Patterns, Syndromes, Types:

Who Should We Be and What Should We Do?

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Author's Note: As one of the founding editors of EJOM, the current editorial team kindly invited me to contribute to this anniversary issue. As the invitation came too late in the day for me to write something entirely new, I have drawn on sections from a forthcoming chapter for a book edited by Laurent Pordié entitled Epistemological Diversions. Science, Technology and Medical Cultures to produce something that EJOM readers will hopefully find of interest. The ideas outlined in both this article and the book chapter are, in turn, part of a wider research project funded by the Wellcome Trust entitled Beyond Tradition: Ways of Knowing and Styles of Practice in East Asian Medicines, 1000 to the Present. For the same reasons, the bibliography provided is indicative and not complete. Readers are referred to the book chapter, which will be published some time in 2014.

Introduction

In their wonderful book on the history of science during the last three centuries, Lorraine Daston and Peter Galison (2007) show how biologists, physicists and other scientists concerned with the objective depiction of reality through the medium of the atlas repeatedly change their notion of what counts as objective. They conclude that efforts at being objective invariably involve ethical commitments about what it means to be a scientist. Importantly, too, the very dialectic between objectivity and subjectivity on which their practices depend, inverts the meaning of the terms as originally employed by the German philosopher Emmanuel Kant. Thus, at the very heart of science we find not stability but changeable human practice.

Chinese medicine is much the same and I have devoted much of my academic research to exploring these changes. In my book Chinese Medicine in Contemporary China, for instance, I argue that the practice of 'pattern differentiation and treatment determination' or bianzheng lunzhi 辨證論治, far from dating back to the mists of time, was created in the late 1950s and 1960s to become the fulcrum of what we today call TCM. This analysis is confirmed by the work of Bridie Andrews, Eric Karchmer, Sean Lei, Kim Taylor and others (Andrews 1996, Karchmer 2010, Lei 1998, Taylor 2004). Yet, I know from numerous discussions that many TCM practitioners feel extremely uncomfortable with these ideas. How can TCM have been

'invented' in the 1950s or 60s? Does not the fact that notions such as pattern/syndrome or the eight principles (bagang 入鋼) have been employed for hundreds if not thousands of years clearly demonstrate that we have always done what we do today?

Some of these anxieties are due to issues of terminology. 'Invented traditions' to historians have a somewhat different meaning than practitioners of Chinese medicine may impute into the term. However, in some way they do go to the heart of what we do and thus of who we think ourselves to be. If Chinese medicine is not two thousand years old, if its core concepts and practices continually change, what are the foundations that should anchor our practices? TCM textbooks and the Chinese state would answer this question in a modernist fashion. TCM is nothing but the synthesis of everything that has come before and thus, by definition, the final product of Chinese medicine's long history. Others seek a way out of this crisis of legitimisation by calling for a return to more authentic forms of Chinese medicine unpolluted by the distorting influences of what is commonly – but extremely simplistically – seen as the distorting influence of Maoism on Chinese medicine. This seems to be a driving impulse between the many classical, canonical, neo-classical, traditional, lineage or oral tradition based styles of Chinese medicine that have become popular over recent years. The argument appears to be that these forms of practice are clinically more effective because they have not been subjected to the distorting influences of politics and culture. That seems illogical to me. If TCM reflects in its practice and organisation specific cultural and political influences, then surely that also was the case for physicians in the Han, or the Song, or the Qing, or for those in Korea and Japan. Lineages are no less a social institution than modern universities and no greater guarantor of authenticity or clinical results. And we surely cannot anchor our tradition in written texts on the one hand but insist that only orally transmitted secrets make them effective in practice.

In this article I will therefore seek to chart a more constructive engagement with the messy and sometimes uncomfortable diversity of our tradition and its history. To this end, I will sketch out a brief biography of a concept that is at the very heart of what we do. This concept is zheng 証/證, commonly translated

as pattern or syndrome. For reasons of space, my biography will limit itself to roughly the last one thousand years. Likewise, I can only outline issues that deserve a more comprehensive discussion. Despite these limitations, however, I believe my biography is sufficiently strong and interesting to allow me to draw a number of conclusions and hopefully inspire reflection and debate.

Beginning in the Song: the first node of bifurcation

In 1076, in the course of a series of sweeping reforms aimed at promoting the efficacy of state bureaucracy and its ability to serve the needs of the people the Song court established the Imperial Pharmacy Service. The Service bought medicines, processed them into pills, powders and pastes, and sold them at below-market price to the public. During times of epidemic it even distributed them for free through its own pharmacies. These pharmacies were initially established in the capital but at the height of its influence in 1151, the Pharmacy Service operated seventy outlets in all major prefectures. Between 1078 and 1252, the Pharmacy Service also compiled and distributed a series of official formularies. These formularies listed around three hundred prescriptions that had been collected from skilled physicians and after evaluation by members of the Pharmacy Service judged to be effective. The formularies served as the basis for the preparation of the prescriptions manufactured and sold by the Pharmacy Service, but they were also distributed more widely in order to 'benefit the people [with their] illnesses' as the official Song History would later state (Goldschmidt 2008, 2009).

To this end, the formularies were organised initially into five and later, in the revised edition, into ten chapters. Chapters might be devoted to one or more specific medical disorders, such as 'Cold damage' (傷寒 shanghan) or 'Phlegm drool' (痰飲 tanyin), but they could also list formulas according to medical specialities such as eye disorders, or women's and children's disorders. Each formula entry stated the indications before listing the ingredients, followed by the method of preparation. For instance, the entry on the formula Separate the Heart Qi Drink (分心氣飲 fen xingi yin) in chapter 3 of the Formulary of the Pharmacy Service for Benefitting the People in an Era of Great Peace reads:

'Treats any disharmony of gi in both men and women. These often arise from grief, sorrow, worry, or anger gi damaging the spirits; or from worrying while eating; or from affairs not proceeding as planned. These lead the constrained gi to accumulate without dispersing so that it tarries in between the diaphragm so that its [movement] is not smooth. This leads to focal distension and oppression in the Heart and chest, deficiency distension in the flanks, choking with obstructed passage, belching and sour reflux, vomiting and nausea, dizziness and blurred vision, fatigue in the

four extremities, a wan yellow complexion, bitter taste and dry tongue, reduced intake of food and drink and gradual emaciation; or deficiency constipation in the Large Intestine; or deficiency focal distension of the diaphragm in the aftermath of an illness with no desire for food and drink. It treats any combination of these.' (Chen Zheng 陳承 et al.1730)

Under another formula of the same name listed a few pages further down we learn: 'It treats the same zheng as the previously listed Separate the Heart Qi Drink' (Chen Zheng 陳承 et al. 1730). It follows that the indication for a prescription at the time was not what we would nowadays think of as a disease but a distinctive combination of symptoms and signs referred to as zheng. This term is commonly translated into English as 'syndrome', 'pattern' or 'type' and many modern Chinese physicians do, indeed, think of it as such. However, in as much as zheng only acquired these meanings in the course of the 20th century, we need to be careful of imputing them into Song dynasty medical practice. Thus, in the first ever Encyclopaedia of Chinese Medicine published in 1921, the Shanghai based scholar physician Xie Guan 謝觀 defined zheng as, 'The external expression of an internal illness.... It testifies to the illness of the internal organs and guides therapy.' In its reference to organ malfunctions, a reference that is entirely absent in many of the zheng described in the Pharmacy's Formulary, Xie's definition reflects Republican era politics. For organs, present in both Chinese and Western medicine, provided a space for marking out commonality and difference that a definition of zheng as the external manifestation of a disordered 'qi dynamic' (氣機 qiji), which would have been more in line with the Formulary but unintelligible to biomedicine, would have lacked. Yet, in its emphasis on explicating a relationship between exterior and interior, Xie's definition does maintain a link not only to the usage of the term in the history of Chinese medicine but also to the etymological origins of the term zheng as the verification of phenomena by means of words.

The literary critic Stephen Owen (1992) argues that the entire history of Chinese literary thought begins with the problem of recognising what something truly is in particular instances rather than, as say in Plato, with a search for abstract ideals to which instances might be compared. That 'inner' nature manifests in 'outer' phenomena was therefore invariably accepted as given. What distinguishes those who know from those who do not is their ability to correctly identify within the shifting complexity of external manifestations 'that from which it comes' by means of a particular attention. Yet, even those who know still face the problem of capturing such relationships in spoken language 言 and even more so within the scope of a literature 文 that

aims to endure over time and to reach across different contexts of practice.

The Song literati culture in which the Pharmacy Service's Formularies were produced was characterised by a belief that it was both possible and necessary to produce such literature; or, to put it another way, that a transparent relationship between words and things was attainable. There existed, furthermore, a widening of intellectual interests that went beyond 'the classics' in order to place such knowledge on a sound intellectual footing. Wang Anshi 王安石 (1021-1086), one of the leading reformers of the time, for instance, wrote:

'If one were only to read the Classics, it would not be enough to know the Classics. I thus read everything, from the hundred schools and various masters to [such medical texts] as the Classic of Difficulties 難經 and the Basic Questions 素聞, the pharmacopeia and various minor theories, and I inquire of everyone down to the farmer and the craftswoman.' Wang Anshi and Song thinkers like him sought such knowledge not merely for its own sake but to order affairs of the state for the purpose of 'benefitting the people'. The work of the Pharmacy Service demonstrates that these aspirations did not exhaust themselves in empty words. However, the Song state equally purposefully employed the medicine it created as a tool of governance. Thus it set out to standardise and supervise medical practice and to displace local customs in areas into which it was expanding through the strategic imposition of imperially sanctioned forms of health care delivery.

The Formularies' articulation between illness and therapy mediated by zheng was an exemplary product of these efforts that succeeded in aligning all of these various inputs and demands into a workable practice. It is predicated, first of all, on the elite's belief that words are able to capture and communicate the coherence of phenomena across different contexts of practice. It assumes that external manifestations, if read in the correct way, match to internal disease states on the one hand and to effective prescriptions on the other. It constitutes a manual for organising and, if necessary, changing local practice. To this end, it downgrades in the description of zheng aspects of medical practice like pulse taking that are more closely embodied, more difficult to put into words, and that resist being moved across different contexts of practice in favour of more straightforward symptom lists. Yet, in as much as these lists continue to include specialist terms such as 'deficiency distension' (虛張 xuzhang) or 'Lung deficiency' (肺虛 feixu) they remain tied to a distinctive cultural discourse and heritage. This discourse transcended that of a narrow professional elite but it was distinctive, nevertheless,

in its framing of medical problems as bodily zheng rather than as spirit possession or ghost affliction.

Scholarly medicine: the second bifurcation

Not surprisingly, resistance to this articulation of medical practice arose both from the so-called shamanic healers (巫 wu) that imperial medicine sought to displace and from elite physicians. These physicians shared the Formularies' focus on zheng but were cut out of the medical market by the Pharmacy Service's attempt to detach health care delivery from specialist expertise. If the former simply continued to do what they had always done, the latter challenged the imperial vision of health care on the terrain of elite discourse by redefining the very terms that structured medical practice. Thus, when in 1347 the Yuan dynasty physician Zhu Danxi 朱丹溪 (1281-1358) composed a critique of the Imperial Pharmacy entitled Elaborations on the Pharmacy's Formulary 局方發揮 he focused on its deployment of zheng in the very first sentence of his argument:

"The Formulary of the Pharmacy" is a book by means of which one can look up prescriptions on the basis of zheng. Even though one takes medicines in the form of prescriptions, there is no need to consult a physician who would adjust [the prescription] or [modify the ingredients] through [different modes] of preparation. All one has to do is pay for the selected pill or powder and all disease and pain can be alleviated and cured. The intention of benefiting the people can thereby said to have been realised. From the Song dynasty to the present day, court and local officials abided by [the Formulary] as a method [of governance]. Physicians transmitted it as [the foundation] of their trade. The sick depended on it as the foundation of their life. Everyone studied it and thereby turned its [form of medicine] into a social custom. Only my humble self has suspicions [as to its usefulness]. Why should that be?' (Zhu Danxi 朱丹溪 1347b)

Zhu was not the first to advance such a critique. However, more than anyone else, he was able to synthesise the disparate styles of practice of the newly emergent scholar physicians (儒醫 ruyi) into a single person-centred medicine. He furthermore succeeded in aligning this practice with core tenets of Neoconfucianism and thereby with the culture of the southern elite to which he addressed himself. With the fall of the Northern Song in 1127 and the move of the capital to Hangzhou, the cultural centre of China had shifted south. The Jiangzi river delta in particular, a region commonly referred to as Jiangnan, became the commercial and intellectual hub of the country, whose physicians likewise came to dominate the production of medical knowledge until well into the 20th century. This southward shift of economic and cultural power was accompanied by important social transformations.

Under the Northern Song elite career strategies were oriented entirely towards the central government and office holding. This gradually changed over the course of the Southern Song as an ever increasing pool of candidates competed for the same number of positions. Following the Mongolian conquest and the fall of the Southern Song in 1279, official office became even more difficult to obtain for Han Chinese. With vertical strategies for social advancement closed off, the elite increasingly oriented towards their locale to become what modern scholars refer to as the 'local gentry.' Occupations like medicine emerged as possible alternatives to an official career for members of this gentry elite, allowing scholars to engage in intellectual activities even as they earned a living and benefitted the common good. Intellectually, this elite was attracted to and, in turn, transformed by broad renaissance-like intellectual currents, whose proponents emphasised the possibility of direct personal access to the coherences underpinning the operations of the world and thereby to the principles that should guide ethical behaviour and living. As member of this southern elite, a disciple in the direct line of the leading Neoconfucian intellectual Zhu Xi 朱熹 (1130-1200), and a scholar who had turned physician only in his mid-30s, Zhu Danxi embodied all of these trends in his own person. As a southerner, he looked for a style of medicine that matched the needs of his elite gentry clientele, for which he found the acrid warming prescriptions of the Formulary too harsh. As a Neoconfucian scholar he required a model of medical practice that honoured its literary heritage without being weighed down by it. As a working physician, he needed to convince others that his skills rather than medicines alone guaranteed clinical results. As a Confucian gentleman, his medical practice had to be driven by benevolence rather than profit. Zhu laid out a solution that met all these demands by answering the rhetorical question with which he had concluded the introductory paragraph of his *Elaborations*: 'The ancients [divided physicians into] spirits, sages, workers, and technicians when discussing medicine. They also said that [the practice] of medicine [depends on] conception 意. For even if they possess [skills] imparted through transmission as well as profound scholarly attainment, they still need to adapt these strategically to changing circumstance. This is comparable to the skills of a general who faces the enemy, or those of a captain at sea. Certainly, unless one strives to the utmost [to embody] a gentleman's subtle [skill] to at times go against the norm, does one not fail to live up to being a physician? He thus cannot simply take formulas used by previous generations because they were effective and apply them to the treatment of the diverse illnesses of today's people. That would be [as stupid as the man from Chu] who tried to remember the place in the river where he had lost his sword by cutting a mark into the side of his boat, or the son of

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Bo Le, who when searching for a horse relied solely on drawings and thereby mixed up a toad with a horse. That someone should attain their goal in this way surely will be accidental.' (Zhu Danxi 朱丹溪 1347b)

Stripped to its essence, what Zhu proposed was to substitute the government's policy of benefitting the people through centrally organised health care policies with a style of medical practice that roots the same ethical objectives in the agency of individual scholar physicians. Precisely for this reason, Zhu argues, it produces superior clinical outcomes. Hyping potential gains, Zhu's vision convinced others to invest the effort it took to become a scholar physician and thus came to dominate elite medical practice in China for the next five hundred years.

Conceptions and judgement: the second bifurcation developed

In post-Song scholarly medicine as conceived by Zhu Danxi zheng do no longer speak or even exist by themselves. Of course, disease still manifested externally in various symptoms and signs. In fact, from the late 16th century onward a new character 症, pronounced in the same way as zheng, came into usage to denote specifically these external manifestations of illness (Li Zhizhong 李致重 1995). In literati medical discourse, however, the older zheng continued to be used but with a meaning that reflected the changed orientations of scholarly medical practice. Instead of standardised symptom lists as in the Formulary, the term now denoted constellations of meaningful but heterogeneous bits of information filtered out of the noise of surface signs by the practising physician. Besides bodily symptoms reported by the patient and signs revealed through pulse diagnosis or visual inspection, this might include information about a person's age or constitution, their place of residence, dietary habits, or anything else that pointed to the patho-dynamic

or internal root (本 ben) of a given disorder (Volkmar 2007). A zheng as noted down in a scholar physician's case record might thus consist solely of a pulse reading, or it might involve a longer narrative that traced the development of an illness in more detail.

These zheng as constellations were meant to capture the specificity of a unique illness episode. As such they became meaningful only within the signifying practices of individual Heart/ minds (vi xin). This practice was build on the premise, initially developed from Neoconfucian philosophies but subsequently intermingled with Chan Buddhist and Daoist ideas, that the properly cultivated Heart/mind has the capacity of penetrating to the deeper coherences (理 li) that underly the sensory world of phenomena. A broad-based familiarity with things, principles and methods formed the foundation but the goal was always the realisation of knowledge in the context of concrete practice. Successful clinical practice was thus built on a succession of insights (悟 wu) rather than the knowledge of facts or the possession of techniques. As a recurring trope in scholarly medical discourse put it, only the capacity of flexibly adapting lifeless methods to the exigencies of continually emergent situations turned them into productive medicine that was truly alive and therefore effective.

Remembering his own apprenticeship, Zhu Danxi recounts how in over eighteen months of training his teacher Luo Zhiyi 羅志義 never wrote out the same identical prescription once. Instead, he modified the formulas and strategies he had memorised to match more precisely with what his patients presented (Zhu Danxi 朱丹 溪 1347a). Five hundred years later, Fei Boxiong 費伯雄 (1800-1879), the most famous Jiangnan physician of his time, reiterated the continued validity of this approach including the metaphors that underpinned it.

'Skillful action relies on customary rules [of practice]. Reality, however, is never constrained by such rules. [The famous general] Yue Zhongwu did not bother too much with mapping out the deployment of troops in great detail. He reasoned that the deployment of troops [in given formations] prior to going into battle is standard practice. The ingenuous use [of these forces in battle], instead, is grounded entirely in our heart/mind. Above all, [he was convinced] that the most important [element of success is the ability] to react flexibly to events as they unfold [on the battle field]. How excellent these words are! In using ancient formulas I, too, favour this [strategy].' (Fei Boxiong 費伯雄 1864)

Both Zhu Danxi and Fei Boxiong referred to the specific faculty of the Heart/mind that made it possible to turn dead models into living effective practice as yì 意. Yì, like zheng, is a concept with multiple meanings that preclude translation by means of a single English term. In Chinese literary thought, *yì* frequently denotes the conceptions of things through which the Heart/mind grasps the external world. These conceptions, in turn, become the source of literary or poetic expression. Yì, therefore, is an awareness located both before and beyond words. The poet Mei Yaochen, for instance, defined *yì* as something vague and indeterminate that through its very haziness guaranteed authenticity. For, 'when a writer has attained it in his own heart/mind, the reader will comprehend it through yi' precisely because the meanings in the images conveyed through poetry and language 'appear beyond the words' 見於言外. (Owen 1992, 376-8). Similarly, for the Song statesman and philosopher Wang Anshi, yì denoted the conceptions one makes out in the work of the sages on which one models the formulation of concrete policies.

That 'medicine is yi' 醫者意也 because effective practice resides in the embodied subjectivity of the practising physician had first been asserted by the imperial physician Guo Yu 郭玉 (fl. 89-105). Re-emphasised by Zhu Danxi it became the slogan and guiding principle for scholar physicians in late imperial China. The Ming dynasty physician Wan Quan 完全 (1500-1585), for instance, employed yì as a method for understanding and responding not only to the nature but also the meaning of an illness (Volkmar 2007). A little later, the influential scholar physician Yu Jiayan 喻 嘉言 (1585-1664), recounted how he had dedicated his life as a physician to understanding illness by way of yì. Yu emphasised that this pursuit might necessitate moving towards a state where he would actively seek to embody his patients' illness (Yu Jiayan 喻嘉言). Neither was he averse to administering unorthodox treatment if he believed this was required in order to produce a cure. The mediating capacities of *yì* as necessary link between focused perception and effective action thus rested not merely on cognition but extended to bodily practices, ethical orientations and an aesthetics that perceived of lack of detail, the indeterminate, and that which can be experienced but not put into words not as a hindrance but as essential to the production of effective medical practice.

Moving towards empiricism: the third bifurcation

Cultivated by scholar physicians from Zhu Danxi to Fei Boxiong, yì thus provided the embodied foundation of a truly personalised medicine:

'If [a physician] is brilliant in his considerations and perfect in his skills, he will adapt his [treatment] to the [individual] circumstances [of each illness]. And, since the circumstance of an illness may vary one thousandfold, he will establish

ten thousand different [therapeutic] patterns.' (Xu Dachun 徐大椿)

The problem, as Xu Dachun 徐大椿 (1693-1771), the author of this description never failed to remind his readers, was that most physicians lacked the necessary ability and skills to realise these lofty ideals. In Xu's opinion, this was made worse by the virtual absence of rules and regulations in the medical market, which from the 14th century onward had become a virtual free for all. This economic context amplified a danger, ever present in a medicine grounded in personal insight, for displays of virtuosity and individual difference to be driven by the search for fame and reputation rather than the authenticity of practice described by Zhu Danxi, Wan Quan or Yu Chang. From the late 16th century onward, an increasing number of physicians thus became ever more suspicious of the emphasis on subjectivity that characterised post-Song medicine. They argued that a return to the classical sources of tradition provided the appropriate antidote.

This movement became particularly powerful in Japan among a group of physicians known today as the 'ancient formula current' 古方派. The most influential of these ancient formula physicians was Yoshimasu Todo 吉益東洞 (1702-1773) from Kyoto who squarely put the blame for the degeneration of post-Song medical practice on its emphasis on yì:'

'Once the notion that medicine is about yi had emerged, it became over time a deceptive strategy and finally an excuse [for bad practice]. In my opinion, if progress on the path of medicine depends only on yì, then why does one first need to study books in order to learn one's trade but later rely on [yì]? How truly absurd and ridiculous. How could this be called a path [of learning]? [Is it not rather the other way around], namely that proceeding from established strategies on the path of medicine prevents one from going astray? Clearly that is how it is.' (Yoshimasu Todo 吉益東洞 1747)

To avoid yi getting in the way Yoshimasu Todo proposed a purely empirical style of medical practice that 'viewed the identification of zheng as treating the root [of the disorder] without seeking to establish its cause.' That is, instead of identifying hidden patho-dynamic processes or speculating as to why a specific illness occurred in this person, the goal of medicine should be to select effective medicines on the basis of corresponding clinical presentations alone. This required a redefinition not only of core precepts of post-Song medical practice but also of its physician/ patient relationships.

To this end, Yoshimasu Todo reduced all disease to one single

⁶ These new scholar physicians moved in the same social circles as their patients and naturally shared with them the frequent preoccupations with physical fragility and weakness that had developed among the Jiangnan gentry ?

process, namely the presence of toxin (毒 du) within the body. The physician's task was to determine the location of this toxin and to expel it from the body. This would cure the disease and preclude the need for any further contact between patients and physician. Clearly, this is a very different conception of illness and the physician's role in it than that of scholar physicians like Yu Chang, who aimed to become one with their patients, or of Fei Boxiong, who was famous for mild treatment of deficient patients that could stretch over many months. Yoshimasu Todo explicitly denounced the frequent patient visits and repeated modification of formulas this style of treatment usually involved and argued to change the social relationships between physicians and patients that underpinned it.

In post-Song China these relationships had been fundamentally transformed with the widespread movement of literati into medical practice. As members of the gentry elite, these new scholar physicians moved in the same social circles as their patients and naturally shared with them the frequent preoccupations with physical fragility and weakness that had developed among the Jiangnan gentry. Such social proximity coupled to the nature of the medical market in late imperial China is one of the reasons why the critiques of post-Song medicine in Jiangnan itself never reached the traction they did in Japan. There, the different social and intellectual conditions during the Edo period, where physicians were not generally members of the elite, coupled to the influence of new ideas about the body imported from the West allowed for the far more radical challenges to medical orthodoxy.

Intellectually, however, Yoshimasu Todo was very much indebted to Chinese critics of post-Song medicine like Xu Dachun and Ke Qin 柯琴. These authors had argued that the works of the Han dynasty physician Zhang Zhongjing 張仲景, widely regarded as the ancestor of prescription based medicine, provided the clearest and most reliable foundations for effective medical practice. Ke Qin, specifically, had stated that the key to understanding these texts was to study the manner in which they related specific zheng to specific prescriptions. Yoshimasu Todo, following Ke Qin's lead, developed sophisticated philological techniques to tease out these correspondences, which he then sought to confirm empirically within his own practice.

On one level, this matching of prescriptions with *zheng* simply returned post-Song scholarly medicine to its status quo ante, as realised in the Imperial Pharmacy's Formulary. We may recall that this text, too, listed prescriptions under their matching zheng and that the effectiveness of the formulas used was vouched for by the Pharmacy's physicians who had examined them. There are, however, equally important differences. If the Formulary's zheng were essentially lists of symptoms and signs intelligible to the educated lay person, Zhang Zhongjing's zheng are altogether different things as explained at length by the Shanghai physician Lu Yuanlei 陸淵雷 (1894-1955), one of the leading reformers of Chinese medicine in China during the Republican era.

'What are [these things] called zheng? Zheng are manifestations. They also constitute criteria for using medicinals. The various items in the Treatise on Cold Damage and the Essentials from the Golden Casket [i.e. the texts of Zhang Zhongjing] such as heat effusion, aversion to cold, stretched stiff nape and back, stiffness of the neck and nape, fullness in the chest and rib-side, vexation and agitation, vexation and thirst, distress below the heart, distress below the umbilicus, hard glomus below the heart, glomus below the heart that is soft when pressed, sweating, lack of sweating, hard stools, shifting fecal gi, clear food diarrhea and so on, these all are manifestations. All of these manifestations cannot be entirely comprehended by studying the text. They require explanation by a teacher, or precise and clear annotations. This is what I previously referred to as the correct method for reading the Treatise on Cold Damage and the Essentials from the Golden Casket.' (Lu Yuanlei 陸淵雷 2010)

Lu's thinking owed much to the ancient formula current and in particular the works of Yoshimasu Todo. These had crossed into Jiangnan when in the wake of the first Sino-Japanese War of 1895 Japan became the guiding light for Chinese modernisers across a wide variety of domains. Lu was attracted to Yoshimasu Todo's empiricism as a strategy for claiming for Chinese medicine the same scientific status accorded to Western medicine, a powerful new entrant into the medical market place with which it was now

competing in a struggle for its very survival. In Lu Yuanlei's eyes, his struggle required of Chinese medicine to align itself with the epistemological orientations and institutional arrangements of China's modernising society, while holding fast to the radically different ontology of disease that marked out its difference and guaranteed its clinical effectiveness. In a paper entitled 'Chinese medicine formulas and medicinals are specific for zheng but not specific for diseases', Lu laid out this ontological difference: 'Manifestations (證候 zhenghou) are not the same as the symptoms (症狀 zhengzhuang) listed in western medical texts. Symptoms are nothing else than descriptions of the abnormal sensations reported by patients. They do not have much influence on either diagnosis or treatment. The manifestations in [Zhang] Zhongjing's texts, on the other hand, constitute the very criteria for using medicinals and [determining] treatment. Western medical texts refer to symptoms in great detail. Hence, even for a disease one has never encountered, once one has read its symptoms in a book, one can clearly imagine an average patient [with that disease]. [Zhang] Zhongjing's manifestations, however, are not like that. There are several very obvious [disease] states about which Zhongjing does not lose a word, while he is not afraid to elaborate two or three times on some very subtle ones. All gentlemen can thus understand that all those conditions on which Zhongjing does not elaborate are not conditions that can serve as criteria for employing medicinals. They are only good to be handed to western medicine physicians as symptoms. Those conditions that Zhongjing explains in detail, on the other hand, constitute criteria for using medicinals. When we read Zhongjing's texts we must absolutely not neglect this.' (Lu Yuanlei 陸淵雷 2010)

By reserving the intelligibility of zheng to 'gentlemen,' that is scholars capable of correctly reading Zhang Zhongjing's texts, Lu Yuanlei furthermore linked this ontology to the epistemic orientations of a specific social group. Like Yoshimasu Todo before him he thereby differentiated his vision of Chinese medicine from both that of the Imperial Pharmacy, whose standardisations reduced the importance of professional expertise, and that of post-Song scholar physicians and their Neoconfucian concerns for the cultivation of *yì* and insights beyond language and texts.

Not surprisingly, Yoshimasu Todo and Lu Yuanlei shared a common interest in reorganising medical education to instil in budding physicians the right epistemic virtues. For Lu Yuanlei, this included besides familiarity with Western medical science and the Chinese medical classics the study also of Japanese. In the context of such learning Zhang Zhongjing's text functioned not as sacred objects

but as models that explicated the relationship between *zheng* and treatment in the clearest possible way.

Synthesis and simplification: the fourth bifurcation

Lu Yuanlei died in 1955. His conceptions of Chinese medicine's specific focus on zheng, however, became one of the pillars of 'zheng differentiation and treatment determination' 辨證論治, the paradigm that constitutes the official core of TCM medical practice. This paradigm was created in the late 1950s and early 1960s by physicians primarily from Shanghai, including Lu's disciple Jiang Chunhua 姜春華 (1908-1992) and his colleagues Huang Wendong 黄文東 (1902-1981) and Qin Bowei 秦伯 未 (1901-1970). While holding fast to Lu's distinction between zheng and disease as the respective focus of Chinese and Western medicines, the political necessities of constructing a truly nationalist medicine required, however, to widen both the definition of zheng and to re-articulate them with disease. Given that many Chinese physicians continued to work broadly within the orientations of post-Song medicine and that in the wake of the second Sino-Japanese war the Japanese influence on Chinese medicine evaporated almost overnight, the definition of zheng became more ecumenical and its application to practice detached from its narrow attachment to Zhang Zhongjing. Resonating with the new Maoist emphasis on 'practice' both Jiang Chunhua and Qin Bowei explicitly emphasised the practical dialectic between the objective reality of zheng and medicines on the one hand and the contextual and strategic nature of diagnosis and treatment formulation on the other (Scheid 2002). By the late 1990s, when Maoist practice philosophies were no longer in vogue, the historian of science Liao Yuqun 廖育群 (2006) even resurrected yì, shorn of its wider ambitions to comprehend the true why of each illness episode, as the modus operandi of zheng differentiation and the distinguishing feature of Chinese medicine.

Historians and anthropologists in China and the West have documented the history of these transformations in great detail (Andrews 1996, Hsu 1999, Karchmer 2010, Scheid 2002, Taylor 2004). They show how the present status of *zheng* as 'the unique core of traditional Chinese medicine' emerged gradually over the course of the 20th century as the consequence of the struggle by Chinese physicians to demarcate themselves from Western biomedicine within contexts of practice that were increasingly hegemonised by scientism and modernity.

During the first phase of this struggle, lasting roughly from 1895 to 1929, Chinese physicians pursued a strategy that sought to define Chinese and Western medicine as categorically different though sometimes complementary to each other. If Western

medicine provided more accurate and detailed descriptions of the body's anatomy, Chinese medicine was superior at understanding the processes of change and transformation that linked it to the universe. Yun Tieqiao 撑鐵樵 (1878-1935) (1922), one of the main protagonists in these debates, arrived at the most extreme formulation of this position when he claimed that the organs of Chinese medicine referred not to 'the body of flesh and blood' but were merely – or above all – concepts generated to capture the transformative processes that animate the cosmos.

Yun's proposition succeeded, at least for a time, in liberating the Chinese medical body from pressures to squeeze itself into the corset of biomedical anatomy. It endures to the present day in the often repeated opposition between a holistic Chinese medical body of process and a reductionist Western anatomical body, an opposition that became even more acceptable once it was wedded to Thomas Kuhn's notion of incommensurability in the 1960s. It also paved the way for the first wave of systems science to sweep through Chinese medicine in the 1980s by allowing researchers to 'black-box' any problematic (in biomedical terms) element of Chinese medicine and focus, instead, on these elements as descriptions of systems (Zhu Shina 祝事納 and Sun Guilian 孫桂蓮 1990).

After 1929, when Chinese physicians decided to move their medicine into the domain of the state to gain for it equality before the law, a new strategy was needed (Lei 1998). Instead of insisting on radical difference they now required a method for protecting the autonomy of Chinese medicine even as it had to accommodate itself to a state health care system organised on biomedical terms. An initial suggestion put forward by the newly established Institute of National Medicine under the directorship of Lu Yuanlei was to accomplish this integration by abolishing Chinese medical disease terms altogether and replace them with biomedical nosologies. The proposal met with stiff resistance from within the Chinese medical community, who feared it threatened their very identity, and was guickly abandoned. It was in the course of these debates, however, that the stereotypical association nowadays between Chinese medicine's focus on zheng and Western medicine's treatment of disease was formed (Karchmer 2010).

Yang Zemin 楊澤民, one of the first Chinese physicians influenced by Marxist dialectics, proposed that Western medicine focused on the classification of disease even if it also recognised *zheng*, while Chinese medicine primarily concentrated on treating *zheng* even if it also knew of the existence of disease (Dong Hanliang 董 漢良 and Chen Tianxiang 陳天祥 1981). This definition of *zheng*

and disease as something common to both Chinese and Western medicine by a scholar who had a foot in both yin/yang thinking and European dialectics, established the possibility of a shared lexicon between the two domains. Yang's definition of zheng as something shared between the two traditions suggests a reading of the term as either 'syndrome' (綜合症 zhonghezheng) or 'symptoms' (症狀 zhengzhuang) (Li Zhizhong 李致重 1995). Lu Yuanlei, as we saw above, had a different definition in mind even if he shared Yang's conception of Chinese medicine as focusing on zheng and Western medicine on disease.

Following the establishment of the PRC in 1949 and the gradual establishment of a plural health care system, practical (rather than legal) problematics of integration came to the fore. Working sideby-side in settings that for purposes of record keeping required a biomedical diagnosis necessitated some form of institutional integration between Chinese and Western medicine. Once more, the power relationships between the two sides were structured in such a manner, however, that it was Chinese rather than Western medicine that had to find a way to accommodate. In this new context, Yang and Lu's dialectical scheme quickly became axiomatic. After all, it did not demand of Chinese medicine to abandon its 'own' diseases altogether. It merely stopped making them essential (Karchmer 2010). For as long as a physician knew how to diagnose and treat a zheng such as 'Kidney yang deficiency', it mattered little whether he was treating the Kidney yang deficiency of a patient suffering from renal failure or from a lesser *yin* disorder.

From the early 1960s onwards, regulators thus began to institutionalise the disease/zheng dialectic as a fundamental principle of Chinese medical practice (Scheid 2002). The primary instrument through which this was achieved were national textbooks for the teaching of Chinese medicine in state-run institutions. These textbooks now located in the diagnosis and treatment of *zheng* the true core of Chinese medicine when less than thirty years earlier such an idea had seemed anathema to a majority of the profession (Karchmer 2010, Taylor 2004). Yet, in a manner that was not imagined by Yang Zemin or Lu Yuanlei, in doing so they fundamentally re-defined the nature of zheng themselves.

First, by compiling the first comprehensive list of zheng and their associated symptoms and signs textbook authors narrowed the possibility of their existence even as they affirmed their very right to exist. Previously it had been possible for any physician to create a *zheng* simply by diagnosing it. Now, only those *zheng* included in the textbooks could be said to officially exist. Over

time, this process was pushed ever further, culminating in the mid-1990s in the compilation of national standards for the diagnosis and treatment of zheng. It is a current goal of the State Administration of Chinese Medicine to create international standards comparable to that of diseases by the ICD, thereby limiting even further previously existing possibilities for defining Chinese medicine in practice.

National standards and Chinese medical textbooks thus considerably simplified the complexity of a previously heterogenous and divided field of practice. Increasingly zheng came to resemble lists of symptoms and signs that had an existence independent of the diagnostic practice through which they were revealed. That is, they truly became something akin to biomedical syndromes. One of the consequences was that techniques such as pulse diagnosis previously considered essential in order to diagnose a given zheng now could be considered optional. Hence, in clinical research zheng are sometimes diagnosed today by questionnaires alone.

Second, as previously existing connections between Chinese medical diseases and zheng were loosened, zheng increasingly became the primary objects of treatment itself. That is, rather than pointing to a deeper patho-dynamic that needed to be understood in relation to the manifestations it produced, signifier and signified fused into the same object. Although this reading of zheng continues to embody an alternative understanding of disease that stands in tension with the standard disease nosology of biomedicine, it deprives Chinese medicine not just of explanatory power. For as some critics point out, it was precisely this disconnection of an entirely zheng based practice from theory that contributed to the vanquishing of Kampo medicine in Meiji Japan (Sugiyama 2004).

Third, by organising clinical textbooks around diseases subdivided into a number of *zheng*, textbook authors in the early 1960s created a model that has come to dominate official and semi-official Chinese medical discourse at home and abroad. Once biomedical diseases are substituted for Chinese medical ones, zheng then begin to take on the nature of mere 'disease types' (病型 bingxing). Or, they are defined as simply constituting different stages of a given disease (Li Zhizhong 李致重 1995). No longer referring to the Chinese medical body in any meaningful way, such types or stages simply represent a mode of organising biomedical disorders into variants. Critics argue that such typing no longer reflects any of the temporal characteristics of zheng as manifesting the coming-into-being of an illness at a particular moment in space/time that is the foundation of any truly

Zheng 證/証 as	Created by	Practice	Ultimate Location of Effectiveness	Benefits	Risks
Indications	Imperial Pharmacy of the Song state	Patients match formulas with symptom patterns	Formulas	Cheap medicine for all	Diagnosis problematic without experience of physician
Constellations	Post-Song scholar physicians	Scholar physicians provide personalised medicine tailored to each individual illness episode	Heart/mind of cultivated scholar physicians	Truly personalised medicine	The self-cultivation required for best practice may be unachievable for all but a small few
Manifestations	Zhang Zhongjing	Physicians conversant with the texts of Zhang Zhongjing match classical formulas with classical formula patterns	Lineage	Small number of formulas with clearly defined practice-based indications	Han dynasty formulas and patterns may not match diseases at different times/places
Syndrome/patterns	2nd edition TCM textbooks representing 'tradition'	Physicians employ their own experience to diagnose and treat with patterns and formulas listed in TCM textbooks	Tradition	Allows for integration with Western medicine but also independent Chinese medical practice	The synthesis of agonistic styles of practice falls apart in practice
Disease types	Integrated Chinese and Western medicine	Physicians treat biomedical diseases on the basis of their differentiation into a small number of types	Unclear	Integration into biomedical practice	Chinese medicine becomes biomedicine
Bio-patterns	omics	Treatments administered on the basis of pattern typing confirmed by omics	Nature	Diagnosis independent of human subjectivity	Finding effective treatments for well-defined patterns

personalised medicine. Nevertheless, today all Chinese medicine practitioners learn to associate specific biomedical diseases with a small number of Chinese medical zheng. At least during the early stages of their careers they often begin diagnosis from this starting point and many never lose the habit.

Conclusions

In the early 21st century, Chinese medicine physicians in China and elsewhere have mostly forgotten or never even become aware of the historical process that turned zheng differentiation and treatment determination into the fulcrum of their practice. That zheng constitute 'the unique core of traditional Chinese medicine' is simply accepted today as self-evident and in no need of further explanation. Yet, the tensions that this process of articulation created by stitching together remnants of the medicine of yì with formula patterns whose association with the Japanese ancient formula current had to be repressed are readily apparent, even as it solved the practical problems of integration between Chinese and Western medicine. Thus, as the Chinese state forcefully promotes the globalisation of standardised zheng that look just like the symptom lists of the Imperial Pharmacy, physicians in clinical practice continue to rely on personal experience and insight to develop and practice what works best for them. Given the enormous difficulties and risks this involves, a sizable number of these doctors is turning, once more, to the relative safety of classical formula style practice with its limited number of *zheng* and clearly articulated relationships between zheng and formulas. In doing so they chose to forget that post-Song doctors abandoned such practice because already then they considered its range too narrow to be applicable to the ever changing realities of disease and illness. Others, meanwhile, seek to overcome present anxieties by objectifying zheng by way of bioscience based research. Hoping to silence all those critics who view any zheng-based practice - pre- or post-Song, Chinese or Japanese, ancient or modern – as pseudoscience, they look to systems biology as a tool that confirms ancient wisdom even as it reconfigures traditional practice.

I want to suggest an alternative strategy for resolving these tensions, one less laden with emotion, burdened by anxieties and distorted by hidden agendas or repressed histories. To this end, we can begin by simply drawing up a preliminary typology of zhengbased practices as elaborated in Chinese medicine from the Song to the present.

All of these modes of *zheng* based practice constitute Chinese medicine and none is more or less authentic than any other. Yet, there are distinctive differences. First, the physicians and institutions who created these different modes or styles of zheng based practice explicitly rejected other styles of which they were aware. TCM alone claims that its novel synthesis has overcome the tensions and contradictions between previously competing styles. From a historian's perspective, however, vanquishing difference through state-imposed simplifications has merely created a new and different style. Hiding away the violent aspects of this production not only marks this style as truly modern but suggests it will eventually come apart at the seams.

The modernity of the TCM style reveals itself in yet another domain, that of the separation of the natural from the social. The reformers who created the Imperial Pharmacy, Zhu Danxi and his fellow post-Song revisionists, Yoshimasu Todo and Lu Yuanlei were all aware of one simple fact: they did not view zheng as phenomena existing in nature waiting to be revealed. For all of them, without exception, zheng were social facts created within particular types of medical practice. Changing what zheng signified implied changing modes of teaching, the relationship between physicians and their patients, and the 'epistemic virtues' (Daston and Galison 2007) towards which ideal medical practice was orientated in each case. That is, the struggle about what zheng meant was always also a struggle about how Chinese medicine should look and who should practise it.

Although TCM is no different, its claim to embody all of Chinese medicine demanded the separation of its social organisation of practice from the attributes of that practice itself. For only if zheng could be conceived of as timeless, as always having been there and not as the products of particular social actors with particular agendas, could they be imagined as the unchanging essence of the Chinese medical tradition. Yet, the burden placed on zheng by this articulation – to be facts of nature that are strangely revealed only to Chinese medicine physicians – marks them out as distinctly modern hybrids whose existence in the long term can be sustained only at considerable cost (Latour 1993).

To share this burden is precisely, of course, why the institutionalised form of TCM had to turn towards both bioscience and politics to underwrite its timeless conception of zheng. Hence, institutions concerned with the global governance of Chinese medicine assert the dominance of specific interpretations of zheng through bio-political arrangements and not through consensus among its practitioners. Unless these standards are actually enforced, physicians in clinical practice will always circumvent them precisely because the reality of disease can never be captured by a single list.

Clinical research and the emerging interface between Chinese medicine and systems biology likewise rely on zheng in order to establish the 'trading zones' that make cooperation between different disciplines possible. Hiding the fact that these trading zones link traditions that carry all kinds of historical baggage will not help researchers in the long run. For instance, clinical researchers, epidemiologists and systems biologists may only gradually become aware that they are entering into a centuries' old struggle for the very soul of what Chinese medicine is. Chinese medicine practitioners, likewise, may find that there is much more at stake in this marriage than verifying existing practices by way of systems science.

In seeking to match patterns of gene expression or protein networks to zheng, researchers are busy creating new possibilities of what zheng are and how they might be inserted into particular arrangements of clinical practice. The possibility exists that in future zheng as omics derived patterns will be stabilised independent of therapy and that the particular gaze of the practising physician will be excluded not only from treatment delivery (as in the Song) but also from treatment construction. Will such zheng, even if they are later matched with herbs from the Chinese materia medica or acupuncture point prescriptions, still be part of Chinese medicine? What does that imply for what Chinese medicine is and, as importantly, what in the future we come to think of what it has been in the past? Will these processes be acknowledged or hidden from sight, leaving it to later generations of physicians, patients and administrators to remedy or pay for their unintended consequences?

Raising these important questions and insisting that they by answered is what the medical humanities can contribute to the practise of Chinese medicine. They show us that all medical practice, however it is conceived, carries risks as well as providing benefits, and that the pursuit of effectiveness is tied to specific forms of social organisation and ethical orientations. In former times, scholar physicians like Zhu Danxi, Yu Chang, Yoshimasu Todo or Lu Yuanlei embodied within their own persons what we, today, have separated into different

disciplines. In that sense, by arguing that the medical humanities be reintegrated into debates about what we think our tradition is and what we want it to be, I am merely advocating a return to the state of affairs that existed before the intrusion of modernity into

the domain of traditional medicine. Such a return will not provide definitive solutions to questions to which there is no ultimate answer. By highlighting the choices to be made it will, however, significantly raise the quality of the debate.

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