurum Decoction are formulae from the *Treatise*, and their use in this case is understandable—they both treat internal heat, the most common cause of macular rashes and spontaneous external bleeding. Wang, however, argues that the other doctors have made an overly superficial diagnosis. To Wang, the patient's pulse and the lack of palpable heat indicate that this illness was not caused by internal heat. On asking about the origin of the illness, he confirms his suspicions: the patient contracted cold damage and then drank a large quantity of cold fluid, damaging his internal yang *qi* and causing an interior cold pattern.

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[299] *Yuan History* (*Yuanshi* 元史, 1370), *fangji*, *Li Gao liezhuan*, in He Shixi, ed., *Zhongguo lidai yijia zhuanlu*, vol. 1 (Beijing: Renmin Weisheng Chubanshe, 1991), 301; Wang Haogu, *These Things are Difficult to Know* (*Cishi nanzhi* 此事難知, 1264), preface, in Wang Haogu, *Wang Haogu yixue quanshu*, 115.

[300] I discuss this issue at length in Chapter 5.

Box 4-3: One of Wang Haogu's Case Records

External Yang and Internal Yin

The general Wanyan's grandson, also a general, had been ill with cold damage for six or seven days. He suffered from intermittent chills and fever. Above his wrist there were three to five macular spots, and a little bleeding from his nose. The physicians used medicinals like White Tiger Decoction and Bupleurum [Decoction] to treat him and he didn't recover. At the time I diagnosed him, the pulse on both hands was deep and rough. On palpation, his chest, diaphragm, and four limbs certainly had no great heat. This was internal cold. On asking the cause [of the illness, I learned] that in the summer heat he had slept [outside] by the corner of one of the halls. First he had cold damage, then he was extremely thirsty, and he drank a large bowl of ice-cold koumiss [fermented mare's milk]. His external contraction [of evil environmental qi] was mild, but his internal damage was severe. The external [illness transformed] according to the internal illness and both were yin [patterns]. Therefore, at first there were macules and spontaneous external bleeding, but afterwards he manifested [signs of] internal yin. As for the intermittent chills and fever, spleen [illnesses] also have them, it is not a case of lesser yang alternating chills and fever. I gave him Regulate the Center Decoction (*Tiaozhong tang* 調中湯), and he recovered after several doses.[301]

Wang's cases reveal a change in the role the *Treatise* played in justifying the social position and clinical decisions of literati physicians. We do not know who his opponents were, but their knowledge of the *Treatise* was taken as a given. By Wang's time, literati-physician medicine had achieved a certain measure of dominance, and knowledge of its canonical texts was widely expected of good physicians. The *Treatise*, however, remained socially useful both because it underpinned physicians' identity as literati physicians and because the various currents each claimed to possess a more accurate understanding of its methods. The *Treatise* was now both a tool of clinical argument and the arena within which many such arguments took place.

[301] *Brief Precedents on Yin Patterns* (*Yinzheng lueli*, 1243), *Haicang zhiyan lu*, *waiyang neiyin*, in Wang Haogu, *Wang Haogu yixue quanshu*, 108.

CONCLUSION: The Social Practice of Literati-Physician Medicine

Like any human activity, medical practice occurs within a social space and is constructed as a practice by social processes. A full understanding of changes in medical thought and practice therefore demands an understanding of its social context, justifications, purposes, and uses.

In addressing the social aspect of the *Treatise's* usefulness, I am not claiming that literati physicians' decision to promote the *Treatise* was primarily based upon social grounds as opposed to medical ones. Literati physicians genuinely believed that the new medicine they were promoting would produce better medical results than other approaches to medicine. Their medical reasons for promoting the *Treatise* are the subject of the final chapter of this dissertation. I do claim, however, for the reasons discussed in this and the previous chapter, that the social element of such interventions in medical knowledge and practice was, and remains, irreducible. In order to accomplish their medical aims, literati medical reformers—for they saw themselves as such—had to establish not only new medical doctrines and therapeutic techniques and not only a new vision of the ideal medical knower, but also a living community of such knowers and the means of convincing others to trust them. The *Treatise's* usefulness in arguing for this new vision and new community was an inherent element of its overall appeal to literati physicians without which we cannot hope to understand literati physicians' fondness for the *Treatise on Cold Damage*.

CHAPTER 5
"A Thousand Changes and Ten Thousand Transformations": The *Treatise on Cold Damage* and the Problematic of Literati-Physician Medicine

> Once an illness is generated, it has a thousand changes and ten thousand transformations. No one can exhaustively understand them. Therefore, in the world, those who are good at medicine do not worry about the difficulty of treating an illness; they worry about the difficulty of knowing an illness.
> 病一生，千變萬化，莫能窮究。故世之善醫者，不患治病之難，患識病之難。
>
> —Shi Kan, *Shi Zaizhi's Formulae* (*Shi Zaizhi fang* 史在之方, early 12th c.)[302]

> When reading Zhongjing's books, you should seek [to understand] his intent in establishing a method. If you obtain [an understanding of] his intent in establishing a method, then you will understand that his books are adequate to be taken as the method for the myriad generations, and later people can neither add to it nor go beyond it.
> 讀仲景之書，當求其所以立法之意。苟得其所以立法之意，則知其書足以為萬世法，而後人莫能加莫能外矣。
>
> —Wang Lü (王履, fl. 1332-ca. 1391), *Collection on Returning to the Medical Classics* (*Yijing suhui ji* 醫經溯洄集, late 14th c.)[303]

In chapter 3, I demonstrated that Northern Song literati medical authors were deeply worried by the complexity of illness and treatment. This concern did not abate during subsequent dynasties, nor has it disappeared in modern times. From the Northern Song to the end of the imperial period, the irreducible variability of illness remained a central concern of literati physicians. Since 1911, physicians of what is now known as "Chinese medicine (*zhongyi* 中醫) have continued to see it as a core problem in the practice of medicine. Although the understanding of this problem and the specific solutions offered have varied over time, the essential problematic has remained unchanged. Given this commitment to a hydra-headed view of illness, Wang Lü's eulogizing of Zhang Ji's works is all the more striking. What made Zhang Ji's work, and particularly the *Treatise on Cold Damage*, so appealing to literati physicians? In this chapter, I argue that literati physicians found in the *Treatise* a model for how to understand

[302] *Juan xia*, *weiyi zonglun*, in Qiu Peiran, *Zhongguo yixue dacheng sanbian*, 4:482.
[303] *Zhang Zhonjing shanghan lifa kao* in Wang Lü, *Yijing suhui ji*, 18–19.

and manage the overwhelming complexity of illness. The *Treatise* was thus not only useful in dealing with the social aspects of medical practice—as discussed in the previous chapter—but was also essential to clinical practice and medical doctrine.

While the variability of illness is, in one form or another, a difficulty faced by any clinical tradition, the perceived urgency of this problem and the amount of effort spent in dealing with it reveal that it occupied a far more important place in Chinese literati-physician medicine than it did in many other medical traditions. In the first place, if the descriptions of literati medical authors are accurate, common physicians did not share literati physicians' worries about the complexity of illness, and the other literati solutions to the crisis of trust in medicine, while recognizing the extreme variability in illness, attempted to side-step the problem by invoking sources of authority outside of medical doctrine (experience or socially endorsed authority). Only literati-physician medicine *theorized* the complexity of illness, thereby taking it not only as the central problem that medicine needed to solve, but also as the very heart of its approach to illness and healing. Likewise, elite, scholarly medical traditions in other places and times did not place equal weight on this problem. In one of his essays, the Greek writer Plutarch (45-120) imagines a debate between three well-educated men over the possibility of the emergence of new diseases. One of the debaters rejects the possibility outright, attributing all illness to diet, which produced only a limited number of possible ailments. Although the other two interlocutors accept the possibility of new diseases, they see them as worthy of note precisely because they are not everyday occurrences.[304] More importantly, they all share a conception of disease as a unified entity, not the fantastically variable illnesses recognized by Chinese literati physicians. Although the later Galenic medicine and its Islamic and medieval European descendants possessed a rich descriptive theory of illness, capable of coping with a great deal of variability in illness,

[304] Vivian Nutton, *Ancient Medicine*, 2nd ed (New York: Routledge, 2012), 36.

surviving evidence suggests that it was seldom used.[305] Moreover, the complexity of illness was of less concern than the identification of specific therapies held to be effective in all cases of a given disease—the very antithesis of literati physicians' insistence on the mutability of illness.[306] Ontological concepts of disease, common in 18th and early 19th century Europe, explicitly sought to distinguish significant variability in signs and symptoms, which identified a disease entity, from the background noise of accidental variation, which was to be ignored.[307] Likewise, germ theories of disease developed in the late 19th and early 20th centuries saw the diversity of signs and symptoms within a given disease as a distraction. What counted was the pathological agent, which was unitary and unchanging.[308] In spite of rising interest in the individual variability of illness, modern biomedicine remains committed to an approach which defines illness in population terms—i.e., what is seen in *most* patients—as seen in modern biomedical dictionaries' definition of disease: "A morbid entity ordinarily characterized by two or more of the following criteria: recognized etiological agents(s), identifiable group of signs and symptoms, or consistent anatomic alterations."[309] All of these more recent approaches to understanding illness see the complexity and variability of signs and symptoms as a fog that must be seen through to identify the actual illness. By contrast, literati-physician medicine's supporters saw this variation as an inherent quality of the illness: the illness itself was transforming, and to be effective, treatment needed to be adapted to the current state of the illness.

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[305] Peter E Pormann and Emilie Savage-Smith, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007), 115–138; Nancy G. Siraisi, *Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice* (University of Chicago Press, 1990), 115–152.
[306] Siraisi, *Medieval and Early Renaisance Medicine*, 152.
[307] Roy Porter, "The Eighteenth Century," in *The Western Medical Tradition: 800 B.C.-1800 A.D.*, ed. Lawrence I Conrad (New York: Cambridge University Press, 1995), 401–402; Roy Porter, *Blood and Guts: A Short History of Medicine* (New York: W.W. Norton, 2004), 77–78.
[308] W. F. Bynum, ed., "The Rise of Science in Medicine," in *The Western Medical Tradition: 1800 to 2000* (New York: Cambridge University Press, 2006), 123–132.
[309] Thomas Lathrop Stedman, *Stedman's Medical Dictionary*, 28th ed (Philadelphia: Lippincott Williams & Wilkins, 2006), 550.

This chapter is divided into two sections. The first examines how Northern Song medical authors understood and dealt with the complexity and variability of illness. The second discusses prominent developments of the Southern Song, Jin, and Yuan dynasties, and traces the course of the *Treatise on Cold Damage* from being a text about a specific illness, to being "the method for the myriad generations." The conclusion clarifies the position of the *Treatise* in literati-physician medicine by drawing a comparison to similar processes in Renaissance European natural history.

SECTION ONE: Managing Complexity in the Northern Song

From its inception, literati-physician medicine was deeply concerned by the complexity and variability of illness. A number of approaches were developed to grasp this diversity, but translating such a grasp into actual treatments was more difficult.

Understanding Complexity in Illness

Physicians and medical authors of the Northern Song recognized a wide variety of factors that contributed to the protean nature of illness. Ranging from environmental factors to characteristics of the patient and the illness themselves, these factors both explained variation in illness and demanded adaptability in treatment.

The seasons were among the most frequently cited causes of variability in illness, particularly in discussions of cold damage. As discussed in chapter 1, both the *Yellow Emperor's Inner Classic* and the *Treatise on Cold Damage* saw cold damage as a broad rubric including not only cold damage proper, but also warm disease and hot disease/summerheat (*shu* 暑). All of these diseases were attributed to damage from cold during the winter that either immediately produced illness or lurked inside the body where it transformed into heat and manifested as an

illness in the spring or summer. This doctrine was generally accepted throughout the period covered by this dissertation, though it would begin to be questioned by the late Yuan and early Ming.[310] This doctrine led to a general belief that the formulae contained in the *Treatise on Cold Damage* were intended only for cold damage proper, which appeared in winter, and not for warm disease or summerheat.[311] This led several authors to develop new formulae or find older formulae to supplement this deficiency in the *Treatise*. Han Zhihe, author of the oldest surviving text devoted exclusively to the *Treatise*, went so far as to include seasonal variations for almost all of the formulae included in his book:

> If the patient's pulse on both wrists is sunken and slow, moderate, or tight, these are all cases of cold in the stomach. From Establishing Spring[312] to Pure Brightness[313], it is appropriate to use Warm the Middle Decoction. From Pure Brightness to Sowing Grain[314], it is appropriate to use Orange Peel Decoction. From Sowing Grain to Establishing Autumn[315], it is appropriate to use Seven-Ingredient Regulate the Middle Decoction.[316]
> 病人兩手脈沈遲，或緩或緊，皆是胃中寒也… 若立春以後，至清明以前，宜溫中湯主之。清明以後，至芒種以前，宜橘皮湯主之。芒種以後，至立秋以前，宜七物理中丸主之。

Han's particular system for dividing the seasons was not adopted by any other author, but Zhu Gong and Pang Anshi both provided seasonal formulae, albeit with less consistency than Han.[317]

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[310] The earliest extant reference to warm disease not caused by cold damage is found in Guo Yong's (郭雍, 1101-1187) *Supplementing what is Missing in Cold Damage* (*Shanghan buwang lun* 傷寒補亡論, 1086), but the passage is brief and not completely clear; see *juan* 18, *wenbing lun*, p. 1a-2a, in Zhu Pangxian and Wang Ruoshui, eds., *Lidai zhongyi zhenben jicheng*, vol. 20 (Shanghai: Shanghai Sanlian Shudian, 1990).
[311] E.g., Zhu Gong's *Nanyang Book for Saving Lives*, *juan* 5, questions 38-45, in Zhu Gong, *Huoren shu*, 69–77. Marta Hanson cites question 43 as evidence that Zhu Gong was "skeptical about the universal applicability of Cold Damage formulas." Since Zhu's entire book is devoted to popularizing and explaining the *Treatise on Cold Damage*, the word, "skeptical" seems poorly chosen. Like other Song scholars, Zhu saw no problem in upholding a book as a classic while at the same time seeing a need to supplement it. See, Hanson, *Speaking of Epidemics*, 38. It is worth noting that the passage in question is a paraphrase of a passage in Pang Anshi's *Treatise on All Types of Cold Damage Illness*, see *juan* 1, *xulun*, in Pang Anshi, *Shanghan Zongbing Lun*, 3.
[312] The day marking the beginning of the 1st solar term, February 3rd, 4th, or 5th in the Gregorian calendar.
[313] The day marking the beginning of the 5th solar term, April 4th, 5th, or 6th in the Gregorian calendar.
[314] The day marking the beginning of the 9th solar term, June 5th, 6th, or 7th in the Gregorian calendar.
[315] The day marking the beginning of the 13th solar term, August 7th, 8th, or 9th in the Gregorian calendar.
[316] *Juan xia*, *wenzhong pian*, in Zhu Pangxian and Wang Ruoshui, *Lidai zhongyi zhenben jicheng*, 1990, 3:24.
[317] E.g., Zhu Gong, *Book on Saving Lives* (*Huoren shu* 活人書), *juan* 6, questions 41-43, in Zhu Gong, *Huoren shu*, 73–76; Pang Anshi, *Treatise on All Types of Cold Damage* (*Shanghan zongbing lun* 傷寒總病論), *juan* 4, in Pang Anshi, *Shanghan Zongbing Lun*, 101–120.

Another form of environmental variability, which linked seasonal variation and calendrical cycles, ultimately became the most popular way of understanding the influence of climate on health and illness: the five movements and six *qi* (*wuyun liuqi* 五運六氣), often referred to simply as movements and *qi* (*yunqi* 運氣).[318] This doctrine, which had its roots in the *Inner Classic*, linked together the movements of the five phases (*wuxing* 五行), the development and decline of in yin and yang as described by the "three yin and three yang," and the sixty-year calendrical cycle created by pairing the ten heavenly stems (*tiangan* 天干) and the twelve earthly branches (*dizhi* 地支). Starting with the particular stem and branch of a given year, a series of correspondences and calculations allowed one to determine the quality of the *qi*—cold, wind, heat, fire, damp, or dryness—that would dominate in a given period of the year. In spite of complaints about overly mechanistic uses of the system, it was popular during the Song for a wide variety of applications.[319] In medicine, the system was used to predict the type of illness that would predominate in a given year and to assist in diagnosing and treating it.[320] The system of movements and *qi* had three advantages over the simpler analysis of seasonal variation in illness, which may explain its ultimate success. First, its complexity as a doctrine gave it greater explanatory flexibility. Not only could it explain the variability of illness during different seasons, it could also explain why the seasons and their associated illnesses were not always the same from year to year. Second, the relationships among the five movements—which were identical to

[318] The most common translation of this term is "phase energetics," derived from the association of the five movements with the five phases (*wuxing* 五行) and modern (mis)conception of *qi* as a form of energy. I have chosen not to use this translation since the correlations of the five phases and the five movements differ and *qi* in this case refers to climatic *qi*, e.g., damp, heat, cold, etc., making the term "phase energetics" potentially confusing.
[319] Catherine Despeux, "The System of the Five Circulatory Phases and the Six Seasonal Influences (wuyun Liuqi), a Source of Innovation in Medicine under the Song (960-1279)," in *Innovation in Chinese Medicine*, ed. Elisabeth Hsu, 2001, 121–65.
[320] Liu Wenshu (劉溫舒, fl. late 11th c.), *On the Subtleties of Movements and Qi according to Questions on the fundamental* (*Suwen rushi yunqi lun'ao* 素聞入式運氣論奧, *juan xia*, *pian* 28-30, pp. 21a-32a, in *Siku Quanshu*.

those among the five phases—gave the system greater dynamism. Seasonal variability alone could not explain the transformations that occurred during the course of an illness. In skillful hands, the system of movements and *qi* could do so. Finally, it had roots in the *Inner Classic* and was seen as having connections to the *Treatise on Cold Damage*,[321] giving it the pedigree of antiquity.

Differences in geography were another way of understanding the impact of the external environment on illness. Pang Anshi associated different illnesses with the north and south and with mountainous and flat land:

> In the south there are no places [covered in] snow and frost; therefore, people are not struck by cold *qi*. The *qi* of the earth is not contained, and vermin discharge toxin. Mists and miasmas [cause illnesses] that occur episodically. These are not covered by this method. There are separate formulae for their treatment. Furthermore, within a single prefecture, there are mountain dwellings that are the abode of accumulated yin. At the height of summer, the snow freezes. The climate is cold, and [people's] pores are sealed, so it is difficult for an evil to harm them. These people are long-lived, and the sick among them mostly [suffer from] wind strike and cold strike illnesses. There are also flatland dwellings that are the abode of accumulated yang. At the height of winter, plants still grow. The climate is warm, and [people's] pores are lax, so it is easy for an evil to harm them. These people are short-lived, and the sick among them mostly [suffer from] damp strike and summerheat-strike illnesses.[322]
> 南方無霜雪之地，不因寒氣中人，地氣不藏，蟲類泄毒，嵐瘴間作，不在此法，治別有方也。又一州之內，有山居者為積陰之所，盛夏冰雪，其氣寒，腠理閉，難傷於邪，其人壽，其有病者多中風中寒之疾也。有平居者為居積陽之所，嚴冬生草，其氣溫，腠理疏，易傷於邪，其人夭，其有病者多中濕中暑之疾也。

[321] E.g,, Xu Shuwei, writing shortly after the loss of North China, associated the transmission of evils through the *Treatise*'s three yin and three yang with the reverse of the annual progression of six *qi* in movements and *qi* doctrine. *Puji benshifang*, *juan* 9, pp. 9a-b, in Xuxiu siku quanshu bianzuan weiyuan hui, *Xuxiu siku quanshu*; The earliest edition of Cheng Wuji's *Annotated Treatise on Cold Damage* as well as the Zhao Kaimei edition contain a series of charts and a brief discussion related to the system of movements and *qi*, but the content seems unrelated to the rest of the text and is neither found in other editions nor mentioned in other discussions of Cheng's commentary. I am inclined to see it as a later addition. See, Cheng Wuji, *Zhujie Shanghan lun*, ed. Zhao Kaimei, Zhongjing quanshu (1599; reprint, Beijing: Renmin Weisheng Chubanshe, 1956), 13–18.

[322] *Shanghan zongbing lun*, *juan* 1, *xulun*, in Pang Anshi, *Shanghan Zongbing Lun*, 3–4.

Seasonal and geographic influences on illness were not, therefore, mutually exclusive. As noted above, Pang made reference to seasonal variation as well.[323] Combined, these environmental influences alone could therefore greatly complicate the presentation of any given illness.

Apart from the external environment, the internal environment of the patient and the character of the ailment itself were potential sources of variability and complexity in illness. One of the earliest extant descriptions of this type of variability is found in Shen Gua's enumeration of the "five difficulties (*wunan* 五難)" of treating illness:

> Nowadays those who examine ill [people] only inspect the six pulses of the *qi* opening and nothing else. In ancient times those who inspected ill [individuals] had to investigate their voice, facial color, movements, skin texture, emotions, and likes. They inquired into what the patient did [for a living] and investigated the patient's activities. Having already obtained the better part [of what they needed to know], they then thoroughly diagnosed the welcoming people [pulse], the *qi* opening [pulse], and the twelve vessels. If the illness occurs in the five viscera, then the five colors will correspond to it, the five sounds will change in accord with it, the five tastes will incline to it, and the twelve vessels will move according to it. They sought the illness with this sort of thoroughness, but they still feared lest they lose it. This is the first difficulty: differentiating illnesses.[324]
> 今之觀疾者, 惟候氣口六脈而已。故之觀疾, 必察其聲音、顏色、舉動、膚理、情性、嗜好, 問其所為, 考其所行, 已得其大半, 而又砭診人迎、氣口、十二動脈。疾發於五臟, 則五色為不應, 五聲為之變, 五味為之篇, 十二脈為之動。求之如此其詳, 然而猶懼失之。此辨疾之難, 一也。

While most supporters of literati-physician medicine could have agreed with Shen's presentation, their own explanations of this sort of complexity were usually framed in stronger doctrinal terms. One early example is Shi Kan's discussion, already quoted in chapter 3:

> Therefore, those who are good at practicing medicine must, once an illness has appeared, first investigate its source, determine how it was transmitted and contracted, scrutinize its punishment and conquest [according the five phases],[325] distinguish its coolness and heat, coldness and warmth, differentiate whether it is above or below, interior or exterior,

[323] E.g., *Shanghan zongbing lun*, *juan* 1, *xulun*, in ibid., 3.
[324] Author's preface, *Excellent Formulae of Su and Shen*, in Su Shi and Shen Gua, *Su Shen neihan liangfang*, 1. This preface dates to ca. 1090.
[325] All editions of this text read "punishment and conquest (*xingke* 刑剋)," a term which I have been unable to locate. "Generation and conquest (*shengke* 生剋)," would fit the context, but a scribal error of *xing* 刑 for *sheng* 生 seems unlikely.

> whether the true [*qi*] or the evil [*qi*] predominates, whether it is vacuous or replete … Each of these has its standard and one cannot err in the slightest.[326]
> 故善為醫者, 一病之生, 必先考其根源, 定其傳授, 審其刑剋, 分其冷熱寒溫, 辨其上下內外, 有真有邪, 有虛有實… 各有其常而不可差之分毫也。

Around the same time, Kou Zongshi (寇宗奭, fl. early 12th c.) included a more systematic discussion of this problem in the preface to *Expanded Meaning of the Materia Medica* (*Bencao yanyi* 本草衍義, 1116, published 1119):

> In treating illness, there are eight essentials. If the eight essentials are not carefully examined, the illness cannot depart. It is not that the illness *does not* depart, but that there is no path[327] by which it *can* depart. Therefore, you must carefully differentiate the eight essentials, so as to make no mistakes. The first is vacuity: this is the five vacuities. The second is repletion: this is the five repletions. The third is cold: this is the organs contracting accumulated cold. The fourth is heat: this is the organs contracting accumulated heat. The fifth is evil [*qi*]: it is not an illness [generated by] the organs themselves. The sixth is correct [*qi*]: it is not [an illness caused by] the attack of an external evil. The seventh is internal: the illness is not on the exterior. The eighth is external: the illness is not in the interior.[328]
> 夫治病有八要, 八要不審, 病不能去。非病不去, 無可去之術也。故須審辨八要, 庶不達誤。其一曰虛, 五虛是也。二曰實, 五實是也。三曰冷, 臟腑受其積冷是也。四曰熱, 臟腑受其積熱是也。五曰邪, 非臟腑正病也。六曰正, 非外邪所中也。七曰內, 病不在外也。八曰外, 病不在內也。

Similar statements can be found in the works of Zhu Gong, Xu Shuwei, and many other Northern Song literati physicians.[329] Pang Anshi saw this internal variation as rooted in part in very physical differences between individuals:

> People's five viscera can be large or small, firm or brittle, established correctly or leaning askew. The six bowels can also be large or small, long or short, thick or thin, relaxed or tense. This causes a person to frequently have a particular illness for their entire life.[330]

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[326] Shi Kan, *Shi Zaizhi fang*, *juan xia*, "*Weiyi zonglun*," in Qiu Peiran, *Zhongguo yixue dacheng sanbian*, 4:482.
[327] The character "*shu* 術" most commonly means "technique, method," but one of its earlier meanings is "path, road." In this instance, Kou seems to be playing on this dual meaning.
[328] *Juan* 1, in Kou Zongshi, *Bencao Yanyi*, ed. Yan Zhenghua, Chang Zhangfu, and Huang Youqun, Zhongyi Guji Zhengli Congshu (Beijing: Renmin Weisheng Chubanshe, 1990), 7–8.
[329] E.g., Zhu Gong, *Nanyang Book for Saving Lives*, author's preface, in Zhu Gong, *Huoren shu*, 19–20; Xu Shuwei, *One Hundred Songs on Cold Damage Patterns*, *zheng* 3-6, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 18–22.
[330] *Shanghan zongbing lun*, *juan* 1, *xulun*, in Pang Anshi, *Shanghan Zongbing Lun*, 3; A similar phrase, though referring only to the stomach and intestines, is found in *Lingshu*, *juan* 11, *pian* 31, p. 3, in *Lingshu (zuishanben) [Xinkan Huangdi neijing Lingshu]*, Ming dynasty 24 *juan* anonymous edition (unpublished ms., n.d.), 50.

人五臟有大小、高下、堅脆、端正偏傾。六腑亦有大小、長短、厚薄、緩急，令人終身常有一病者。

Regardless of how it was conceived, patients' individual characteristics were seen as a major factor interacting with external influences in the formation of illnesses. These two broad sources of variability combined to give illness its protean character.

Treating Complex Illnesses

If Northern Song approaches to grasping the variability and complexity of illness were notable for their abundance and diversity, literati physicians' approaches to treating variable and complex illnesses are notable for their small number. Literati physicians drew almost exclusively on two sources in establishing doctrines to guide treatment: the *Yellow Emperor's Inner Classic* and the *Treatise on Cold Damage*. These two texts served as sources of scripts by which literati physicians could seek to understand and treat the illnesses they saw around themselves.[331]

Throughout the Northern Song and during the early Southern Song and Jin, a strict division of labor separated the spheres in which each of these texts could be used. The *Treatise on Cold Damage* and its formulae were used for cold damage in its broad sense—encompassing potentially epidemic febrile illnesses in all seasons—and miscellaneous diseases, all other illnesses, were the domain of the *Inner Classic*. The doctrines of the *Inner Classic* were used to explicate difficult passages in the *Treatise on Cold Damage*, but the *Treatise*'s doctrines had priority when dealing with cold damage.[332] The reverse, the use of the *Treatise*'s doctrines and

[331] I borrow this use of the term "scripts" from Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 11–12.
[332] The rejection of day-counts (as discussed in chapter 3), a prominent feature of the *Inner Classic*'s cold damage doctrine, is a this dissertationicularly clear example of the *Treatise*'s priority when dealing with cold damage.

formulae for miscellaneous diseases, did not occur.[333] Even as ardent a supporter of the *Treatise* as Xu Shuwei adhered to this rule. In his formulary, *Efficacious Formulae for Universal Relief*, formulae from the *Treatise* are only found in the section devoted to "Cold Damage and Seasonal Epidemics (*shanghan shiyi* 傷寒時疫).[334]

The Inner Classic *and Miscellaneous Diseases*

All of the methods of understanding the variability of illness discussed above had precedents in the *Inner Classic.* The system of movements and *qi* is the topic of the seven great treatises (*qipian dalun* 七篇大論) added to the *Inner Classic* by Wang Bing (王冰, fl. 8th c.),[335] and seasonal variation is discussed extensively.[336] Geography and local environment are also linked with specific illnesses.[337] Variation in the internal environment particularly as understood through the five phases and five viscera, is a consistent concern throughout the *Inner Classic*.

[333] There are a handful of ambiguous instances in which an author appears to be using a cold damage formula to treat a miscellaneous disease. For example, Shi Kan's recommendation of Five-Ingredient Poria Powder (*wuling san* 五苓散) to treat inhibited urination or Qian Yi's (錢乙, 1032-1113) use of White Tiger Decoction to treat persistent vomiting and diarrhea, but these were seen as cases which resembled miscellaneous diseases but were caused by the invasion of environmental evil *qi*. Moreover, both of these formulae are also found in the *Treatise*'s sister-text *Essentials of the Golden Coffer*, which was devoted to miscellaneous diseases. See Shi Kan, *Shi Zaizhi fang*, *juan shang*, *liuqi suoshengzhi bing*, *xiaofu bi*, in Qiu Peiran, *Zhongguo yixue dacheng sanbian*, 4:459; and Qian Yi, *Straightforward Guidance on Medicinals and Patterns for Children* (*Xiao'er yaozheng zhijue* 小兒藥證直訣, 1119), *juan zhong*, pp. 8a-b, in Qian Yi, *Xiao'er yaozheng zhijue*, ed. Yan Xiaozhong, vol. 39–40, Zhoushi yixue congshu (Yangzhou: Jiangsu guji keyinshe, 1984).

[334] In *Siku Quanshu*; the separateness of cold damage as an illness is further seen in the insistence that it's methods of diagnosis differed from miscellaneous diseases. Xu wrote an entire book on cold damage pulse diagnosis, now lost. A fragment of Xu's pulse studies can be found in Wang Haogu's (王好古 fl. early-mid 13th c.) *Brief Precedents on Yin Patterns* (*Yinzheng lueli* 陰證略例, 1232), *Xu Shuwei maili*, in Zhu Pangxian and Wang Ruoshui, *Lidai zhongyi zhenben jicheng*, 1990, 20:16–17; a more complete example of Northern Song cold damage pulse diagnosis can be found in Han Zhihe's *Shanghan weizhi lun*, *juan shang*, *shanghan pingmai pian* and *bianmai pian*, pp. 3b-7b, in *Siku Quanshu*.

[335] *Yellow Emperor's Inner Classic: Questiosn on the Simple* (*Huangdi neijing suewn* 黃帝內經素問, 1st c. BCE), *pian* 66-71, 74, in Wang Bing, *Wang Bing yixue quanshu*, 299–392, 410–436.

[336] E.g., *Suwen* 2, in ibid., 19–23.

[337] E.g., *Suwen* 12, in ibid., 76–77; for further discussion of this passage see Hanson, *Speaking of Epidemics*, 30–35.

The majority of these discussions, however, remained at the level of etiology, explaining how particular illnesses were related to pathologies of the five viscera, *q*i, blood, yin, yang, etc. They did not provide guidance on treatment. The following passage is typical:

> The five viscera and six bowels all cause people to cough. It is not only the lung. If the five viscera [cause a] cough for a long time, then it will be contracted by the six bowels. If a spleen cough does not end, then the stomach will contract it. The signs of a stomach cough are coughing with vomiting. If the vomiting is severe, long worms will be spit up.[338]
> 五藏六府皆令人欬，非獨肺也 … 五藏久欬，乃移於六府。脾欬不已，則胃受之。胃欬之狀，欬而嘔，嘔甚則長蟲出。

Even when specific treatments were mentioned, they were nearly always acupuncture or moxabustion. Altogether, the *Inner Classic* lists only thirteen medicinal formulae,[339] but medicinal formulae were the treatment of preference for the majority of literati physicians, who saw performing acupuncture and moxabustion as beneath their status.[340]

Equally problematic were certain gaps in the doctrinal structure of the *Inner Classic*. The concepts of vacuity (*xu* 虛) and repletion (*shi* 實) had been central to the drug therapy tradition since the end of the Han, and remained central in the Song.[341] Vacuity indicates that a condition is due to some component of the body performing its function inadequately; repletion, on the other hand, attributed illnesses to pathological excesses within the body, whether contracted from the external environment or generated within the internal environment. Although both of these terms are found in the *Inner Classic*, they are rare and not particularly important. Only two chapters of the *Inner Classic* use them systematically.[342] Generally, the *Inner Classic* merely notes that an illness is in a particular organ, without mentioning whether the illness is vacuous or

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[338] *Suwen*, *juan 10*, *pian* 38, p. 12b, in Chen Yongguo, ed., *Chongguang Buzhu Huangdi Neijing Suwen*, Mingchao Jiaqingnian Gu Congde Chongdiao Ban (Taibei: Tianzi Chubanshe, 1989), 79.
[339] Cheng Shide and Meng Jingchun, eds., *Neijing jiangyi* (Shanghai: Shanghai Kexue Jishu Chubanshe, 1984), 206.
[340] Leung, "Medical Learning from the Song to the Ming," 383.
[341] There are a variety of synonyms or near-synonyms for these terms; e.g., insufficiency (*buzu* 不足) and excess (*taiguo* 太過), weakness (*wei* 微) and exuberance (*sheng* 盛), etc.
[342] Namely, chapter 80 of the *Suwen* and chapter 8 of the *Lingshu*.

replete. By way of comparison, the character *xu* 虛 occurs 266 times in the *Questions on the Fundamental* division of the *Inner Classic* but 96 times in Zhu Zhenheng's far shorter *A Few Words on Investigating [Things] and Extending [Knowledge]*. The character *shi* 實 occurs 146 times in *Questions on the Simple*, but 47 times in *A Few Words*. The *Inner Classic* could not provide detailed doctrinal or clinical guidance on these two important concepts.

For all of these reasons, the *Inner Classic* required major supplementation if its doctrines were to be applied clinically. The sources drawn upon to supplement it were diverse. The formularies of the past—in particular the works of Sun Simiao and the Song government formularies—were used to amend the *Inner Classic*'s lack of formulae, and the doctrines found in works like Sun's *Essential Formulae Worth a Thousand Gold* and Chao Yuanfang's (巢元方, fl. early 7th c.) *Treatise on the Origins and Signs of Diseases* filled in doctrinal gaps.

The imperial physician Qian Yi's work contains the most influential Northern Song effort to build a systematic method for the diagnosis and treatment of miscellaneous diseases. Among the sources used by Qian Yi to supplement the *Inner Classic*, there is one that is somewhat unusual. According to Yan's preface, Qian argued that the doctrines of the *Inner Classic* were only suitable for children older than five years old. For this reason he turned to the *Fontanel Classic* (*Luxin jing* 顱囟經), a text devoted to the treatment of children.[343] The *Fontanel Classic* claims great antiquity and was associated with both the Yellow Emperor and a student of Zhang Ji. There is abundant evidence for the existence of a book with this or a similar title from the 6th century onward, but the relationship of those texts, the book used by Qian Yi, and the *Fontanel Classic* available today is unknown.[344] It is evident, however, from Yan's preface and from a

[343] *Yuanxu*, pp. 1a-2a, in Qian Yi, *Xiao'er yaozheng zhijue*.
[344] Ma Jixing, *Zhongyi wenxianxue*, 230–231; Yan Shiyun and Li Qizhong, *Sanguo liang Jin Nanbeichao yixue zongji*, 99–100.

slightly later discussion of the text that the version used by Qian Yi contained both doctrinal discussions and formulae designed for the treatment of children, allowing Qian to remedy the two deficiencies of the *Inner Classic*.[345]

In diagnosing miscellaneous diseases, Qian Yi emphasized the five viscera and their interrelationship as articulated through the five phases. After a brief discussion of the medical differences between children and adults *Straightforward Guidance* presents a list of the five viscera and the signs and symptoms that are present when a given organ is replete or vacuous:

> The spleen governs fatigue. If it is replete, [the patient] will sleep heavily, the body will be feverish, and [the patient] will drink water. If it is vacuous, there will be diarrhea and vomiting, and wind will be generated.[346]
> 脾主困。實則困睡，身熱飲水。虛則吐瀉，生風。

The symptoms listed appear to be derived from a variety of earlier sources,[347] but Qian Yi neither quotes any such sources nor cites them in support of his position. These five basic patterns of illness—and their treatment—were complicated by the mutual influence of the five viscera:

> … When the liver is strong and conquers the lungs and the lungs are weak and cannot conquer the liver, you should supplement the spleen and lungs and treat the liver. Assisting the spleen is a case of the mother causing the child to be replete. To supplement the spleen, [use] Assist the Yellow Powder. Treating the liver is governed by Drain the Green Pill.[348]
> … 肝強勝肺，肺怯不能勝肝，當補脾肺治肝。益脾者，母令子實故也。補脾，益黃散。治肝，瀉青丸主之。

An illness of the liver, associated with the wood phase, could only transmit to the lungs, associated with the metal phase, if the lungs are weak, because in five-phase doctrine metal normally conquers wood, not the reverse. In such a situation, one supplements not only the lungs,

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[345] E.g., Liu Fang, *juan* 12, *jingxian di'er*, in Liu Fang, *Youyou xinshu*, ed. Ma Jixing et al., Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1987), 404.
[346] *Xiao'er yaozheng zhijue*, *juan shang*, *wuzang suozhu*, p. 2b, in Qian Yi, *Xiao'er yaozheng zhijue*.
[347] For example, this line could be derived from either the *Suwen* or *Zhubing yuanhou lun*; see *Suwen*, *juan* 7, *pian* 22, pp. 6b, in Chen Yongguo, *Chongguang Buzhu Huangdi Neijing Suwen*, 54; and *Zhubing yuanhou lun*, *juan* 15, *pian* 3, in Chao Yuanfang, *Zhubing yuanhou lun jiaozhu*, 470–471.
[348] *Juan shang*, *ganbing sheng fei*, p. 5a, in Qian Yi, *Xiao'er yaozheng zhijue*.

but also the spleen, associated with the earth phase, because earth generates metal (making spleen-earth the mother of lungs-metal), thus assisting in strengthening the lungs. Even the names of Qian's formulae emphasize the importance of the five viscera and five phases. Yellow (*huang* 黃) is the color of earth and the spleen, and green (*qing* 青) is the color of wood and the liver. The names of the formulae thus explicitly state their function. Even when Qian used the disease-name differentiation of illnesses that had been important before the Song, he typically divided the disease into five sub-diseases, each caused by one of the five viscera. Regarding the seizure disorder known as *xian* 癎,[349] Qian informs us, "As for the five *xian*, you treat them according to the respective viscera 凡五癎，皆隨藏治之."[350] Likewise, of sores and rashes (*chuangzhen* 瘡疹) he says, "The five viscera each have a pattern 五藏各有一證."[351] In so doing, he inverted the structure of texts like *Formulae Worth a Thousand Gold* and the *Treatise on the Origins and Signs of Diseases*. In those books, the viscera were used to name entire sections of the text within which diseases associated with that viscus were grouped. In Qian's work, the viscera serve as subdivisions of a given disease.

What is most striking about Qian Yi's system for diagnosing and treating miscellaneous diseases is the degree to which it was a creation *ex novo*. Although there was no shortage of doctrine and formulae scattered in the pre-Song sources, this material was neither systematic in its doctrine nor comprehensive in its clinical scope. In order to deal with the potentially infinite variability of illness, Qian Yi had to rework this material into a set of scripts that could explain any given illness and offer guidance on its treatment. Qian's system was ultimately very

[349] *Xian* is frequently translated as "epilepsy," but the recent work of Fabien Simonis has shown how problematic this association is. I have therefore chosen not to translate this term. See, Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine."
[350] *Juan shang*, *wuxian*, p. 8b, in Qian Yi, *Xiao'er yaozheng zhijue*.
[351] *Juan shang*, *chuangzhen*, p. 9a, in ibid.

influential: Zhang Yuansu and his students Li Gao and Wang Haogu expanded and modified it, and through them many of Qian Yi's ideas and formulae became widely known and accepted.

The Treatise on Cold Damage *as a Model for Dealing with Variability*

If the *Inner Classic* presents a great deal of doctrine but offers very little explicit clinical guidance and almost no formulae, the *Treatise on Cold Damage* is its precise converse. Doctrine is seldom mentioned explicitly, but clinical guidance and formulae are abundant. The importance of this difference was recognized by Northern Song writers, as seen in Zhang Lei's (張耒, 1054-1114) postface to Pang Anshi's *Treatise on All Diseases of Cold Damage*:

> Why is it that the excellent physicians of the past did not prepare formulae? … Only Zhongjing's *Treatise on Cold Damage* both discusses illnesses and prescribes formulae. The details are certainly complete. It also describes the method of increasing or reducing [the quantity of medicinals] and adding or removing [medicinals].[352]
> 古之良醫，皆不預為方何也 … 惟仲景《傷寒論》論病處方，纖悉必具，又為之增損進退之法 …

The Song imperial edition of the *Treatise* is composed of separate lines, each of which describes a particular clinical situation. Many, but not all, of these lines end with a recommended formula:

> In cold damage, when the pulse is slippery and there is reversal[-cold of the extremities], there is heat in the interior. White Tiger Decoction governs it.[353]
> 傷寒，脈滑而厥者，裏有熱。白虎湯主之。

In essence, the *Treatise* was a collection of ready-made clinical scripts, including information on diagnosis, prognosis, and treatment method. In the imperial edition, all of the lines that included a recommended formula were gathered together at the beginning of each chapter in a numbered

[352] Postface, in Pang Anshi, *Shanghan Zongbing Lun*, 206. This postface is no longer this dissertation of any editions of the text, but is found in the *Mount Ke Collection* (*Keshan ji* 柯山集), *juan* 44.
[353] *Shanghan lun*, *juan* 6, *pian* 12, line 350, in Zhang Ji, *Zhongjing quanshu*, 458.

list of "methods (*fa* 法)."[354] These methods were the most valued part of the *Treatise on Cold Damage*, and the fact that it contained methods and not merely formulae alone appears to have led to a truism among physicians, reported (disparagingly) by Wang Haogu, that in treating cold damage there were methods, but in treating miscellaneous diseases there were only formulae (*fang* 方).[355]

As seen in Zhang Lei's comments, Northern Song authors particularly valued the extreme detail of the *Treatise on Cold Damage*'s clinical advice. Northern Song medical authors highlighted this detail in their texts about cold damage. Xu Shuwei, who wrote more texts on cold damage than any other author of this period, used his case records to illustrate the importance of these details. In explaining one of his clinical decisions he notes:

> The seventh pattern[356] [in the fifth chapter of the *Treatise*] is that [after] promoting sweating, the sweat leaks out incessantly and urination is difficult. The sixteenth pattern [in that chapter] is spontaneous sweating and frequent urination. Thus, if there is a small difference in the numerous signs [presented by the patient], Zhongjing changes the method by which he treats him. Therefore, you must be precise regarding [medicinal] decoctions.[357]
> 蓋第七證則為發汗漏不止，小便難，第十六證則為自汗，小便数。故仲景於諸證候紛紛小變異，便變法以治之，故於湯不可不謹。

As I mentioned in the previous chapter, Zhu Gong structured his book as a list of one hundred questions about cold damage and within each question presented long lists of possible variations and how to treat them:

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[354] It is unclear whether the Song editors added these lists or found them in one of the editions they examined. Neither their preface or postface mentions adding them, but they give few details about their editorial decisions in general.

[355] *Supreme Commander of the Bastion of Medicine* (*Yilei yuanrong* 醫壘元戎, 1237), *juan* 12, p. 47a, in *Siku Quanshu*.

[356] Throughout this text, Xu refers to the numbered methods as "patterns (*zheng* 證)."

[357] *Ninety Discourses on Cold Damage* (*Shanghan jiushilun* 傷寒九十論), *zheng* 2, in Xu Shuwei, *Xu Shuwei Shanghan Lun Zhu Sanzhong*, 149.

> You should investigate whether there is or isn't sweating in order to distinguish between hard tetany[358] and soft tetany. If there is no sweating, Kudzu Root Decoction governs it. If there is sweating, Cinnamon Twig Decoction with Kudzu Root governs it.[359]
> 當察有汗無汗，以分剛痓柔痓，無汗葛根湯主之，有汗桂枝加葛根湯主之。

Zhu's distinction between hard and soft tetany and his choice of formulae were derived from the *Treatise*.[360] Much of Zhu's text consists of similar statements—often paraphrasing the *Treatise* itself—emphasizing the diversity of cold damage illness, and the need for precise diagnosis and treatment.

The *Treatise on Cold Damage* did, however, require supplementation in two areas. The first area consisted of what might be called "omissions" in the text. A number of lines in the *Treatise* describe a clinical situation but either give no advice on treatment or give only general or negative advice (e.g., "… you cannot promote sweating 不可發汗"). To Northern Song and later physicians, the most significant of these omissions concerned warm disease, which Zhang Ji mentioned twice in the *Treatise*, but for which he gave no treatment.[361] Since warm diseases were seen as a major cause of epidemics, particularly in the southern parts of the empire, physicians were particularly interested in finding effective treatments, and efforts to supplement this gap in the *Treatise* accounts for a significant portion of the writings on cold damage in this period.[362]

The second area was doctrinal rationale. While a great deal of medical doctrine is implicit in the clinical advice of the *Treatise on Cold Damage*, there is very little explicit discussion of doctrine or explanation for the treatments recommended. It was in this regard that the *Inner*

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[358] The original meaning of *zhi* 痓 is unclear, but it was understood by Song and later interpreters of the *Treatise* as "tetany (*jing* 痙)," a reading supported by the use of *jing* in place of *zhi* in the *Classic of the Golden Coffer and Jade Case* (*Jingui yuhan jing* 金匱玉函經).
[359] *Juan* 6, question 50, in Zhu Gong, *Huoren shu*, 82.
[360] See, *Shanghan lun*, *juan* 2, *pian* 4, p. 9a, in Zhang Ji, *Zhongjing quanshu*, 356.
[361] *Shanghan lun*, *juan* 2, *pian* 3, pp. 2a-b and *juan* 3, *pian* 5, p. 13a, line 6, in ibid., 349, 360.
[362] E.g., *juan* 4-5, in Pang Anshi, *Shanghan Zongbing Lun*, 101–143; and *juan* 6, in Zhu Gong, *Huoren shu*, 69–83.

Classic became relevant to cold damage. Han Zhihe, for example, used it to explain the mechanism by which the invasion of external cold could lead to a febrile illness:

> The "Treatise on Fever"[363] says "When people are damaged by cold, they suffer a febrile illness." The commentary[364] says "When cold toxin occupies the flesh and skin, the yang *qi* cannot diffuse outward and is bound in the interior. Therefore, those who are damaged by cold, contrary to expectations suffer febrile illnesses." … Thus, cold damage illnesses have their origin in internally hidden yang, which causes the illness.[365]
> …《熱論》云："人之傷於寒也，則病熱"。注云："寒毒薄於肌膚，陽氣不得散發，而內怫結，故傷寒者，反為病熱"。… 即傷寒之病，本於內伏之陽為患也。

The use of the *Inner Classic* to explain the *Treatise* reached its height in the work of Cheng Wuji, who composed the first complete commentary on the *Treatise*, the *Annotated Treatise on Cold Damage*, drawing primarily on the *Inner Classic* for his explanations.[366]

Observing these developments in Song dynasty medicine, Asaf Goldschmidt has argued that the upsurge in writing on the *Treatise on Cold Damage* was a result of the desire of medical authors to "integrate" cold damage doctrine into the "pragmatic, symptom-centered practice" that previously dominated medicine and the "classical medicine" of the *Inner Classic* after the "reintroduction" *Treatise* by its imperial publication.[367] I demonstrated in chapter 1 that the narrative of a "reintroduction" of cold damage doctrine and the concept of "pragmatic, symptom-centered" medicine are both historically untenable. We can, therefore, neither speak of the integration of cold damage doctrine with current practices within which it had no place nor appeal to intellectual dissonance between the old and the new as a motivation for writing on the

[363] *Suwen* 31, the title could also be translated "Treatise on Heat," since the character *re* 熱 has both meanings. I have translated it as "fever" because the text of this chapter of the *Suwen* is devoted to febrile illnesses caused by cold damage not heat.
[364] This is the commentary by Wang Bing (fl. 8th c.), as included in the Song imperial edition of the *Suwen.*
[365] *Shanghan weizhi lun*, *juan shang*, *Shanghanyuan pian*, pp. 1b-2a, in *Siku Quanshu*.
[366] Cheng Wuji, *Zhujie Shanghan lun*.
[367] Goldschmidt, *Evolution*, 141–172.

Treatise.[368] In chapter 4, I argued that the use of the term "classical medicine" in the Northern Song is highly problematic, but if we read "classical medicine" as the doctrines of the *Inner Classic* corpus, there is an important way in which we can speak of their integration with the methods of the *Treatise on Cold Damage*.

Song medical authors did not perceive a gap between the *Treatise* and the *Inner Classic*. They assumed the *Treatise on Cold Damage* drew upon the *Inner Classic* and therefore they drew upon the *Inner Classic* in attempting to explain and interpret the *Treatise.* They had good reasons for making this assumption. The preface of the *Treatise* explicitly names the *Questions on the Fundamental*, the *Eighty-one Difficulties* (*Bashiyi nan* 八十一難, another name for the *Classic of Difficulties* (*Nanjing* 難經), and *Nine Fascicles* (*Jiujuan* 九卷, a now lost text in the *Inner Classic* corpus) as sources that Zhang Ji drew upon in composing the *Treatise*.[369] Furthermore, while no explicit references to the *Inner Classic* are found in the body of the *Treatise*, there are a number of similar passages and many more passages that can easily be read as drawing on its doctrines. At no point did any Northern Song medical author feel the need to argue that the *Inner Classic*'s ideas were applicable to the *Treatise*; they drew upon it unselfconsciously in explaining the *Treatise*'s methods. They did not see themselves as integrating, they were explicating.

The act of explicating the *Treatise* in terms of the *Inner Classic* did, however, forge links between specific methods of the former and specific doctrines of the latter. Potential new scripts were formed which not only explained the *Treatise*'s methods, but also provided concrete treatments for the *Inner Classic*'s doctrines. Since most of these doctrines were not specific to

[368] Even if intellectual dissonance were present, it is never an adequate explanation of historical actors' activities. Humans live surrounded by intellectual dissonance, but we are seldom aware of it and even less frequently do we take action to remedy it. Some other factor must make its resolution important in a given situation.
[369] *Shanghan cubing lun xu*, in Zhang Ji, *Zhongjing quanshu*, 305. Most modern scholars believe this section of the preface is a later addition, but Song authors accepted it as authentic.

cold damage, this created the possibility of eliding the division between cold damage and miscellaneous diseases. While Northern Song physicians did not choose to do so, later physicians would do with increasing frequency.

SECTION TWO: The *Treatise* in the Southern Song, Jin, and Yuan

The separation of miscellaneous diseases and cold damage was maintained throughout the Northern Song and the first several decades of the Southern Song and Jin, but beginning in the last half of the 12th century the barrier began to erode, as literati physicians applied the formulae and ultimately the doctrines of the *Treatise on Cold Damage* to the treatment of miscellaneous diseases.

At the same time, medical thinkers began to focus on a problem that they felt the *Treatise* did not adequately address: the pathology of fire. All of the most influential physicians of the Southern Song, Jin, and Yuan were concerned with fire in one form or another. If the key distinction in Northern Song literati-physician medicine was miscellaneous diseases versus cold damage, the key distinction in this period was illness due to cold versus illness due to fire or heat—whether contracted from the external environment or generated internally.

The medicine of the Jin and Yuan dynasties has traditionally been seen as a reaction against the medicine of the Northern Song. While this is largely true, the degree to which the medicine of this period was based upon Northern Song medicine has not been adequately appreciated. In particular, previous studies have underestimated the role of the *Treatise* in the formation of a number of doctrines that have traditionally been seen as standing in opposition to it. The clinical utility of the *Treatise* and the high status accorded to it in the medical canon made

it an appealing model for new medical developments—even those developments which sought to modify, supplement, or set limits on the *Treatise* itself.

In this part of the chapter, I examine how influential physicians made use of the *Treatise* to go beyond its traditional limits, both by expanding the discussion of heat and fire and by applying the methods of the *Treatise* to miscellaneous diseases. I have organized this section according to the clusters or currents that dominated medicine at this time. While the boundaries of these currents were never fixed or firm, they are useful in following the development of medical doctrine and practice in this period.

The Yongjia Cluster

As mentioned in Chapter 4, there is no evidence for the existence of self-conscious currents of medical learning in the Southern Song; nevertheless, the ideas and methods of particular physicians and particular medical texts enjoyed widespread popularity and influence. Like currents, appeal to these popular physicians and texts could strengthen the social position of physicians vis-à-vis their competitors, but, unlike currents, there was no self-conscious sense of commitment to a particular set of ideas and practices derived from a particular set of physicians who were perceived as constituting a medical lineage.

Apart from the government-published formulary *Formulae of the Imperial Pharmacy* which is known to have remained popular throughout the Southern Song and into the Yuan, data exist for only two examples of such popularity in the Southern Song: the physician Chen Yan and the short text *Easy and Simple Formulae* (*Yijian fang* 易簡方, ca. 1196). Because *Formulae of the Imperial Pharmacy* did not deviate from the Northern Song pattern in its use of the *Treatise on Cold Damage*, I will focus on the latter two examples. These two are in fact related.

The author of *Easy and Simple Formulae*, Wang Shuo (王碩, fl. late 12th-early 13th c., styled Defu 德膚), was a part of the circle of friends with whom Chen Yan frequently discussed medicine in Wen Prefecture 溫州, frequently called by its old name Yongjia. The Yongjia cluster was a group of elite men with medical interests all connected—at a minimum—by their relationship to Chen Yan.[370] It was Wang Shuo's text, *Easy and Simple Formulae*, however, which became the focus of the cluster.

Chen Yan achieved fame as a physician during his own lifetime. Lu Shanzu (盧檀祖, fl. late 12th-early 13th c.), one of the members of the cluster, reported that "There were more than seventy youths of the neighborhood who followed the gentleman [Chen Yan] in his travels … 鄉之從先生游者七十餘子 …"[371] Chen's *magnum opus*, *Treatise on the Essentials of Using the Three Causes to Evaluate the Origin of an Illness* (*Sanyin ji yibingyuan luncui* 三因極一病源論粹, 1174), often abbreviated as the *Formulae for the Three Causes* (*Sanyin fang* 三因方),[372] used the three causes of illness—internal (*neiyin* 內因), external (*waiyin* 外因), and neither external nor internal (*buneibuwaiyin* 不內不外因)—as rubrics to organize all types of illness. The three causes are originally mentioned in the *Treatise on Cold Damage*'s sister text, *Essentials of the Golden Coffer*, but Chen substantially modified their definitions. In particular, he moved many

[370] The existence of the Yongjia cluster and most of its texts was forgotten from the early Ming through the late 19th c. when a Wen Prefecture native, Sun Yiyan 孫衣言 and his son Sun Zhirang 孫治讓 rediscovered it. The contemporary scholar Liu Shijue 劉時覺 named it the Yongjia medical current (*Yongjia yipai* 永嘉醫派) in parallel to the Yongjia scholarly current (*Yongjia xuepai* 永嘉學派) which flourished at roughly the same time. I have termed it a cluster and not a current in accord with my distinction between the two as discussed in the introduction to This dissertation 2 of this dissertation; see Liu Shijue, *Yongjia Yipai Yanjiu*, 1–5.

[371] *Correcting Errors in Easty and Simple Formulae* (*Yijian fang jiumiu*, 1241), *juan* 1, *Yangwei tang*, in ibid., 242. Most of the Yongjia cluster texts have only been recently reconstructed. *Sanyin ji yibing fang*, *Yijian fang*, *Xu yijian fanglun* are the exceptions. *Sanyin ji yibing fang* has remained extant since its composition. The remaining three texts were rediscovered in Japan during the 20th century after having been lost since the early Ming.

[372] This is the title given by Chen Yan in his preface. The book is better known by the title *Formulae Using the Three Cuases to Evalute a Pattern of Illness* (*Sanyin ji yibingzheng fanglun* 三因極一病證方論); see author's preface, in Chen Yan and Wang Shuo, *Chen Wuze yixue quanshu*, ed. Wang Xiangli (Beijing: Zhongguo Zhongyiyao Chubanshe, 2005), 3.

of the causes which Zhang Ji classified as internal into the neither internal nor external category, leaving only the emotional excesses of the seven affects (*qiqing* 七情)—which Chen stressed as etiologies—as internal causes.[373]

Chen Yan's combination of the doctrines and methods of the *Inner Classic* and *Treatise* was idiosyncratic. On the one hand, he often gave *Inner Classic* doctrines precedence even when discussing cold damage. He used the associations of the six *qi*, for example, to argue that while Han dynasty (206 BCE-220 CE) authors (including Zhang Ji) thought all evils which invaded the exterior were located in the foot greater yang channel (*zu taiyangjing* 足太陽經), the actual reason cold damage began in the foot greater yang channel was the affinity of greater yang with cold *qi*. On the other hand, he expanded the application of the *Treatise*'s doctrines and formulae in significant ways. He frequently used the *Treatise*'s formulae to treat illnesses that were not caused by cold damage, and, even more strikingly, he applied the three-yin-three-yang system of the *Treatise* to the diagnosis of foot *qi* (*jiaoqi* 腳氣), a miscellaneous disease characterized by weakness and withering of the legs and progressive deterioration. In so doing, Chen broke with the Northern Song rule that the *Treatise*'s doctrines and methods could only be used in treating cold damage, but he did so unsystematically. Among all the miscellaneous diseases which he described, he applied the three-yin-three-yang system to foot *qi* alone. Likewise, although he usually used the *Treatise*'s formulae to treat miscellaneous diseases similar to the cold damage illnesses for which the *Treatise* used them, at times he used them in ways that have no connection to their use in the *Treatise*.[374] Moreover, at no point did he cite the *Treatise* to justify his use of such formulae.

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[373] *Sanyin jibingzheng fanglun*, *juan* 2, *sanyin lun*, in ibid., 36.

[374] E.g., he used Four Reversals Decoction (*Sini tang* 四逆湯) to treat vomiting due to cold in the stomach, a use which can also be found in the *Treatise*, but he used Poria-5 Powder (*Wuling san* 五苓散) to treat vomiting of blood

Wang Shuo's *Easy and Simple Formulae* differed greatly in style from Chen's *Formulae for the Three Causes*. Chen's book contains more than one thousand formulae divided into eighteen fascicles and heavily interspersed with short doctrinal treatises. Moreover, it decidedly favors the literati-physician medicine approach as revealed by both the quantity of doctrine included and its commitment to addressing the problem of the diversity of illness by means of medical doctrines found in the Northern Song medical canon. By contrast, *Easy and Simple Formulae* is a single fascicle, contains only forty formulae, and emphasizes diagnosis by symptomatology without overt reference to doctrine. This last point drew the criticism of some of the younger members of the Yongjia cluster. Shi Fa (施發, fl. early 13th c., styled Zhengqing 政卿), for example, complained, "But he makes no distinction between patterns of vacuity and repletion, cold and heat. He calls it *Easy and Simple*, but is this not too simple? 然其於虛實冷熱之證無所區別, 謂之為《易簡》, 無乃太簡乎?"[375] In short, Wang Shuo's text had more in common with the proven-formulae and authoritative-source texts of the Northern Song than with literati-physician medicine. Although Wang drew the majority of his formulae from Chen Yan's book, he omitted the doctrinal detail and appeal to the authority of antiquity characteristic of the literati-physician approach. It is significant that while there is no evidence that Wang Shuo practiced medicine as an occupation, both Chen Yan and Shi Fa are known to have done so.

In spite of approaching medicine from a very different vantage point, Wang Shuo continued Chen Yan's practice of using formulae from the *Treatise on Cold Damage* for illnesses other than cold damage. Unlike Chen, however, he does not apply the *Treatise*'s formulae to miscellaneous diseases whose symptoms differ markedly from the symptoms they

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due to overeating, a use which has no parallel in the *Treatise*. See *Sanyin ji yibingzheng fang*, *juan* 9 and 11, *shangwei tuxue zhengzhi* and *han'ou zhengzhi*, in ibid., 109, 135.

[375] *Further Easty and Simple Formulae* (*Xu yijian fanglun* 續易簡方論), *juan* 6, in Liu Shijue, *Yongjia Yipai Yanjiu*, 234.

originally treated in the *Treatise*. Furthermore, Wang explicitly addresses the novelty of this practice. In discussing True Warrior Decoction (*Zhenwu tang* 眞武湯), Wang says:

> Taking this medicinal is appropriate not only in cases of yin-pattern cold damage; it is also suitable for all people who suffer from vacuity-taxation with fear of cold, high fever, cough, and dysentery to take it.
> 此藥不惟陰證傷寒可服, 若虛癆之人, 憎寒狀熱, 咳嗽下痢, 皆宜服之.

Wang uses this formula to treat a miscellaneous disease with the same symptoms as the cold damage illness for which it was originally designed, but is aware of the fact that doing so may be seen as innovative. Altogether, Wang includes seven formulae from the *Treatise*. For five of these, he includes miscellaneous diseases among the illnesses they treat. In all of these cases, the miscellaneous diseases being treated have symptoms identical or nearly identical to the cold damage illness the formula originally treated. Thus, while Wang never explicitly cites the *Treatise* as an authority, he is implicitly relying on it while simultaneously stretching the limits of its clinical applicability.

The Hejian Current

Liu Wansu, also known as Liu Hejian 劉河間 after his native place Hejian prefecture, was the founder and central figure of the Hejian current. Liu was a prolific writer and a famous physician. He is known to have authored four books, and numerous others are attributed to him or claim to present his teachings. He was heavily influenced by the *Inner Classic*'s doctrine of movements and *qi*, proclaiming that "… the essentials of the medical teachings lie in the five movements and the six *qi* …醫教要乎五運六氣."[376] He developed a highly influential reading of this doctrine in which the six *qi* were primarily understood not as external climatic factors, but

[376] *Thoughts on the Origin of Illnesses according to the Mysterious Pivot of the Questions on the fundamental* (*Suwen xuanming yuanbing shi* 素問玄機原病式, 1186), author's preface, p. 4a, in *Siku Quanshu*.

as internal conditions of the body. In particular, he focused on the problem of heat or fire, arguing that all of the six *qi* could generate or be generated by fire or heat.[377]

Although it is not certain that Liu Wansu himself wrote a text devoted to the *Treatise on Cold Damage*, texts purporting to present his teachings on cold damage constitute almost half of all known Hejian current texts (see Table 5-1). Moreover, the texts that Liu is known to have written clearly attest to the value he attached to Zhang Ji and the *Treatise*. Liu saw Zhang Ji as a minor sage, not the equal of the Yellow Emperor or Divine Farmer but far beyond what his contemporaries could easily understand:

> Zhongjing was a minor sage. Although Zhongjing's books have not completely encompassed the teachings of the sages, they fall only a little short of the sages. Their language is abstruse, such that for those who study it nowadays, it is still difficult. Therefore [the medicine] that contemporary people practice is all nothing more than [what is found in] recent formularies.[378]
> 仲景者，亞聖也。雖仲景之書未備聖人之教，亦几於聖人。文亦玄奧，以致今之學者，尙為難焉。故今人所習，皆近代方論而已。

He lamented that in spite of their best efforts, previous cold damage authors, such as Zhu Gong, had not completely grasped the "intent of the sage 聖人之意," which was to be found in the doctrine of the five movements and six *qi*.[379]

[377] E.g., *Formulae Clarifying the Yellow Emperor's Questions on the fundamental* (*Huangdi Suwen xuanming lunfang* 黃帝素問宣明 論方, 1186), *juan* 8, p. 1a-b, in ibid.; for a more detailed discussion of Liu Wansu's ideas, see Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 74–86.
[378] *Suwen xuanji yuanbing shi*, author's preface, p. 2a, in *Siku Quanshu*.
[379] *Suwen xuanji yuanbing shi*, author's preface, p. 3a, in ibid.

Texts Related to the *Treatise*	**Texts not Related to the *Treatise***
Direct Investigation of Cold Damage (*Shanghan zhige* 傷寒直格)	*The Abstruse Mechanism of the* Questions on the fundamental*: The Model of the Origin of Illness* (*Suwen xuanji yuanbing shi* 素問玄機原病式)
Categorized Collection on the Heart-Method of the Roots and Branches of Cold Damage (*Shanghan biaoben xinfa leicui* 傷寒標本心法類萃)	*Formulae Clarifying the* Yellow Emperor's Questions on the fundamental (*Huangdi Suwen xuanming lun fang* 皇帝素問宣明論方)
Heart-Essentials of Cold Damage (*Shanghan xinyao* 傷寒心要)	*Treatise on Preserving Life according to Pathomechanisms and Suitabilities of the [Six Climactic] Qi of the* Questions on the fundamental (*Suwen bingji qiyi booming lun* 素問病機氣宜保命集)
Liu Hejian's Medical Mirror for Cold Damage (*Liu Hejian shanghan yijian* 劉河間傷寒醫鑒)	*Newly Printed Essential Guidance on the* Questions on the fundamental *Explained Using Diagrams* (*Xinkan tujie Suwen yaozhi lun* 新刊圖解素問要旨論)
Heart-Mirror of Cold Damage (*Shanghan xinjing* 傷寒心鏡)	*Treatise on the Three Dispersion[-Thirsts]* (*Sanxiao lun* 三消論)
Seal of the Methods for Cold Damage (*Shanghan qianfa* 傷寒鈐法)	*Secret Essentials of Preserving Children* (*Baotong mifa* 保童秘要)
*Liu Hejian's Three Books on Cold Damage** (*Liu Hejian shanghan sanshu* 劉河間傷寒三書)	*18 Secret Numinous Formulae with Modifications* (*Jiajian lingmi shibafang* 加減靈秘十八方)
	Confucians Serve their Kin (*Rumen shiqin* 儒門事親)

Table 5-1: Texts Attributed to the Hejian Current

* This book is a compilation of the first three books in the "Texts Not Related to the *Treatise*" column—none of which is completely devoted to the *Treatise on Cold Damage*—making its title all the more striking

Like Cheng Wuji, Liu Wansu (and other Hejian-current authors) emphasized *Inner Classic* doctrine in interpreting the *Treatise on Cold Damage* but drew from very different parts of the *Inner Classic* and often arrived at very different conclusions. Cheng used the *Inner Classic* in a piecemeal fashion, drawing from whatever sections of the text he found useful in explaining a given line of the *Treatise*, but Liu had a more focused approach, emphasizing those parts of the *Inner Classic* which were devoted to either cold damage or the doctrine of movements and *qi*—

to which Cheng paid little attention.[380] In particular, Liu focused on the *Treatise on Fever* (*Re lun pian* 熱論篇), which allowed him to argue that "[The patterns seen in] the transmission of [cold damage] through the six channels from shallow to deep are all heat patterns. It is not an illness of yin-cold. 六經傳授，自淺至深，皆是熱證，非有陰寒之病."[381] In part, this argument rested on the ambiguity of the character *re* 熱, which literally means "heat" but in medicine also means "fever." When speaking of cold damage as a "heat/febrile illness (*rebing* 熱病)," [382] most interpreters of the *Treatise*, like Han Zhihe quoted above, saw the cause of the illness as cold which resulted, somewhat paradoxically, in a febrile illness. "Heat" for these authors primarily meant "fever," and the key factor that needed to be treated was the cold. This point of view resonated well with the *Treatise* itself, which prescribes warming formulae for the early stages of cold damage. The Hejian current approach, however, took the phrase "heat/febrile illness" more literally. After describing an argument identical to Han's, *Direct Examination of Cold Damage* (*Shanghan zhige* 傷寒直格, late 12th c.) argues, "When the *Inner Classic* says plainly that this is a heat illness, it is saying that the whole body is suffering an illness of heat *qi*《內經》既言熱病者，言一身為病之熱氣也."[383] From this point of view the key feature of cold damage was pathological heat, and therefore cooling formulae were necessary to treat it.

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[380] A series of charts, usually appended to the front of Cheng's commentary on the *Treatise*, does deal in detail with the doctrine of movements and *qi*, but the attribution of these charts to Cheng is unclear and neither the charts nor the doctrine of movements and *qi* are discussed in the remainder of the commentary.

[381] *Direct Examination of Cold Damage* (*Shanghan zhige* 傷寒直格, late 12th c.), preface, p. 1a, in *Siku Quanshu*. This is a quote attributed to Liu by the unnamed author of the preface, possibly the compiler of the text Ge Yong (葛雍, dates unclear).

[382] This phrase can also be rendered "hot illness" but I have reserved the term "hot disease" for the more specific usage of this phrase to refer to cold damage illnesses which do not manifest until summer, see the discussion of the broad meaning of cold damage above and in Chapter 1.

[383] *Shanghan zhige*, *juan zhong*, p. 1b, in *Siku Quanshu*; Ding Guangdi, "Shen tao Jin-Yuan sidajia lun huo," in *Zhang Zihe yanjiu jicheng*, ed. Qian Chaochen and Wen Changlu (Beijing: Zhongyi Guji Chubanshe, 2006), 591–592.

The Hejian current's approach to cold damage was unique but quite popular during the Jin and into the Yuan. It expanded on Song efforts at dealing with warm diseases and other heat illnesses that could arise in the course of cold damage, but overturned the unspoken Song rule that the *Treatise* had primacy over the *Inner Classic* in cold damage doctrine. In spite of the importance that Liu Wansu and his followers gave to *Inner Classic* cold damage doctrine, the treatment methods and formulae of the *Treatise* remained central to their clinical recommendations. In this regard, they closely resembled their Song predecessors, and they also continued the Song practice of restricting the use of the *Treatise*'s methods and formulae to actual cases of cold damage.[384]

Zhang Congzheng and his Attacking Method

Zhang Congzheng (張從正 1156-1228, styled Zihe 子和) is an excellent example of the fuzziness of medical currents' borders. His indebtedness to Liu Wansu is undeniable, but his ideas diverged from Liu's in important ways.[385] For this reason, some authors view him as part of the Hejian current while others do not.

A native of Sui Prefecture in what is now Henan province, Zhang was born into a family of physicians. He would eventually become an imperial physician, and his methods were influential enough that Li Gao would complain of their ascendancy in the capital on his arrival there, and Zhu Zhenheng would begin his medical career as Zhang's avid admirer. Although there is no evidence that Zhang ever studied with Liu Wansu, he was heavily influenced by Liu's

[384] Fabien Simonis states that Liu used the *Treatise* to argue for his heat etiology of madness (see Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 82), but the passage cited is actually found in *Suwen*, *juan* 12, *pian* 45, p. 12b-13a. See Chen Yongguo, *Chongguang Buzhu Huangdi Neijing Suwen*, 92–93.
[385] Ding Guangdi, "Shen tao Jin-Yuan sidajia lun huo," 592–593; Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 83.

ideas, as indicated by his use of Liu's formulae and praise of his methods: "One can only use Liu Hejian's acrid and cool formulae. For patterns [of illness caught] within three days, eight or nine out of ten will fully recover 止可用劉河間辛涼之劑, 三日以裏之證, 十痊八九."[386] Like Liu, he was also heavily influenced by the *Treatise on Cold Damage*. His debt to Liu and Zhang Ji was so great that Zhang Yizhai (張頤齋, fl. Yuan dynasty), in his preface to Zhang's *Confucian's Serve their Kin* (*Rumen shiqin* 儒門事親, early 13th c.)[387], said it was as if "… Changsha [Zhang Ji] and Hejian [Liu Wansu] had returned to life …長沙河間復生於世矣."[388]

The major point on which Zhang Congzheng's methods diverged from Liu Wansu's was his emphasis on the three "attacking methods (*gongfa* 攻法)" as principal treatments for all illnesses. The three attacking methods were sweating (*han* 汗), purging (*xia* 下), and vomiting (*tu* 吐).[389] These methods had along history, particularly in the treatment of cold damage. Zhang, however, drawing primarily on *Inner Classic* doctrines, generalized their application, arguing:

> It is not the case that this thing, illness, is something the body usually possesses. Whether it comes from outside and enters or is generated from within, it is always evil *qi*. When evil *qi* overcomes the body, it is acceptable to rapidly attack it.[390]
> 夫病之一物，非人參素有之也。或自外而入，或由內而生，皆邪氣也。邪氣加註身，速攻之可也。

Although his rationale was largely derived from the *Inner Classic*, the formulae that Zhang used, were often chosen from the *Treatise*. Because he used these methods in treating all types of

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[386] *Confucians Serve their Parents* (*Rumen shiqin* 儒門事親, early 12th c.), *juan* 1, *pian* 3, in Zhang Congzheng, *Zihe yiji*, ed. Chen Zengying et al., Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1994), 34.
[387] This text is a compilation of the work of Zhang and his students/admirers. For a discussion of its complex textual history see, Okanishi Tameto, *Sō izen iseki kō*, 826; Qian Chaochen and Wen Changlu, eds., *Zhang Zihe yanjiu jicheng* (Beijing: Zhongyi Guji Chubanshe, 2006), 5–7.
[388] This preface is found in a Yuan manuscript edition, ssee Okanishi Tameto, *Sō izen iseki kō*, 826–827.
[389] Zhang actually broadened the meaning of the three attacking methods such that vomiting included all methods that "move upward 凡上行者," sweating included all methods that "release the exterior 凡解表者," and sweating included all methods that "move downward 凡下行者;" see *Rumen shiqin*, *juan* 2, *pian* 13, in Zhang Congzheng, *Zihe yiji*, 64–65.
[390] *Rumen shiqin*, *juan* 2, *pian* 13, in ibid., 63.

illnesses—cold damage and miscellaneous diseases alike—Zhang broke down the Song dynasty division between these two.

An excellent example of Zhang Congzheng's use of the *Treatise*'s formulae to treat miscellaneous diseases has been highlighted by Fabien Simonis. In treating a case of postpartum "heart-wind," a form of madness, Zhang used a purgative formula found in the *Treatise*: "Whenever woman suffers heart-wind after childbirth … it is appropriate to use Stomach-Regulating Order the *Qi* Decoction … 凡婦人產後心風者 … 宜調未承氣湯 …"[391] In another part of the text, Zhang recommends Poria-5 Powder (*wuling san* 五苓散), another *Treatise* formula, for a miscellaneous disease: "When a child has unceasing watery diarrhea, she can take Poria-5 [Powder] and Assist the Original [Powder] in equal portions … 夫小兒水瀉不止，可服五苓與益元各停…"[392] Zhang's use of the *Treatise*'s formulae in these two instances was not arbitrary. The *Treatise* already possessed a clinical script in which yang-brightness disease heat caused delirious speech (*zhanyu* 譫語) and Stomach-Regulating Order the *Qi* Decoction was used to treat it.[393] As Fabien Simonis has shown, Liu Wansu had already drawn upon this and similar scripts in the *Treatise* to argue that heat was the major cause of madness, but Liu never used the *Treatise*'s formulae to treat madness.[394] Zhang Congzheng, on the other hand, used precisely the formula the *Treatise* recommended. Likewise, the *Treatise* already recommended promoting urination in patients with unceasing diarrhea, and Poria-5 Powder was not only the premier urine-promoting formula of the *Treatise*, but was also explicitly recommended for patients suffering from sudden-turmoil disease (*huoluanbing* 霍亂病)—an illness characterized

[391] *Rumen shiqin*, *juan* 11, *huoleimen*, in ibid., 273; Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 87.
[392] *Rumen shiqin*, *juan* 5, *shuixie buzhi jiushisan*, in Zhang Congzheng, *Zihe yiji*, 156.
[393] *Shanghan lun*, *juan* 2, *pian* 5, p. 19b-20a, line 29, in Zhang Ji, *Zhongjing quanshu*, 366–367.
[394] Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 82.

by incessant nausea and vomiting.[395] Zhang merely took the recommendations of the *Treatise on Cold Damage* and applied them to similar patterns of illness that occurred in the course of miscellaneous diseases. Unlike Chen Yan, his use of the *Treatise*'s formulae remains clearly rooted in the *Treatise* itself; unlike Wang Shuo, his use of the *Treatise*'s formulae was not guided by symptomatology alone but was instead based on doctrines and principles he found in the *Treatise*. He read the *Treatise* not as a collection of clinical scripts for dealing with cold damage, but as a collection of clinical scripts that could be used with any illness. In so doing, he inaugurated a practice that became common during the Ming dynasty and has remained common up to today, but he never explicitly theorized his approach.

The Yishui Current

Although Zhang Yuansu (styled Jiegu 潔古) is generally considered the founder of the Yishui current, it was his student Li Gao who became its central figure. Zhang, a native of Yi Prefecture in modern Hebei, passed the civil service exam as a young man, but lost his degree through violating the taboo on the use of characters in the personal names of deceased emperors. He then devoted himself to medicine, becoming a famous physician. Li Gao, usually known by his literary name Dongyuan 東垣, was a native of Zhending, also in modern Hebei. Li came from a wealthy family and only took up the study of medicine after watching his mother die when the doctors summoned could reach no agreement about the nature of her illness. After searching for some time for a qualified teacher, he finally encountered Zhang Yuansu and went on to become Zhang's most famous student.

[395] *Shanghan lun*, *juan* 4, *pian* 7, p. 15a, line 159 and *juan* 7, *pian* 13, p. 2b, line 386, in Zhang Ji, *Zhongjing quanshu*, 412, 466.

The Yishui current's ideas are often seen as something unrelated to, or even a reaction against, the Northern Song dominance of the *Treatise on Cold Damage*.[396] A quote attributed to Zhang is often used in support of this argument: "Ancient formulae are not appropriate for modern illnesses; on the contrary they will harm people 古方今病，甚不相宜，反以害人."[397] This quote, however, is only found in a preface written after Zhang's death. No similar statements are found in Zhang's surviving works; on the contrary, they make extensive use of formulae from the *Treatise* to treat both cold damage and miscellaneous diseases. Moreover, Li Gao quotes Zhang as saying:

> Zhongjing's medicinals are the method of the myriad generations. They are called the ancestors of all formulae. If later physicians take the methods of the *Inner Classic* as a model and study the intent of Zhongjing, then they can be taken as teachers.[398]
> 仲景藥為萬世法，號群方之租，治雜病若神，後之醫家，宗《內經》法，學仲景心，可以為師矣。

The only relevant statement found in Zhang's own writings also indicates his high regard for Zhang Ji's texts. After discussing a subtle difference in two of the *Treatise*'s formulae, Zhang notes:

> One treats exterior vacuity and one treats interior vacuity. Thus for each I have stated its primary use. When later people use ancient formulae, if they extend [the same method] to each [formula], then they will know its root and not cause mistakes.[399]
> 一則治其表虛，一則治其裏虛，是各言其主用也。後人之用古方者，觸類而長之，則知其本，而不致差誤矣。

From this quote, it would appear that Zhang's objection to ancient formulae was not so much to the formulae themselves as to contemporary physicians' poor understanding of how to use them.

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[396] E.g., Hanson, *Speaking of Epidemics*, 39.
[397] Preface, *Awakening to the Origin of Medicine* (*Yixue qiyuan* 醫學啟原, date unclear, in Zhang Yuansu, *Yixue qiyuan*, 1.
[398] *Elminating Doubts Regarding Internal and External Damage* (*Neiwaishang bianhuo lun* 內外傷辨惑論, 1247), *juan xia*, *linzheng zhifang*, in Li Gao, *Dongyuan yiji*, ed. Ding Guangdi, Zhongyi guji zhengli congshu (Beijing: Renmin Weisheng Chubanshe, 1993), 44.
[399] *Yixue qiyuan*, *juan xia*, *12, yongyao beizhi*, *6, yongyao yongfang bian*, in Zhang Yuansu, *Yixue qiyuan*, 162.

In his own lifetime Li Gao himself was known as an expert on cold damage,[400] and composed a text on cold damage that is no longer extant. Wang Haogu, who studied medicine under both men, saw their knowledge of Zhang Ji's writings as the foundation of their medical skill: "… the venerable Jiegu, Zhang Yuansu … and the gentleman Dongyuan, Li Gao [who was styled] Mingzhi all revered Changsha Zhang Zhongjing's formulae … 潔古老人張元素 … 東垣先生李杲明之，皆祖長沙張仲景湯液."

The Yishui current was best known for Li Gao's concept of internal damage (*neishang* 內傷). The term "internal damage" was not novel. It is found as early as the *Inner Classic*, but in Zhang and Li's hands it became far more important in textually based medicine than it had ever been before. In the *Inner Classic*, internal damage was not a technical term, but simply a literal phrase referring to any form of harm suffered by the interior of the body. This included damage due to incorrect acupuncture technique,[401] emotional excess,[402] incorrect use of medicinals,[403] damage to the bones caused by deep-rooted ulcers,[404] and any damage to the viscera generally.[405] Zhang Yuansu's views on internal damage are difficult to reconstruct. The majority of the texts he authored appear to have been lost during the Mongol conquest of the Jin, and none of his surviving texts discuss internal damage.[406] The only surviving evidence of Zhang's views are quotes attributed to him in the works of Wang Haogu. According to Wang, Zhang associated internal damage specifically with the three-yin diseases (*sanyin bing* 三陰病) seen in the

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[400] *Yuan History* (*Yuanshi* 元史, 1370), *fangji*, *Li Gao liezhuan*, in He Shixi, *Zhongguo lidai yijia zhuanlu*, 1:301; Wang Haogu, *These Things are Difficult to Know* (*Cishi nanzhi* 此事難知, 1264), preface, in Wang Haogu, *Wang Haogu yixue quanshu*, 115.
[401] *Suwen*, *juan*14, *pian* 50, p. 1a, in Chen Yongguo, *Chongguang Buzhu Huangdi Neijing Suwen*, 100.
[402] *Lingshu*, *juan* 19, *pian* 66, p. 6a, in *Lingshu (zuishanben) [Xinkan Huangdi neijing Lingshu]*, 83.
[403] *Suwen*, *juan* 11, *pian* 40, p. 7a, in Chen Yongguo, *Chongguang Buzhu Huangdi Neijing Suwen*, 83.
[404] *Lingshu*, *juan* 21, *pian* 75, p. 10a, in *Lingshu (zuishanben) [Xinkan Huangdi neijing Lingshu]*, 93.
[405] *Lingshu*, *juan* 4, *pian* 4, p. 4b, in ibid., 20.
[406] The preface, written at the request of Li Gao, to *Yixue qiyuan* states that the majority of Zhang's works were lost in 1232, when Li Gao suffered through the Mongol siege of Kaifeng, see Zhang Yuansu, *Yixue qiyuan*, 1.

Treatise on Cold Damage. Wang titles his discussion of Zhang's ideas, "The Venerable Jiegu's Precedent on Internal Damage to the Three Yin 潔古老人內傷三陰例." The primary argument of this section is drawn from several passages in the *Inner Classic*, one of which discusses how to diagnose damage to the three yin.[407] Although there is nothing in the quote from Zhang Yuansu indicating that the three yin referred to are identical with the three yin of the *Treatise*, three of the seven formulae recommended are taken from the *Treatise*, and Wang himself, in a comment, opines explicitly that the three yin mentioned are in fact the three yin of the *Treatise*:

> When they have not seen Zhongjing's medicines, people do not speak of the three yin. Once they have seen that Zhongjing's medicinals [for yin patterns] are divided into three, everyone comes to know that there are three yin.[408]
> 未見仲景藥時, 人皆不言三陰, 既舉仲景藥分而三之, 人皆得知有三陰。

Once again we see that far from disparaging the *Treatise*, Zhang Yuansu was actively broadening the scope of its application.

In forming his internal damage doctrine, Li Gao relied upon the *Treatise* even more heavily than Zhang had, but he also took the concept of internal damage in a new direction. As seen in Wang Haogu's excerpts of his texts, Zhang Yuansu spoke of internal damage to any of the three yin, which correspond to the spleen, kidneys, and liver. Li, however, emphasized internal damage to the *qi* of the spleen and stomach, the organs of digestion, which he held were the root of vitality in the body.[409] Moreover, for Zhang internal damage illnesses were always cold in nature, but Li argued that in their early stages, internal damage illnesses could present with fever and other signs of heat, making it difficult to distinguish them from cold damage

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[407] *Brief Precedents Reagarding Yin Patterns* (*Yinzheng lueli* 陰證略例, 1243), *Jiegu laoren neishang sanyin li*, in Wang Haogu, *Wang Haogu yixue quanshu*, 77–78; The relevant *Inner Classic* passage is found in *Suwen*, *juan* 3, *pian* 9, p. 9a, in Chen Yongguo, *Chongguang Buzhu Huangdi Neijing Suwen*, 28.
[408] *Yinzheng lueli*, *Jiegu laoren neishang sanyin li*, in Wang Haogu, *Wang Haogu yixue quanshu*, 77.
[409] *Piwei lun*, *juan shang*, *piwei xushi chuanbian lun* in Li Gao, *Dongyuan yiji*, 57–59.

illnesses.[410] The inspiration for this idea was the epidemic that ravaged northern China in the wake of the Mongol conquest. Li was present at Kaifeng during and after the Mongol siege, and recorded his observations of the epidemic which followed the fall of the city:

> … After the siege was lifted, the people of the capital who did not become sick numbered one or two in ten thousand. The sick and dead followed one upon another without end. The capital has twelve gates. Each day [the dead] sent out through each gate numbered two thousand if there were many and no less than one thousand if there were few. It was like this for two to three months. How can it be that all of these one million people contracted wind-cold external damage? It need not be said that by and large people during the siege were damaged by irregular eating and drinking and excessive toil. Owing to two or three months of being hungry in the morning and full at night, rising and sleeping irregularly, and suffering from cold and heat due to being homeless, their stomach *qi* had been exhausted for a long time. If one day they were damaged by eating excessively, and, furthermore, the treatment [of their illness] was inappropriate, then there is no doubt they would die. It was not only Daliang that was this way. Far away in Zhenyou and Xingding, in places like Dongping, Taiyuan, and Fengxiang, after the siege was lifted, there were no cities which did not suffer illness and death in the same way. In Daliang, I personally witnessed that there were some [physicians] who effused [patients'] exterior. Some used croton fruit to eliminate [the evil *qi*]. Some used Order the *Qi* Decoction to purge [the patients]. Suddenly the illness would become chest-bind and jaundice, and [the physician] would then use Sunken into the Chest Decoction or Pill taken with Virgate Wormwood Decoction. There were none that did not die. It must be that [the illness] was not cold damage to begin with. Because the treatment was mistaken, it changed and appeared similar to the pattern of true cold damage. It is all the fault of the medicine.[411]
>
> … 解圍之後，都人之不受病者，萬無一二，既病而死者，繼踵而不絕。都門十有二所，每日各門所送，多者二千，少者不下一千，似此者幾三月。此百萬人豈俱感風寒外傷者耶。大抵人在圍城中，飲食不節及勞役所傷，不待言而知。自其朝飢暮飽，起居不時，寒溫失所，動經三兩月，胃氣虧乏久矣。一旦飽食大過感而傷人，而又調治失宜，其死也無疑矣。非惟大梁為然，遠在貞祐、興定間，如東平，如太原，如鳳翔，解圍之後，病傷而死，無不然者。余在大梁，凡所親見，有表發者，有以巴豆推之者，有以承氣湯下之者，俄而變結胸、發黃，又以陷胸湯、丸及茵陳湯下之，無不死者。蓋初非傷寒，以調治差誤，變而似眞傷寒之證，皆藥之罪也。

According to Li, internal damage due to irregular diet and fatigue could produce what we would now call a febrile epidemic. The cold, generally chronic illness seen in Zhang Yuansu's version of internal damage is here transformed into a hot, potentially acute, febrile illness.

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[410] *Neiwaishang bianhuo lun*, *juan shang*, *bian laoyi shoubing biaoxu buzuo biaoshi zhizhi* in ibid., 16.
[411] *Neiwaishang bianhuo lun*, *bian yinzeng yangzheng*, in ibid., 8–9.

Although Li Gao in this passage attributes the deaths primarily to mistreatment, the remainder of this text, of which this is the opening section, reveals that the difficulty facing these physicians was formidable. The following sections of the text argue that both external damage—by which Li Gao primarily means cold damage—and internal damage can produce fever and chills, aversion to wind, heat in the hands, changes in the mouth or nose, alterations in the patient's breathing, headache, difficulty getting up and moving about, and loss of appetite. We are even told that internal damage combined with the heat of summer can produce a condition similar to the yang-brightness disease described in the *Treatise on Cold Damage*, which produces high fevers, extreme sweating, and a large, surging pulse.[412] Li explains in detail how to recognize whether these symptoms are caused by internal or external damage, but the distinctions are often subtle and were all based on Li's personal experience and reasoning. No previous medical text had made these differentiations. Li Gao refashioned internal damage into a complement for cold damage, producing similar febrile illnesses but demanding very different treatment methods.

Li Gao wrote two books explaining his point of view on internal damage: *Eliminating Doubt Regarding Internal and External Damage* (*Neiwaishang bianhuo lun* 內外傷辨惑論, 1247) and the *Treatise on the Spleen and Stomach* (*Piwei lun* 脾胃論, 1249). In these books, Li Gao relied primarily on the *Inner Classic* to justify his doctrinal innovations, but also made occasional references to the *Treatise on Cold Damage*. Li's preference for using sweet and warm (*ganwen* 甘溫) medicinals to treat internal damage, for example, was justified in part by precedents from the *Treatise*:

> Some may say, "How can sweet and warm [medicinals] generate blood? And these aren't even medicinals for the blood!" [I] reply, "Zhongjing's method is to use ginseng [which

[412] *Neiwaishang bianhuo lun*, *juan shang*, in ibid., 9–16.

> is sweet and warm] to supplement the blood when it is vacuous. When the yang is flourishing, then it is able to generate yin-blood."[413]
> 或曰：甘温何能生血，又非血藥也。曰：仲景之法，血虛以人參補之，陽旺則能生陰血也。

Moreover, in treating internal damage Li relied heavily on the *Treatise*. The *Treatise*'s formulae appear frequently in Li's two books on internal damage, as do formulae from the *Treatise*'s sister text, *Essentials of the Golden Coffer*. *Eliminating Doubts Regarding Internal and External Damage* includes a list of four formulae for treating basic patterns of the spleen and stomach, two of which are taken from the *Treatise*.[414] A similar list found in the *Treatise on the Spleen and Stomach* adds two more formulae from the *Treatise* while replacing one formula from the *Treatise* with a closely related formula from *Essentials of the Golden Coffer*.[415]

In addition to the use of the *Treatise*'s formulae, Li Gao incorporated another element of the *Treatise* into his own writing. As noted by the Song author Zhang Lei (quoted above), the *Treatise on Cold Damage* "describes the method of increasing or reducing [the quantity of medicinals] and adding or removing [medicinals].[416] Several formulae in the *Treatise* are followed by explanations of how to modify the formula to deal with different clinical situations. For example, following the instructions for preparing Four Reversals Decoction for Unblocking the Pulse (*tongmai sini tang* 通脈四逆湯), we find the following advice:

> If [the patient's] face is red, add nine stalks of scallion. If his abdomen aches, remove the scallions and add two *liang*[417] of peony root. If he vomits, add two *liang* of fresh ginger. If his throat is sore, remove the peony root and add one *liang* of platycodon root. If the

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[413] *Piwei lun*, *juan zhong*, *changxia shire weikun youshen yong qingshu yiqi tang lun*, in ibid., 92; An almost identical passage is found in *Neiwaishang bianhuo lun*, *juan zhong*, *yinshi laojuan lun*, in ibid., 19.
[414] *Neiwaishang bianhuo lun*, *juan zhong*, *sishi yongyao jiajian fa*, in Li Gao, *Dongyuan yiji*, 21.
[415] *Piwei lun*, *juan xia*, *piwei sun zai tiao yinshi shi hanwen*, in ibid., 124.
[416] Postface, in Pang Anshi, *Shanghan Zongbing Lun*, 206. This postface is no longer this dissertation of any editions of the text, but is found in the *Mount Ke Collection* (*Keshan ji* 柯山集), *juan* 44.
[417] The *liang* is the most common unit of weight mentioned in the *Treatise on Cold Damage*, its exact measure remains unclear, but estimates range from 13-16g. By the Song, the *liang* was taken to weigh approximately 40g, and medicinal formulae tended to use the *qian* 錢, one-tenth of a *liang* or approximately 4g, as the primary measure. From the Song onwards, most authors used one *qian* of a medicinal for each *liang* specified in the *Treatise*.

> diarrhea stops but the pulse is not palpable, remove the platycodon root and add two *liang* of ginseng root. When the illness is fully in accord with the formula, only then [should the patient] take it.[418]
> 其面色赤者，加蔥九莖。腹中痛者，去蔥，加芍藥二兩。嘔者，加生薑二兩。咽痛者，去芍藥，加桔梗一兩。利止脈不出者，去桔梗，加人參二兩。病皆與方相應者，乃服之。

The inclusion of modifications for formulas was not typical in either the pre-Song formulary literature or the miscellaneous disease sections of formularies from the Song and after. Li Gao, however, included extensive instructions for modifying the formulae he presented in his books. For his most famous formula, Supplement the Middle and Increase the *Qi* Decoction, Li introduces no fewer than twenty-four modifications, written in a style very similar to those found in the *Treatise* and frequently recommending the same modifications: "If there is abdominal pain, add five *fen*[419] of white peony root and three *fen* of licorice root 腹中痛者，加白芍藥（五分）、甘草（三分）." While Li Gao's formula-modifications were not always identical to those found in the *Treatise*, his sense of their necessity and the form in which he wrote them further reveal both his concern to adapt medicinal formulae to a specific instance of illness and the influence of the *Treatise on Cold Damage* on his methods of managing this concern.

Li Gao thus extended Zhang Yuansu's use of formulae from the *Treatise on Cold Damage* to treat miscellaneous diseases. He frequently and unselfconsciously recommended the *Treatise*'s formulae for illnesses due to internal damage. Moreover, his doctrine of internal damage, though devoted to describing miscellaneous diseases, reshaped internal damage into a mirror image of cold damage. While the category of miscellaneous diseases had always been the complement of cold damage diseases in a quantitative sense—whatever was not cold damage was a miscellaneous disease—Li Gao's formulation of internal damage was a complement of

[418] *Shanghan lun*, *juan* 6, *pian*11, p. 11b, line 317, in Zhang Ji, *Zhongjing quanshu*, 451.
[419] One *fen* is one-tenth of a *qian* (see note 111 above). In Li Gao's time it was approximately equal to 0.4g.

cold damage in a more qualitative sense. Their etiologies were parallel. Evils coming into the body from the outside caused cold damage; evils generated within the body itself caused internal damage. This fact was highlighted by Li's preference for the previously rare term "external damage" as a synonym of cold damage. Most striking, however, are the ways in which Li Gao unified the treatment of cold damage and internal damage. He used cold damage formulae to treat internal damage, and followed the example of the *Treatise* by giving extensive guidance on how to modify his formulae to adapt to varying clinical situations. Finally, Li Gao's interest in internal damage, like Northern Song author's interest in cold damage, was strongly motivated by his experience of epidemic disease. Li Gao's doctrine of internal damage blurred the distinction between miscellaneous diseases and cold damage, but did not collapse it. His student, Wang Haogu, would take up that task.

Wang Haogu

Wang Haogu was born in Zhao Prefecture in what is now Hebei. He was a younger fellow student of Li Gao's during Zhang Yuansu's life. On Zhang's passing, he took Li Gao as a teacher. Wang's attachment to the *Treatise on Cold Damage* is well attested. Of the six texts that can be reliably attributed to him,[420] three deal explicitly with some aspect of the *Treatise* as their primary topic. In his preface to *These Things are Difficult to Know* (*Cishi nanzhi* 此事難知,

[420] Wang's first preface, dated 1238, to *Materia Medica for Decoctions* (*Tangye bencao* 湯液本草, 1248) mentions four texts he authored: *Brief Precedents on Yin Patterns* (*Yinzheng lueli* 陰證略例), *Supreme Commander of the Bastion of Medicine* (*Yilei yuanrong* 醫垒元戎, 1237), *Gathering Heroes' Discussions of Macules* (*Banlun cuiying* 癍論萃英, date unclear), and *Supplementing the Legacy of Qian Yi* (*Qian Yi buyi* 錢乙補遺, lost). A sixth text, *These Things are Difficult to Know* (*Cishi nanzhi* 此事難知, 1264), is extant with a preface by Wang. Twelve other texts are attributed to Wang, but are only attested in late sources and are now lost.

1264), Wang explains that his decided to study with Li Gao because Li could explain the *Treatise on Cold Damage* correctly.[421]

Wang Haogu continued Li Gao's use of the *Treatise*'s formulae for miscellaneous diseases, but he did so explicitly. In his 1238 preface to *Materia Medica for Decoctions* (*Tangye bencao* 湯液本草, 1248), Wang notes that he has at times "… used cold damage prescriptions to treat miscellaneous diseases……以傷寒之劑，改之雜病." Moreover, he also applied the *Treatise*'s doctrines and nosological divisions to miscellaneous diseases. He particularly emphasized applying the six-channel nosology of the *Treatise* to all types of illness. In his short text on childhood macular rashes, *Gathering Heroes' Discussions of Macules* (*Banlun cuiying* 癍論萃英, date unclear), Wang opined, "On the whole, treating [macules] in the same way you treat cold damage is the most insightful opinion. Use medicinals in accord with the [six] channels. You cannot be remiss 大抵傷寒同治，最為高論，隨經用藥，不可闕也." [422] In *Supreme Commander of the Bastion of Medicine* (*Yilei yuanrong* 醫壘元戎, 1237),[423] Wang divided all illnesses among the six channels of the *Treatise on Cold Damage*—completely ignoring the distinction between cold damage and miscellaneous diseases. In the conclusion of the book, he made his point clear by repudiating the distinction between methods (*fa*

[421] Preface, in Wang Haogu, *Wang Haogu yixue quanshu*, 115. This preface is dated 1308, "至大改元;" however, this is inconsitent with the dates of Wang's other works. It is generally believed to be an error for 1264 "至元."
[422] *Banlun cuiying*, *Haicang Laoren banlun*, in ibid., 168.
[423] Fabien Simonis translates this title as *Medical Ramthis dissertations Against the Yuan Barbarians*. This translation is possible--and the double entendre may have been intentional--but neither the preface nor the body of the book supports this reading. It is more likely that the term "supreme commander (*yuanrong* 元戎)" is a reference to Zhang Ji, whose ideas are the backbone and structure of the text. Simonis, "Mad Acts, Mad Speech, and Mad People in Late Imperial Chinese Law and Medicine," 106.

法)—associated with the *Treatise*—and formulae (*fang* 方)—associated with miscellaneous diseases:

> Those in the world who treat cold damage have methods; those who treat miscellaneous diseases have formulae. Although this is so, it is still incorrect. I say that in treating miscellaneous diseases there are also methods; in treating cold damage there are also formulae. Methods are precisely formulae; formulae are precisely methods. Is there a difference [between them]?
> 世之治傷寒有法，療雜病有方，是則是矣，然猶未也。吾謂治雜病亦有法，療傷寒亦有方，法即方也，方即法也。豈有異乎。

For Wang Haogu, all illnesses could be understood and treated using the methods and formulae of the *Treatise on Cold Damage.* Like Zhang Zihe of the Hejian current, Wang's views anticipated ideas which would become widespread at the end of the Ming dynasty, almost four centuries later, but during his lifetime, they were by no means universally accepted.

The Danxi Current

By far the most influential of the medical currents that developed in the 13th and 14th centuries, the Danxi current exerted tremendous influence on text-based medicine in the Ming dynasty, rivaling—though never eclipsing—the influence of the *Treatise on Cold Damage* and Zhang Ji.[424] The founder and center of the Danxi current, Zhu Zhenheng is better known by the epithet Danxi 丹溪—the name of a creek near his home. A native of Wu Prefecture in what is now Zhejiang, Zhu studied Learning of the Way Confucianism and sat for—and failed—the civil service examinations twice before turning to medicine.

Zhu's approach to medicine self-consciously synthesized the approaches of his 13th-century predecessors. By selectively emphasizing different aspects of previous medical authors'

[424] Ibid., 136–201.

work, he was able to forge a synthetic style of practice that he claimed combined the best of all medical ideas. Zhu also placed great stress upon the individualization of treatment. Recent scholarship has frequently presented this individualization as an innovation of Zhu's, but, as this chapter has shown, the variability of illness and the consequent need to individualize treatment was a central concern of elite medical thought from the Song onwards. Zhu Zhenheng was certainly one of the most vocal champions of this method, but he was by no means the first.

Zhu's approach to using the formulae from the *Treatise on Cold Damage* demonstrates that the trend I have been tracing—of greater use of the *Treatise*'s ideas and formulae in treating miscellaneous diseases—was neither ubiquitous nor linear in its progress. In spite of the fact that he had studied Wang Haogu's works,[425] he never recommends the use of a formula from the *Treatise* for a miscellaneous disease. He did not, however, ignore the *Treatise*. Like Li Gao before, him, Zhu composed a text, now lost, discussing the *Treatise*. In his lambasting of the Song dynasty *Formulae of the Pharmacy Bureau*, *Exposition on the Bureau's Formulary* (*Jufang fahui* 局方發揮, date unclear), Zhu substantiated his criticisms by copious citations from both the *Treatise on Cold Damage* and its sister-text *Essentials of the Golden Coffer.* These quotations and paraphrases are so frequent that they constitute the bulk of the text. In spite of the obvious esteem in which he held the *Treatise* and the authoritative way in which he quoted from it, Zhu held that the *Treatise*'s formulae were for treating cold damage and not miscellaneous diseases. Near the beginning of the *Exposition*, he divides the totality of illness between Zhang Ji and Li Gao: "Treating external contraction by effusing and scattering is Zhongjing's method; treating internal damage by supplementing and nurturing is Dongyuan's method. Who can alter

[425] *Insightful Views Produced by Investigation of Things* (*Gezhi yulun* 格致餘論, 1347), author's preface, in Zhu Zhenheng, *Zhu Danxi yixue quanshu*, ed. Tian Sisheng (Beijing: Zhongguo Zhongyiyao Chubanshe, 2006), 3.

them? 治外感以發散，仲景法也，治內傷以補養，東垣法也，誰能易之?”[426] Zhu thus retained the Song distinction between cold damage and miscellaneous diseases, and none of the many case histories attributed to him by his students show him treating miscellaneous disease—the latter reconceived as forms of internal damage—with formulae from the *Treatise*. His student, Wang Lü, however, would break with Zhu's precedent on this point.

Wang Lü

Wang Lü (styled Andao 安道) was born in Kunshan in modern-day Jiangsu. He was a student of Zhu Zhenheng, but his views on the *Treatise*'s range of application—as seen in his quote which opened this chapter, were quite different. For Wang, Zhang Ji's methods were so profound that if properly understood, "later people can neither add to it nor go beyond it 後人莫能加莫能外矣."[427] Like Wang Haogu, Wang Lü addressed the division of cold damage and miscellaneous diseases directly:

> Zhongjing's established methods are the standard for later generations under heaven; therefore, you can borrow them to use for other illness … In treating miscellaneous diseases, there is not one [disease for which] you cannot borrow them.[428]
> 夫仲景之立法，天下後世之權衡也，故可借焉以為他病用 … 凡雜病之治，莫不可借也。

For Wang Lü, as for Wang Haogu, the *Treatise on Cold Damage* transcended the division between cold damage and miscellaneous diseases.

Wang did not, however, conclude that there was no need for further development in medicine. The section of *Collection on Returning to the Medical Classics* (*Yijing suhui ji* 醫經溯洄集, late 14th c.) from which this passage is taken is devoted to arguing *against* the use of the

[426] *Jufang fahui*, in ibid., 34.
[427] *Yijing suhui ji*, *Zhang Zhongjing shanghan lifa kao*, in Wang Lü, *Yijing suhui ji*, 20.
[428] *Yijing suhui ji*, *Zhang Zhongjing shanghan lifa kao*, in ibid., 20–21.

Treatise's formulae in cases of warmth and summerheat illnesses (*wenshubing* 溫暑病). For Wang, the real goal was to understand Zhang Ji's "intention (*yi* 意)" in establishing a particular method. If you understood his intention, you would use his methods and formulas correctly. If you failed to understand his intention, you would turn the *Treatise on Cold Damage* into a "calamity for later generations 貽禍後人."[429] In the case of warm disease and summerheat, Wang argued that one had to understand that Zhang Ji's intention in writing the *Treatise* had been to treat illnesses in which external cold immediately produced an illness (*jibing shanghan* 即病傷寒). Such illnesses were cold in nature and demanded the use of the warm medicinals seen in Zhang Ji's signature formulae. On the other hand, warmth and summerheat illnesses were examples of illnesses in which external cold hid within the body and only manifested as an illness in the spring or summer. Such illnesses were hot in nature, and warm medicinals were contraindicated. Wang attributed this gap in the *Treatise* to the ravages of time. The parts of the *Treatise* describing such treatments had been lost, but by understanding Zhang Ji's intentions, one could know that different methods and formulae were necessary for treating warm and summerheat illnesses:

> If Zhongjing had established formulae for warmth and summerheat, it would certainly not be like this. There would have to be separate methods. I merely regret that his legacy was lost and not transmitted.[430]
> 若仲景為溫暑立方，必不如此，必別有法，但惜其遺佚不傳。

The incompleteness of the *Treatise* was thus not an indictment of its value any more than its universal applicability was an end to all medical learning. The importance of the *Treatise* lay in the intentions of which it was an outer manifestation. By understanding these intentions, a doctor could learn to respond to the variability of illness with an equally variable repertoire of

[429] *Yijing suhui ji*, *Zhang Zhongjing shanghan lifa kao*, in ibid., 19.
[430] *Yijing suhui ji*, *Zhang Zhongjing shanghan lifa kao*, in ibid., 25.

treatments. The *Treatise on Cold Damage* was the solution to the problem of the mutability of illness, but only if it was read as a living document.

CONCLUSION: The Dioscorides of Chinese Medicine

In his study of Renaissance natural history, Brian Ogilvie describes the formation of the discipline of natural history:

> … natural history was invented in the sixteenth century, but Renaissance naturalists drew upon ancient and medieval predecessors in the study of nature. Steeped in medical humanism, the first generation of naturalists turned naturally to the Roman and especially Greek classics to delineate their subject and defend their methods. Subsequent generations pursued lines of inquiry set by the ancient and medieval authors even as those authors works received less and less attention.[431]

In particular, Dioscorides' work on medicinal substances, *De materia medica*, drew the admiration of early Renaissance naturalists. In their eyes, Dioscorides was the "model of the careful naturalist" and his work "served as a pattern for descriptive natural history."[432] Renaissance natural historians learned how to "do" natural history by studying Dioscorides. Ogilvie enumerates several reasons why Dioscorides was chosen as a model instead of Aristotle, Theophrastus, or Pliny—all of whose texts on natural objects were available to Renaissance naturalists. Dioscorides' text had a reputation for reliability, it was medical (most early naturalists were also physicians), and it focused on description of medicinal substances—their appearance, where they were found, how they were used—and largely ignored philosophical questions, a trait that appealed to the dominant humanist point of view.[433] In short, Dioscorides was *useful* to Renaissance naturalists. *De materia medica* combined the pedigree of antiquity and

[431] Ogilvie, *The Science of Describing*, 87.
[432] Ibid., 137.
[433] Ibid., 137–138.

a reputation for accuracy with an approach to the study of nature that was in harmony with the prejudices and preferences, goals and desires of Renaissance naturalists.

In its initial stages, then, natural history consisted of a combination of philological work and an effort to match Dioscorides' descriptions to plants familiar to Renaissance naturalists, but—especially for naturalists living in Northern Europe—there were difficulties. Dioscorides' descriptions were far from perfect, and as naturalists honed their own descriptive skills and explored territory Dioscorides had never known, they came to see their own work as superior to his. Respect for Dioscorides became merely respect for one's forbears: he was no longer pragmatically useful.

The parallel with the history of *Treatise on Cold Damage* is instructive. Like their Renaissance counterparts, Song intellectuals placed a high value on Antiquity. The Song witnessed a resurgence of interest in the practical application of ancient ideas and methods to contemporary problems. The *Treatise* was both an ancient text and had a well-established reputation for efficacy in medical circles. Moreover, Zhang Ji's emphasis on the variability and of illness—and the need to adapt treatments in accord with that diversity—matched the Song elite's concerns over the diversity of illness. The *Treatise on Cold Damage* was *useful* because it could be read as an answer to this central problematic of Song elite medical thought.

Like Renaissance natural history, Northern Song cold damage studies were focused to a large extent on solving the philological problems the *Treatise on Cold Damage* presented (as discussed in chapter 4). In the Southern Song and Jin dynasties, however, writing about the *Treatise* took on new dimensions. Liu Wansu combined the *Treatise*'s ideas with the *Inner Classic*'s doctrine of the five movements and six *qi*, arguing for a view of cold damage as an illness dominated by heat *qi*. Zhang Zihe adapted the *Treatise*'s three "attacking methods" to

form a new therapeutic approach that emphasized expelling evil *qi* from the body, and Li Gao used the *Treatise* as a basis to refashion internal damage as the complement of cold damage, arguing against Zhang Zihe and emphasizing the necessity of warming and supplementing medicinals.

In spite of this near abandonment of philological enquires into the *Treatise on Cold Damage*, the *Treatise* itself—unlike Dioscorides' *De materia medica*—did not become obsolete. It remained an essential support for any medical argument and its medical purview expanded in a slow and uneven but relentless progress to include all of cold damage and miscellaneous diseases—the entirety of medicine at the time. Arguments about the need for contemporary formulae to treat contemporary illnesses served to emphasize the need to individualize prescriptions—a technique learned from the *Treatise* itself—and make room for new ideas and practices—whose validity was always defended, at least in part, by reference to the *Treatise*.

Why did the *Treatise on Cold Damage* remain pertinent to medical discourse in the Southern Song, Jin, and Yuan dynasties while Dioscorides gradually became irrelevant? The wider cultural contexts of Renaissance Europe and middle-period China no doubt offer many explanations, but such broad arguments run the risk of falling into generalization and stereotypes. I will therefore limit myself to discussing a few specific points. First, Renaissance naturalists were primarily concerned with identifying and distinguishing various plants and animals. If Dioscorides misidentified a plant or described it incorrectly or incompletely, not only was he incorrect, but his description would also be superseded by any more accurate or complete account.[434] Human illnesses and healing, the *Treatise*'s topic, were less susceptible to clear refutation. It was always possible to explain any given failure of treatment in terms that did not

[434] It is worth noting that a similar process occurred in the Chinese *materia medica* tradition. New *materia medica* both built on and superseded previous ones. As a result, our knowledge of older *materia medica* texts is the result of arduous reconstructions by Qing and modern scholars.

impugn the *Treatise.* Second, for Renaissance naturalists, commentary on Dioscorides and other early sources was limited to correcting their errors and giving modern identifications for the plants and animals described. Chinese medical authors used commentary for far more diverse purposes. Commentary could justify treatment choices and doctrinal innovations, it could tie together historically unrelated texts, it could argue against other author's ideas, and it could establish the commentator's erudition. The flexibility of commentary among Chinese physicians allowed the *Treatise* to remain pertinent to a large range of issues and useful in many endeavors. Finally, while *De materia medica* offered a model of detailed natural description, it did not—and given the two constrains mentioned above, could not—offer a true solution to the central problematic of Renaissance natural history: how to meaningfully describe and catalog the diversity of living things. By contrast, the *Treatise on Cold Damage* not only offered a model for the treatment of illnesses, it also offered both the conceptual solution to the problem of the variability of illness—the individualization of treatment—and a set of practical tools—in the form of diagnostic methods, treatment principles, and medicinal formulae—which could serve as the basis for realizing this conceptual solution—for treating actual illnesses.

For all of these reasons, the *Treatise on Cold Damage* remained actively useful to Chinese physicians even after the initial phases of popularization and explication were over. The *Treatise* was useful in arguing with other physicians, in convincing patients to follow your advice, and in the learning and practice of medicine. Literati physicians first learned to deal with the complexity of illness by studying the *Treatise*, and their successors continued to learn this skill by studying it. So long as it continued to play these important roles, the *Treatise on Cold Damage* would continue to occupy a place in the heart of literati-physician medicine.

CONCLUSION
Continuity and Rupture Revisited

The medical crisis of trust that began in the Northern Song came to an end in the Yuan. As discussed in Chapter 3, there is no purely intellectual or analytical means of closing such crises. They can only be resolved through social action. In this case, the "solution" was the inadvertent result of social and political changes unrelated to medicine.

As Robert Hymes has shown, in spite of steadily increasing competition in the civil service exams, few elite men chose medicine as a career in the Northern and Southern Song. This pattern changed in the Yuan, however, as increasing numbers of gentlemen turned to medical practice to earn their living. Hymes argues that the primary force behind this change was the abolition of the examination system in the early Yuan. With the exams cancelled, not only did elite men have no possibility of gaining government office, they also had no need to hire teachers to prepare their sons for the exams. As a result, the market for teachers—traditionally the fallback career for men who failed in the exams—also collapsed. Even when the exams were reinstated, the Yuan government continued to limit the number of official positions available to people from southern China—by now its demographic, intellectual, cultural, and economic heart. The elite needed new career options that were considered worthy of their status.[435] The literati-physician approach to medicine, with its vision of medicine as an elite practice and doctors as scholar-physicians, provided ample justification for elite men who became practicing physicians. The triumph of the literati-physician approach was thus secured by the development of a new social order within which it played a useful role, and thenceforth, all literati medicine was literati-physician medicine.

[435] Hymes, "Not Quite Gentlemen?"

The other two approaches to literati medicine—proven formulae and authoritative sources—offered no comparable role for elite physicians. They continued to see doctors as a potentially troublesome, non-elite group whose ministrations were best avoided by judicious self-medication. Most of the works produced within these two approaches were assimilated into the victorious literati-physician model. The intellectual compatibility of the approaches, as discussed in Chapter 3, made this a relatively simple task. Particularly unpalatable examples—such as Su Shi's use of Sagely Powder (*Shengzi san* 聖子散) to treat all epidemics—were remembered as object lessons illustrating the need to carefully differentiate each individual case of illness.[436]

The triumph of literati-physician medicine also secured the position of the *Treatise on Cold Damage*. From the Yuan onward the *Treatise* was the central text of literati medicine. While not every medical author or physician shared Wang Lü's enthusiastic evaluation of its importance,[437] no one could ignore it. They could argue with it, supplement it, or even correct it, but no author writing on medicinal therapy could completely neglect it.[438] The *Treatise* has remained useful to doctors from the Yuan up to modern times, and this usefulness is the most common explanation of its central place in modern Chinese medicine. In fact, however, the utility of the *Treatise* is a by-product of its centrality. Literati medicine, the ancestor of modern Chinese medicine, was built on the foundation of the *Treatise on Cold*

[436] Su Shi and Sagely Powder continue to be used as object lessons in universities of Chinese medicine to this day.
[437] See Chapter 5.
[438] Texts on acupuncture, of which far fewer survive, usually refer to the *Inner Classic* corpus instead, but acupuncture remained overwhelmingly a non-elite practice until the 20th century. It was at best on the margins of literati medicine. See Leung, "Medical Learning from the Song to the Ming."

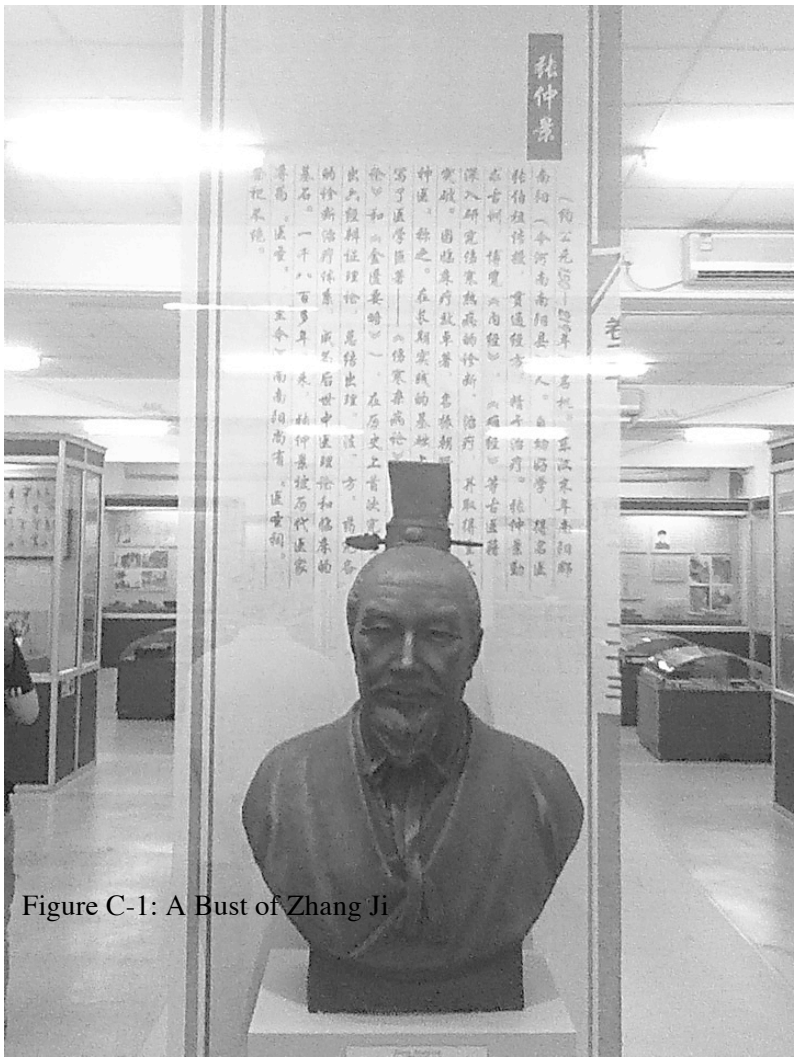

Figure C-1: A Bust of Zhang Ji

Damage. The *Treatise* was used as a model for how to deal with the problem of illness's complexity and mutability by individualizing treatments for each particular case of illness. So long as that problem and this solution remain central to Chinese medical practice—in other words, so long as modern Chinese medicine continues to perpetuate the cultural tradition of literati medicine—the *Treatise on Cold Damage* will remain useful because it articulates the core principles on which that medical tradition is based.

In the physical center of the Beijing University of Chinese Medicine's Museum of Chinese Medical History there is a bust of Zhang Ji (see the image above). All of the other

exhibits encircle it like planets orbiting the sun. I do not know if the placement of this bust was intentional, but it is an apt metaphor for Zhang Ji's place in Chinese medicine. Zhang Ji and the *Treatise on Cold Damage* were the heart of literati medicine as it formed from the Song through the Yuan, and they remain so in modern Chinese medicine.

As Volker Scheid observes, the modern understanding of Chinese medicine is tightly intertwined with the concepts of "tradition" and the "traditional."[439] The latter term in particular is highly problematic. Even though Chinese speakers do not use the term Traditional Chinese Medicine (TCM) by which Chinese medicine is most widely known outside of Asia, they do refer to it as "traditional medicine (*chuantong yixue* 傳統醫學)" in contrast to "modern medicine (*xiandai yixue* 現代醫學)." As this example illustrates, the "traditional" is inseparable from the "modern," and both are the productions of a self-conscious modernity with little relevance to the traditions described. The traditional is the longing for escape from the modern, repressed and projected onto the subjugated other. Although the term is used to refer to Chinese medicine in modern China, it is merely one pole of a continuum whose opposite pole is represented by efforts to scientize and systematize Chinese medicine. The contrast between the two makes the artificiality of the distinction all the more apparent.

Tradition as I refer to it is in no way associated with the "traditional." Rather, as discussed in the introduction to Part II, I define tradition as a "continuity within a group that shares a common commitment to … an evolving problematic and method."[440] Traditions in this sense are living things. Though they may retrospectively invent their own history and invoke a sense of community greater than appears justified by the actual connections among their members, they are not fictions imposed after the fact. The members of a living tradition

[439] Volker Scheid, "Chinese Medicine and the Problem of Tradition," *Asian Medicine* 2, no. 1 (January 2006): 59–71.
[440] Ogilvie, *The Science of Describing*, 10.

participate in a shared identity even as they reshape that identity and the contents of their tradition.[441] The commitment to a basic problem and an approach to resolving that problem is the thread that provides continuity across time and in spite of very real and often dramatic change. The emergence and decline of this commitment is, I would argue, one of the few reliable methods of defining the emergence and decline of a tradition, of recognizing when change rises to the level of rupture.

All three forms of literati medicine that emerged in the Northern Song shared a problematic: the protean character of illness. Literati-physician medicine, and thus—from the Yuan onward—literati medicine as a whole, drew upon the *Treatise on Cold Damage* to put forward a novel approach to dealing with that problematic: individualizing treatment. Although elements of this approach can be seen in pre-Song medical texts, the attention devoted to it and the detail in which it is articulated from the Song onward are clearly new. It therefore constituted a new medical tradition. This approach to managing the complexity of disease has taken on many forms and been called many names. Some authors urged physicians to search for the root (*ben* 本) or source (*yuan* 源) of illness. Others developed lists of factors to be considered during diagnosis.[442] Most recently, Chinese government textbooks and schools—and therefore the majority of doctors—have portrayed "pattern differentiation [as the basis of] determining treatment (*bianzheng lunzhi* 辨證論治)" as the core of Chinese medical practice.[443] While these methods differ in various degrees, they are all realizations of the basic literati medicine approach of individualizing treatment in response to the ever-changing and subtle nature of illness. For this

[441] In addition to Ogilve, I am influenced in my position on tradition by Scheid, "Chinese Medicine and the Problem of Tradition"; and Alasdair C. MacIntyre, *After Virtue: A Study in Moral Theory* (Notre Dame: University of Notre Dame Press, 1984), 221–222.
[442] See Chapter 5.
[443] Volker Scheid, *Chinese Medicine in Contemporary China* (Durham: Duke University Press, 2002), 200–237.

reason, we may say that modern Chinese medicine is not merely a descendant of Song literati medicine, it is the same cultural tradition that has survived for more than a thousand years.

It is interesting to note that modern physicians of Chinese medicine frequently assert that the *Treatise on Cold Damage* is the earliest example of pattern differentiation. This claim has generally been rejected by historians—and it is clear that the medicine Zhang Ji advocated differed in many important ways from that practiced in the Song or today—but this assertion does capture the indebtedness of literati medicine to the *Treatise* as the initial inspiration and model for the individualization of treatment incarnated in a modern form as pattern differentiation. Likewise, the *Treatise's* Song editors' claim that they were reviving the medicine of antiquity that had been forgotten certainly resonates with the fact that they were creating a new form of medicine through appropriation from of the *Treatise*. Finally, the dissonance I noted between Song and pre-Song medical texts was a visceral reaction to the rupture that occurred in that period, and the sense of familiarity that I found in the *Treatise on Cold Damage* was a tacit recognition that I was literally reading the foundations of Chinese medicine as I know it.

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