

19 Travelling Light: Sino-Tibetan Moxa-Cautery from Dunhuang

Vivienne Lo 羅維前 and Ronit Yoeli-Tlalim*

The practices of blood-letting and cautery, the treatment of wounds and the concept of the Zodiac man all inspired iconographic representations of the body that have become well-known in the history of medicine.¹ Less commonly known is that a new style of medical imaging associated with cautery techniques seems to have emerged simultaneously in 9th–10th century Europe, Tibet and China. Common visual characteristics of these manuscript images include simple, sometimes quite roughly executed, outline sketches of the body, aimed to facilitate therapeutic interventions involving the application of burning hot substances to the skin or bloodletting. The medical charts in this new genre were multi-purpose representations of therapeutic know-how. They might be read alone, or together with more scholarly iconography and texts. In some contexts they could function independently as guides to practice; in others, they might require knowledge derived from their respective classical medical milieux, as ‘visualisations of the medical word’, where the image is subordinated to a dominant corpus of medical texts.² This chapter is primarily concerned with identifying those elements of this medieval medical iconography concerned

with therapeutic know-how that disposed a therapeutic tradition to travelling, to crossing geographic, linguistic, temporal and cultural boundaries.

Fundamental to these diagrammatical illustrations are a series of human figures, marked with black dots, and brief textual captions. In the earliest known versions, the dots mark places on the body that are a strategic part of the therapeutic procedure. In later charts from their respective traditions, the dots may also represent a physical axis of correlational knowledge that connects parts of the body to celestial bodies and to physiological notions of the circulation of embodied spirits – mapping forms of astromedical knowledge. But in the earliest European, Chinese and Tibetan charts, the image is unmistakably performative: a series of human figures take centre stage, with captions simply identifying common illnesses, and providing easily understood directions for medical practitioners or householders in search of an instant remedy.

In contrast to the Asian figures that we are soon to meet, the 17 figures that fill the last part of a 9th-century Latin manuscript sketch out scenes where an adult male physician is about to sear the flesh of an apparently unsuspecting patient. In the foreground, a burner, with lively dancing flames, lends a kind of immediacy to the therapeutic action where, in the first image of the sequence, an assistant tends the cautery irons.³ The physician’s larger scale and sharply drawn eyes embody absolute medical authority. His gaze is trained on the much smaller figure of the patient, perhaps a child. The patients in these images are either prone or supine, their expressions blank, in passive acceptance of what must have been a painful, potentially traumatic, experience. The captions to the images are perhaps the most perfunctory of all we will meet in this chapter. They name symptoms of illness such as ‘headache’, or [a disorder of the] ‘gums’ with the cursory directive ‘cauterise thus’; (see Fig. 1) Difficult theoretical notions that would have required a formal training in medicine are conspicuously absent. As Hartnell states, ‘Instead of linking back to an authoritative text, medical power is invested in the black spots of the image itself’, which articulate the essential information for effective action.⁴

* Papers which serve the basis of this chapter were presented by the authors in a number of conferences: Vivienne Lo: ‘Medicine on the Silk Roads’ at the British Library 2005; ‘Dunhuang Forum: convergence and innovation’, Dunhuang Academy, August 2016; Ronit Yoeli-Tlalim: ‘On the notion of channels (*rtsa*) in the Tibetan medical manuscripts from Dunhuang’, The 12th Biennial Conference of Asian Studies in Israel, Haifa University, 25–6 May 2014; ‘Tibetan medicine from Dunhuang: notes on transmissions of medical knowledge along the Silk Road’, Interaction in the Himalayas and Central Asia, Third International SEECHAC Colloquium, Austria Academy of Sciences, Vienna, 25–7 November 2013; ‘Tibeto-Chinese/Sino-Tibetan medicine from Dunhuang’, 24th International Congress of History of Science, Technology and Medicine, Manchester, 23 July 2013. The proceedings from the British Library conference were published by the authors in a special issue of *Asian Medicine: tradition and modernity* 2007, vol. 3, issue 2. Many scholars have helped with the research for this chapter, especially Peter Zieme, Geoffrey Samuel and Dieter Maue. We are also very grateful to Jack Hartnell who shared insights which have led directly to the arguments in this chapter. See Hartnell 2017a. Ronit Yoeli-Tlalim’s work was supported by the Wellcome Trust.

1 The earliest European version of the Zodiac Man has been identified as BNF ms. Lat. 7028, fol. 154r, dating to the 11th century. Cohen 2014, p. 71. See also Hartnell 2017a and b and Yearl 2011.

2 Hartnell 2017b, p. 331.

3 Plut. 73.41, Biblioteca Medicea Laurenziana.

4 Hartnell 2017b, p. 332. ‘Western Manuscript images of this type are presumed to have been around about the same time as the Tibetan and Chinese manuscripts, but are only really known in



Figure 19.1 Cautery depicted in a 9th-century Latin manuscript, Plut. 73.41, f. 122 r. © Florence, The Biblioteca Medicea Laurenziana; reproduced with permission of MiBACT, further reproduction by any means is prohibited

Even though the surviving evidence is, as yet, too slim to make any substantial claims about links in the global medieval world of medicine, such performative images, of which we will hear much more in this chapter, provide intriguing testimony on the basis of which to ask more informed research questions of the period, and imagine new pathways to a history of ‘travelling medicine’. They focus us on the following domains for close analysis: the widespread use of cautery and body piercing techniques, the sparse efficient detail of the images, the direct text-image relationship, and the ambiguous relationship with authoritative texts.

For Tibet and China we are fortunate to have c. 9th-century charts guiding moxa-cautery therapy,⁵ preserved in

later sources, from the 12th/13th century. This is partly due to the huge rise in manuscript production and medical practice concurrent with the birth of university culture in the West at that time, so is likely just a bias of what survives rather than the evidence suggesting that practice was only popularised in these later centuries’, Hartnell, pers. comm.

5 We have chosen to use the term ‘moxa-cautery’ rather than the

the Dunhuang manuscript collections, and now held at the Bibliothèque nationale de France and the British Library respectively.⁶ These rare witnesses to the practice of medieval medicine not only conjure up a coherent vision of how the body was manipulated in the day-to-day practice of medicine, but also invite an analysis of what facilitated, and indeed facilitates, communication of medical knowledge across cultural boundaries. The connection between the production of the Tibetan and Chinese moxa-cautery charts that we analyse here is fundamental and undisputed. Analysing their continuities, we will ask ourselves: What is the relationship between them? Is one an adaptation of another? We will also identify shared astrocalendrical notions and the discourse of auspicious and inauspicious times for protecting the lunar circulation of bodily spirits. Counter-intuitively, however, after a momentary excitement about similarities, the second and more considered response of the transcultural historian of medicine is key to the methodology of this chapter: what can we tell from the Tibetan and Chinese charts about the nature of the transmission of medical knowledge from the ways that their respective image production *differs*?

The Images

Of the tens of thousands of medieval manuscripts discovered in 1900 at the Mogao 莫高 caves near Dunhuang (Fig. 2), the eastern end of the so-called Silk Roads, most are Buddhist scriptures. There are also thousands of secular texts. Some of these secular manuscripts testify to the surprising penetration throughout medieval Chinese society of officially sanctioned texts produced at the Chinese capital. Others reveal a fascinating range of previously unknown literature, in a variety of languages, that were passing through, copied or interpreted at Dunhuang.⁷ More than a hundred of these texts are directly concerned with medicine: most of these are in Chinese. There are also a few medical manuscripts in Tibetan and in Khotanese. In nearby sites, there are also medical manuscripts in Tokharian, Sanskrit, Sogdian, Uighur and Syriac.⁸ Some of

common modern term, ‘moxibustion’, in order to encompass the range of therapies practised in medieval China and Tibet, some of which were quite invasive.

6 The manuscripts all have a latest date of c. 1035, the year that scholars generally agree the so-called ‘Library Cave’ was closed. Many of the manuscripts that it contained were already of some antiquity, and various methods such as script, layout and contents have been used to ascertain their original copying dates.

7 Lo, 2005a, pp. 227–8 and Yoeli-Tlalim (forthcoming).

8 For a discussion of some of these medical interactions see Yoe-



Figure 19.2 A pile of scrolls, after removal by Stein from Cave 17 in Dunhuang. © The British Library, photo 392/27 (587)

the Chinese medical manuscripts from Dunhuang reveal exotic influences and exchanges, hitherto unknown in the Chinese medical literature that has been passed down to us in printed form, and edited countless times since the imperial patronage of medical publication in the Song period (960–1279).⁹

In this chapter we are concerned with three medieval illustrated Tibetan and Chinese manuscripts which tell us about the transmission of moxa-cautery and cautery techniques, that is the application of burning materials to the surface of the body at strategic locations for therapeutic reasons: the Tibetan Pt.1058¹⁰ and the Chinese S.6168a and b, and S.6262. All three manuscripts set out a series of naked or semi-clothed human figures that indicate strategic locations for moxa-cautery. There are also two more Tibetan texts – Pt.127 and Pt.1044 – as well as numerous Chinese texts dealing with moxa-cautery and its prohibitions.¹¹ The Tibetan manuscripts have been dated to c. 9th

or 10th centuries.¹² The script on the Chinese manuscripts has been dated to the Tang period (618–907), but cannot be dated more accurately.

We will also make brief mention of a set of charts, the dating of which is yet to be determined, discovered at Turfan with captions in Uighur,¹³ and some 18th-century Japanese manuscript charts that demonstrate continuities with the illustrated traditions of Sino-Tibetan medicine.

Let us begin with the Tibetan manuscript Pt.1058 (Fig. 3), an illustration of moxa-cautery points, which features two upright, naked, presumably male figures: the one on the left is a static view in half profile, the other, on the right is a side view depicting someone who appears to be in movement.¹⁴ The figure on the right has six points indicated (foot, knee and arm), and the figure on the left has 13 points indicated (hips, thigh, legs and feet). The manuscript is cut off on the left, where there appears to have been a third image. What has remained of that third image is parts of the legends which were linked to it. Based on these, we can assume this was probably a rear view, since the legends appear to refer primarily to the vertebrae.

Their naked bodies are lean and muscular, with roughly executed striated rib cages, a far cry from the plumper, more opulent Tang dynasty (618–907) ideal of the same period. The Tibetan figures have a high bridge and sharp angle to the nose, full lips and chiselled cheekbones. Unlike later Tibetan medical images made within a Buddhist art tradition, these bear no resemblance to Buddhist artistic conventions. While this entails some raw, almost childlike renderings – such as the fingers of the left image, it also conveys some innovative imaginary, freshness and vitality – such as the dynamic pose of the right image. The limbs of these images are rotated, perhaps to reveal most clearly the strategic therapeutic locations, perhaps in a demonstration of some other kind of individual agency. The hair of each figure is tied loosely in a looping ribbon that gathers up the locks on top of the head in a bow, the ribbons caught by

li-Tlalim (forthcoming).

9 The varying number of manuscripts that contain information related to medicine is sensitive to contested definitions of the term ‘medicine’, and whether one includes, for example, practices and ideas concerned with gender and sexuality, drugs used in ritual rather than consumed etc. For varying examples see Ma Jixing 1998, list of contents; Despeux 2010, pp. 34–95; Yoe-li-Tlalim 2015.

10 In Chinese sources appearing as: P.18.017. See Cong 1994, p. 179.

11 For the Chinese prohibition manuscripts recovered at Dunhuang, see Arrault 2010, pp. 285–330. Illustrated charts: S.6168, S.6262 (BL); Prohibition Charts: P.2675 (BNF), S.5737 (BL), S.4537 (India Office, BL); Remedy text listing moxa-cautery as an auxiliary technique to a drug recipe: P.2662 r° and v°, P.3144 v°, P.3378 v°, P.3596, S.3395 r° (BNF), S.5435 r° (BL); Calendar including references to the circulation of the *renshen* 人神 (human spirit) around the body: P.2591, P.2623, P.2705, P.2765 r°, P.2973A r°, P.3247 v°, P.3403 r° and v°, P.3492 r° and v°, P.3555B + P.3555 (Piece 9), P.4996, (P.3476) r° (BNF); S.95 r°; S.276 v°; S.612 r°; S.681 v° (BL)

+ DH.1454 v° (Institute of Oriental Manuscripts, St Petersburg); S.1473 r°; S.2404 r°; S.5919; S-P.6 r° and v° (BL); BD.15292, WA37–9 (NL Beijing).

12 On the dating of the Tibetan Dunhuang manuscripts, see: Uray 1988, pp. 515–28; Takeuchi 2012, pp. 205–16; Dalton, Davis and van Schaik 2007. Dalton and van Schaik 2006.

Cong Chunyu 叢春雨 had previously suggested that the Dunhuang Tibetan medical manuscripts dated between the 7th and 9th centuries CE. Cong 1994, p. 15 *et passim*.

13 Müller 1923; Rachmati 1932, pp. 401–48 and Maue, pers. comm.

14 On Pt.1058 see: Luo Bingfen *et al.* pp. 34–7, Lalou 1941–2 and Cong 1994, pp. 179–81. The image is accessible on the Bibliothèque nationale de France website: <http://gallica.bnf.fr/ark:/12148/btvt1b8305595k?rk=21459;2> (accessed, 11/06/2017).



Figure 19.3 Tibetan moxa-cautery chart from Dunhuang. Image 1 (on our left) marks 13 locations on the lower limbs. To the left-hand side of the text, along with descriptions of three points indicated, there are 12 broken lines of text, apparently relating to another image, now no longer extant. Image 2 has six points marked but the text is damaged. © Bibliothèque Nationale, Paris, Oriental ms. Pt.1058

the wind giving the impression of movement. The figures' eyes are intent with dark pupils focussed somewhere in the distance. In contrast to the posed and diagrammatic figures of the Chinese moxa-cautery charts we will meet later on, the Tibetan ones are rather individual characters: one with eyelids and lashes lowered; the other with eyes wide open, staring straight ahead (Fig. 3).

The therapeutic points are marked with heavy black dots, with fine black lines stretching to the side where the location of each point is written out with simple anatomical descriptions and directions such as 'measure three fingers from the heart of the calf', or 'in the hollow behind the ankle', 'between the big toe and the second toe'.¹⁵ Unlike comparable Chinese and European charts, the text does not provide any information about the illnesses to be treated or the points indicated for specific ailments. There are no instructions for carrying out the therapeutic procedure. The map is therefore simply concerned with detailing the particular locations for moxa-cautery.

With no information about the nature of moxa-cautery set out systematically on the Tibetan charts, we have to turn

to related texts in order to understand what kind of therapy is indicated. Two other manuscripts from Dunhuang, Pt.1044 and Pt.127, contain moxa-cautery remedy texts organised according to treatments for groups of symptoms. Generally speaking, Pt.1058 appears to illustrate parts of Pt.127, and discuss the same locations of the body. Pt.1044 and Pt.127 tell us a great deal about the nature and severity of illnesses treated, ideas about anatomy and physiology, moxa-cautery locations and the nature of bodily fluids. Groups of symptoms are listed in relation to the moxa-cautery points and include such problems as digestion, diarrhoea, swelling of the hands and feet, pain in the kidneys, vomiting blood and incessant nose bleed.

The greatest number of references to pathogenic agents in the Tibetan moxa-cautery remedy texts identify strike by wind: wind deviation, wind in the ear, wind causing sudden pain, headache, craziness or loss of motor function. In Pt.127 alone, wind is mentioned as a pathogenic agent no less than 25 times. Wind in Tibetan medicine is one of the three *nyes pa*, corresponding to the Indian concept of the three *dosa*: *rlung* (wind), *mkhris pa* (bile) and *bad kan* (phlegm). Wind can be a cause of illness but also

¹⁵ Pt.1058. For a list of all points see Lalou, 1941–2.

what enables a practitioner to balance the body through wind-related practices.¹⁶

The kinds of illnesses treated in Pt.127 and Pt.1044 also include a range of symptoms of a much more severe nature associated with 'chu ser' (Yellow Fluid), a pathology that became common in later Tibetan medical literature. There is a parallel in Chinese pathology related to the term *huang bing* 黃病 (Yellowing Illness), but the Tibetan concept is quite distinctive. In the Tibetan manuscripts, Yellow Fluid could enter the body, particularly where there was external injury. It could rise to the head, accumulate in the spine, amassing in the joints, the heart or kidneys, or descend to the feet. It could be chronic or acute, associated with febrile illness and both sharp and heavy, swollen pain. Where it accumulated, there could be swelling, and stiffness of the joints and organs, impeding mobility. As it flowed into the head, Yellow Fluid could be observed 'yellowing' the eyes and flesh. These symptoms are often described as being contagious and were clearly febrile in nature. At risk of a teleological observation, the frequent reference to constant bleeding of the nose, swelling and pain of the kidneys and spleen, as well as yellowing of the flesh and eyes is suggestive that Yellow Fluid might cause illnesses that we associate today with typhoid and yellow fever, amongst other serious afflictions.

Moxa-Cautery Texts

We are accustomed nowadays to imagining a dominant classical tradition of acupuncture, and in that sense the Dunhuang Chinese moxa-cautery texts are quite distinctive. As historians, we should be cautious of a positivist approach, which studies the Chinese medical body as if it had always been a vehicle for *needling* therapies akin to contemporary acupuncture. Instead, we might heed signs of contestation: early warnings about the dangers of acupuncture, which according to Wang Tao 王濤, writing c. 752, 'can kill people, and cannot raise the dead'.¹⁷ Cautery therapy certainly pre-dates acupuncture, and given the widespread availability of substances that could be burnt on the body along with the ease of application, it stands to reason that it was more widely used.

The independent moxa-cautery tradition represented in manuscripts is perhaps better evidence of therapy as it was practised throughout Chinese society than the transmitted scholarly literature which, read alone, might suggest

acupuncture was the dominant mode of practice. Not only does moxa-cautery pre-date acupuncture, but it was also much more widespread. Early evidence of moxa-cautery with *ai* 艾 (*Artemisia vulgaris*) and other materials, coming from the course and hinterland of the Yangzi valley and its tributaries, can be found in medical texts over one thousand years before the Dunhuang manuscripts, and much earlier in less specialised literature.¹⁸

Moxa-cautery traditions associated with channel theory, but not with acupoints, have featured in Chinese householder manuals from as far back as the Mawangdui manuscripts of the 2nd century BCE and at least as far forward as the 16th-century *riyong leishu* 日用類書 (encyclopaedias for everyday use), which Chang Che-chia has shown provide household instruction on practically every medical technique except acupuncture.¹⁹ Representations of Yin and Yang channels of the body, associated with moxa-cautery, and tangentially related to later acupuncture models, survive in texts and in two lacquered figurines excavated from tombs of Han dynasty (206 BCE–220 CE) aristocrats (See Lo, Chapter 3 in this volume).²⁰ Confirming the extensive use of acu-moxa during the early empires, Han military records written on bamboo strips, for example, record that moxa-cautery methods were used in emergency medicine by officers in the Chinese garrisons around Dunhuang.²¹

Just before the putative date of the Chinese Dunhuang moxa-cautery literature, the 7th-century work of Sun Simiao 孫思邈 provides us with a near-contemporary source indicating that illustrated point charts were included in mainstream acupuncture and moxa-cautery manuscript productions at the Chinese court, although they were omitted in later printed editions.²² Two hundred years later in 861 the preface to P.2675 sets out the text's intention to abridge the moxa-cautery techniques of a number of schools or teaching lineages in order to provide a practical medicine for those living in outlying regions without access to better quality medicines. P.2675 is in fact a text more concerned with the proscription and control of what was evidently a popular practice by this time, rather than with prescriptions for guiding treatments.

Since they don't mention acupuncture at all, our extant Chinese Dunhuang charts suggest that there were independent moxa-cautery traditions: on the one hand

16 Yoeli-Tlalim 2010.

17 Wang Tao, *Waitai miyao*, preface.

18 Lo 2002, pp. 99–128; Li Jianmin 2002, pp. 320–31; Yamada 1998.

19 Cong 1994, p.15; Chang Che-chia 2006, p. 183 n. 20.

20 Lo and He 1996, pp. 81–123.

21 Xie Guihua, 2005, p. 97.

22 Sun Simiao, *Beiji qianjin yaofang* (comp. 650–9): 1995 edn, pp. 508, 513. 王燾, *Waitai miyao* 外臺秘要 (c. 752), *juan* 39: 1993 edn, p. 779.

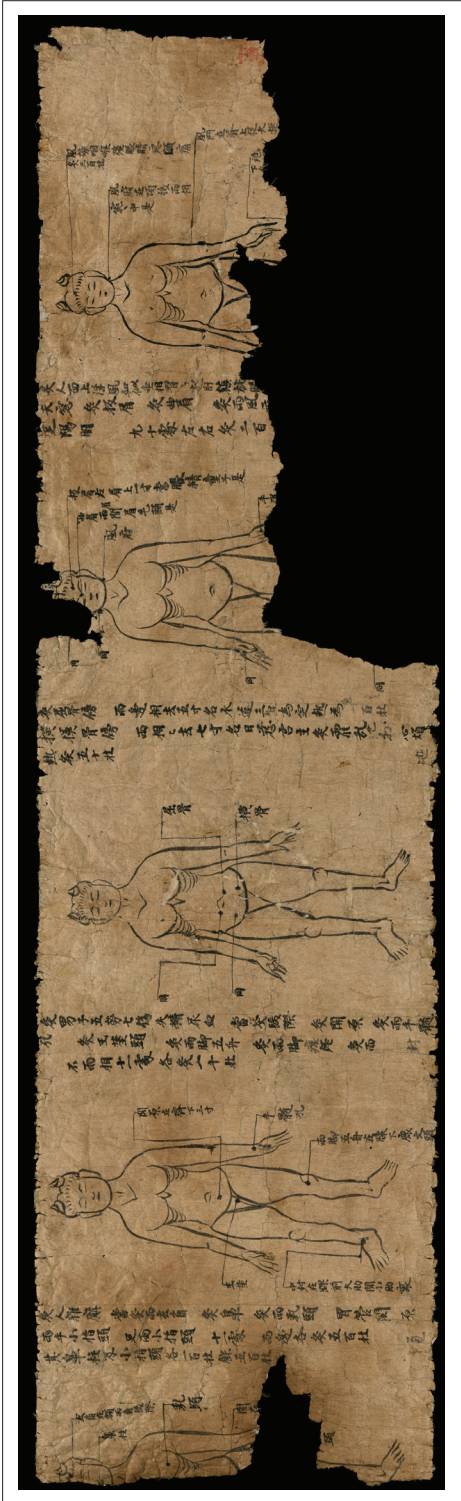


Figure 19.4a Chinese moxa-cautery chart from Dunhuang, Or.8210/S.6168. Above: right-hand side; below left-hand side. © The British Library

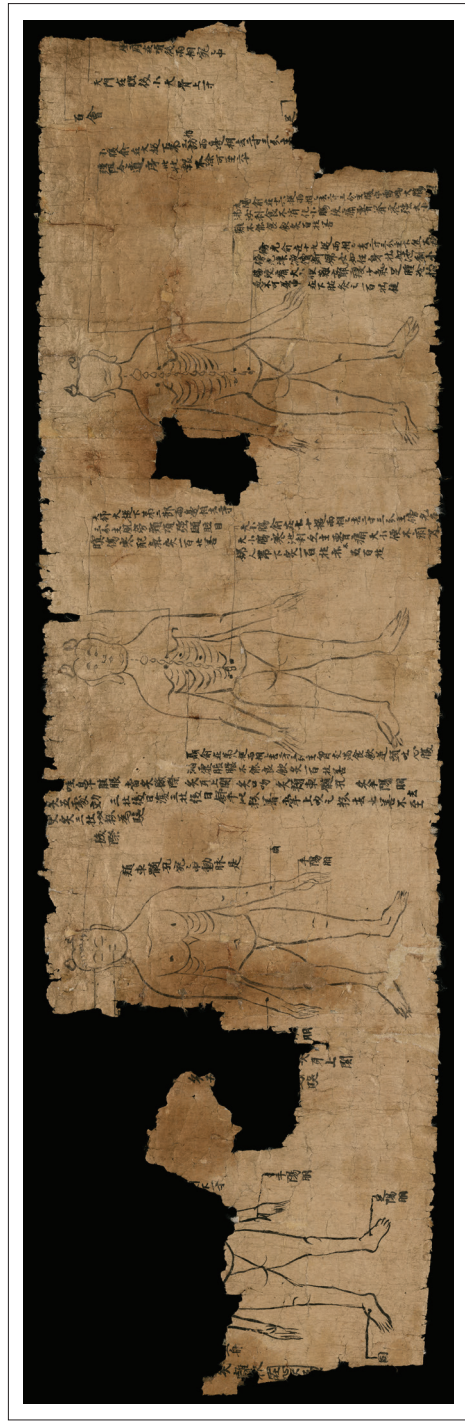
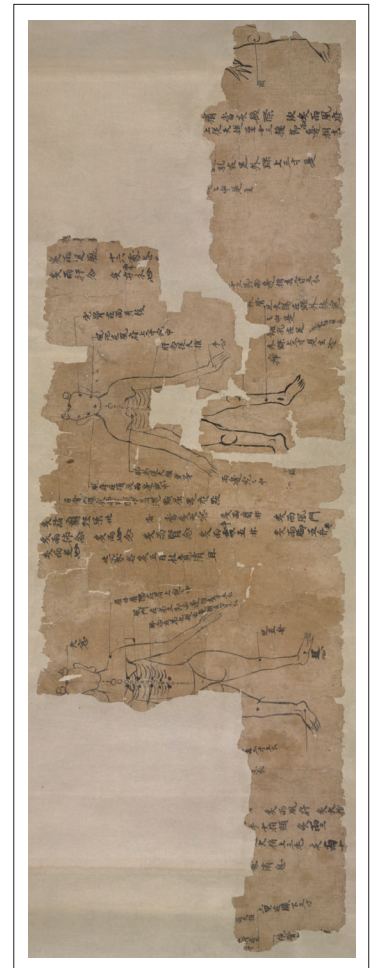


Figure 19.4b Chinese moxa-cautery chart from Dunhuang, Or.8210/S.6262. © The British Library



we find texts that privileged an understanding of learned concepts of the body which would have required astro-medical knowledge, or knowledge of the body's interior, and complex ideas about physiology; on the other we find illustration-based texts which suggest a more practical use in therapy, both needling and moxa-cautery, and in pre- and prescription. But when we consider that charts were also included in scholarly works such as those by Sun Simiao, the independent existence of the exclusively moxa-cautery chart-manuscripts demonstrates that the two genres of medical writings could be read separately, or together, by different groups of readers.

In the Chinese illustration-based manuscripts, black lines lead from the black dots that mark the set places for moxa-cautery, to simple instructions as to how to carry out the treatments, and for what ailments. The simple arrangement of image and text directs the reader's attention to where and how to place the moxa-cautery materials on the patient's body, and with what goal in mind. The sparse information clearly privileges the performative nature of the charts. The combination of image and text included everything that a lay person might need to apply moxa-cautery, so that the charts lent themselves to use in the homestead, as a kind of frontline medical treatment.²³ Astonishingly, in the Chinese texts moxa-cautery tends to be applied in multiples of 100, and even up to 1,000 in the case of treatment to the *yuxingtou* 玉莖頭 Head of the Jade Stem, (i.e. the head of the penis) for *wulao qishang* 五勞七傷 (five wearinesses and seven injuries), an affliction of men and boys. Here are some excerpts from S.6168 (Fig. 4a):

Moxa for wind floating in the face; as if insects *xixi* on the face; on rising (they) fall down, whirling...; *tian zhuang* 天窗 (窗) (Heaven's Window); moxa *ban mei* 板眉 (? Eyebrows); moxa *qumei* 曲眉 (Bending Eyebrows); moxa two *fengfu* 風府 (Wind Palaces); ...*Shou yangming* 足陽明 (Hand Yangming). In all cases 10 places. 200 times on left and right.

Moxa *wulao qishang* 五勞七傷 (five wearinesses and seven injuries) in men and boys; losing *jing* 精 (seminal essence) blood in the urine. You must moxa *faji* 髮際 (Hair Border); moxa *guanyuan* 關原 (關元) (Connecting to the Source); moxa *liang shou sui kong* 兩手髓孔 (Two Hand Bone Marrow Hole); moxa *yuxingtou* 玉莖頭 (Head of the Jade Stem); moxa *liang jiao wuzhou* 兩腳五舟 (Two Feet Five Boats); moxa *liangjiao bijing* 兩腳痺經 (Two Feet Numbness of the Channels); moxa *liangjiao zhongfeng* 兩[腳中]封 (Central Dike of the Two Feet); not on both sides... 11 places. Each moxa 1,000 *zhuang*.

Moxa people's various insanities. You must moxa two *xuanjiao* 玄角 (Dark Corner) moxa *bizhu* 鼻[柱] (Bridge

of the Nose); moxa two *ru tou* 乳頭 (Heads of the Breasts); *weiguan* 胃脘 (管) (Duct of the Stomach), *guanyuan*, *liangshou xiaozhitou* 兩手小指頭 (Tip of the Two Little Fingers) *zu liang xiao zhitou* 足兩小指頭 (the Tip of the Little Toes); 11 places on two sides each. Moxa 500 *zhuang*. The Bridge of the Nose and the Tip of the Little Fingers, 100 *zhuang* each; the rest 500 *zhuang*.

Xiaofu shu 小腹俞 (Connection to the Lesser Abdomen) next to the third vertebra below *daji* 大槌 (椎) (Great Extremity) on both sides 2 *cun* and 3 *fen* away. Controls... stiffness/obstruction causing internal haemorrhoids 30 *zhuang bao* (?). If there is no recovery (?), you can moxa up to 60.

Dachang shu 大腸俞 (Connection to the large intestine) at the 16th vertebra on both sides 2 *cun* 3 *fen* away. Controls thunderous calling in the belly, large intestine bubbling diarrhoea/dysentery, inability to digest food, small intestine, twistingly hurts, the small of the back and spine are painful and stiff, difficulty in defecating, inability to eat and drink. Moxa 100 *zhuang*. Excellent.

The Dunhuang Chinese moxa-cautery charts seem to easily fit the bill of household medical manuals, since symptoms treated are mostly non-fatal, non-contagious chronic illnesses predominantly associated with pain and sensory disturbance, gastro-intestinal and locomotive disorders. Many illnesses are associated with *zhong feng* 中風 (Attack by Wind).

Since the earliest written records in China, untimely winds were known as a cause of sudden disorder in the body of state and the physical body alike. There were good and bad winds and untimely winds always spelled bad fortune. In classical medicine they were 'the origin of 100 illnesses'.²⁴ Classical medical treatises depict malevolent demon-like wind spirits, and simultaneously imagine wind as a more abstract cause of physical disorder (Fig. 5).

Moxa-Cautery Images

There have barely been any analyses that compare the Tibetan medical manuscripts from Dunhuang with their Chinese counterparts, which have been more comprehensively researched.²⁵ The manuscripts were preserved in the

24 Winds were recognised as an independent source of illness from very early times. Kuriyama isolates lack of regularity and sudden change in the winds as the characteristics that qualify it to be the 'origin of 100 diseases', disorders of time and space that could be manipulated by diviner and physician alike. See Kuriyama 1999, pp. 233–70.

25 Lin Meijun and Guo Changqing 2009, pp. 55–7. Complete tran-



Figure 19.5a and b A ceiling mural from Western Wei 534 –556 Cave 249 at Dunhuang shows Lei Gong 雷公, the Thunder Duke or the Thunder Spirit, surrounded by drums, together with another image (below right) that some suggest is the Feng Shen 風神 (Wind Spirit), or Feng Bo 風伯 (Wind Uncle) with a bag full of wind on his back. © Wang Jinyu, with kind permission to publish from the Dunhuang Academy



same collection, and therefore their connection in time and space raises the question of connection in content as well. There are, however, a number of factors which indicate the temporal priority of the Chinese moxa-cautery chart tradition. As mentioned above, traditions of Chinese medical illustration survive from one thousand years before the date of either the Tibetan or the Chinese Dunhuang charts, and point charts were included in well-known and widely distributed medical compilations of the 7th and 8th centuries, before and contemporary with the probable dating of the Dunhuang texts. The Tibetan versions of the moxa-cautery charts are rough productions that offer only information about the locations for treatment, and do not integrate information about treatment and treatment indications on the chart itself (though that information may be located in moxa-cautery texts Pt.127 and Pt.1044). The Chinese charts offer similar information displayed on many more figures, and integrate greater detail about illnesses and therapeutic technique. Embedded in the Chinese moxa-cautery tradition at Dunhuang, as we will see shortly, are also early Chinese astromedical concepts concerned with care for the physiology of the spirits of the body, concepts which are evidenced in the later Tibetan tradition. The Tibetan Dunhuang manuscripts are the earliest extant Tibetan manuscripts. So while, in the absence of clear earlier Tibetan evidence, none of these factors alone can establish definitively the anteriority of the Chinese tradition, this combined evidence strongly supports the case.

While content-wise the Tibetan and Chinese charts may be similar, visually they are very different. Each of the sets of Chinese images has qualities that point to their production in centres that are far away from the main loci of political power where cultural interaction was a greater feature of everyday life. The Chinese charts, with their articulated rib cages and elongated Buddhist-style earlobes, for example, are not standard central Chinese productions. Perhaps they reflect the growing influence of Buddhism and Buddhist imagery in the Tang court or, as likely, the specific Buddhist culture of Dunhuang as a unique site of intense cultural exchange. The Tibetan charts, as we argue throughout this chapter, demonstrate considerable contact with pre-existing Chinese moxa-cautery traditions. With this in mind the charts provide a unique opportunity to explore the hypothesis that during the 9th and 10th centuries, a Sino-Tibetan medicine was emerging in written form, after which its cross-cultural innovations, to be detailed

in this chapter, were absorbed into the larger Himalayan *mélange* evident in the canonical texts of Tibetan medicine which were compiled around the 12th century, but not into the Chinese received tradition of a conflated *zhenjiu* 針灸 ‘acu-moxa’, the category most frequently encountered in post Han medical literature.

Unlike the two Tibetan figures, the 18 male figures of the Chinese charts have been standardised across the sets in all three manuscripts. The two styles of pose, anterior and posterior (and not in profile) are sketched to facilitate inspection, with hands and feet turned out to reveal places marked with black dots. The only clothing is a loin cloth that modestly conceals genitals and buttocks, which would otherwise be exposed in the anterior and posterior views. The hair has been civilised and restrained into two top knots maximising exposure of the face. The faces are standardised to a neat oval shape with curving eyebrows and barely visible eyes, making the expression appear content and passive, altogether pleasing to the eye, if an anodyne blank model on which to inscribe variations of technique. Individuality has been subordinated to functionality.

Both the Tibetan and the Chinese charts feature basic images with a clear practical goal, many of them crudely drawn. Both have emphasised rib cages for ease of positioning abdominal locations. The black lines connecting between black dots on the anatomical figures and the concise hands-on captions may seem almost trivial to our eyes, but in fact they are not: they are some of the earliest – if not *the* earliest – extant examples of indication lines in anatomical illustrations.²⁶

Illnesses and Treatment

Extending our comparison also to the Tibetan moxa-cautery texts Pt.127 and Pt.1044 reveals striking similarities in form, content and context.²⁷ The structure of these moxa-cautery texts is very similar to the text accompanying the Chinese charts S.6168 and S.6262: a list of symptoms, the location on which to apply moxa-cauterics and the number of moxas to be burnt. The descriptions of ailments which are to be treated by moxa-cautery are also very similar. Both the Chinese and Tibetan material deal primarily with many wind (T: *rlung*, Ch.: *feng*) related ailments; genito-urinary and reproductive disorders as well as digestive and abdominal illnesses. Some of the descriptions bear almost literal similarities. Such, for example, is the passage found

scripts of S.6168a and b, and S.6262 are in Ma Jixing (ed.) 1998, pp. 477–512, and Cong Chunyu (ed.) 19942, pp. 182–200. See also Lo 2005a and b, and 2010; Yoeli-Tlalim (forthcoming).

26 For a discussion on indication lines, see Herrlinger 1970, pp. 19 and 54–60.

27 Yoeli-Tlalim (forthcoming).

in the Chinese ms. S.6168 describing wind in the face like insects on the face,²⁸ which is remarkably similar to what we find in Pt.1044: '[If] due to wind (*rlung*) illness swellings are forming on the face, and there is itching like a walking insect...'.²⁹ It is interesting also to note here the Tibetan measurement word *tshon*, a loanword from the Chinese *cun*, which appears quite frequently in the Tibetan moxa-cautery texts from Dunhuang.

Moxa-cautery in both Tibet and China involved the burning of various qualities of *ai* 艾 (mugwort or *Artemisia vulgaris*) on the therapeutic location. There is no specific description for medieval Dunhuang moxa-cautery with *ai* in either the Tibetan or Chinese charts, but in the Tibetan material there is reference to Turkic style iron cautery. There is also evidence elsewhere of the use of a variety of woods such as elm, orange wood, pine, jujube and mulberry wood in the medieval Chinese tradition.³⁰ The moxa-cautery texts Pt.127 and Pt.1044 tell us about combination therapies that recommend the staged use of drugs, dietary therapy, moxa-cautery and bloodletting according to the progression and increasing severity of the illness.

In contrast to the large numbers of moxa placed on the therapeutic locations in the Chinese charts, the Tibetan texts call for the application of rather small numbers.

While most of the remedies preserved associated with the Dunhuang Tibetan medical charts indicate the treatment as forms of moxa-cautery therapy, there is also evidence of fumigation, massage and horn cupping, and bloodletting as well as the use of *materia medica*.

No Theory

The moxa-cautery charts and texts from Dunhuang – both the Chinese and the Tibetan – do not discuss theory. Both the Tibetan and Chinese moxibution charts and texts are entirely concerned with practical know-how, rather than formal classical knowledge – no explanations or reasonings are provided relating to Chinese classical physiology of Yin, Yang, Qi. In the Chinese case, the charts could be standalone instructional manuals or, as noted above,

included in scholarly medical treatises and sit side-by-side with learned treatises on medicine. In the Tibetan moxa-cautery texts, although we do have mentions of the two other *nyes pa* – it is mostly *rlung* (wind) that the texts are concerned with. There is no dealing with the three: wind, bile and phlegm as a triad and indeed, no mention of the term *nyes pa*. So while the concept was known in Buddhist contexts, the Tibetan medical manuscripts from Dunhuang reveal a stage where this notion has not yet been integrated into a medical system as we know it from a later stage. In neither the Tibetan nor the Chinese charts is there substantial internal evidence of, or reliance, on theories such as those we know well from the transmitted literature. Within these practical traditions at Dunhuang, it is easy to imagine that therapeutic knowledge transmitted readily, without the encumbrance of theoretical baggage.

Moxa-Cautery, Calendrical Spirits and the Channels of Acupuncture

Most significantly, neither Chinese nor Tibetan texts from Dunhuang link treatments to a system of channels. This is consistent with how moxa-cautery is later described in the 12th-century Tibetan *Gyushi*.³¹ In China moxa was undoubtedly more widespread than acupuncture throughout history, being a part of the self-care tradition in the home and evidenced in popular almanacs and manuscript traditions. And so there was a multiplicity of co-existing traditions, some dependent on channel theory and some not. As noted above, the dangerousness of acupuncture treatment meant that the technique went in and out of fashion at various times in imperial history. But in the scholarly written tradition, the notion of points arranged along channels and related to the organ functions was already present in a fairly standardised textual form from the time, in the 3rd century, when Huangfu Mi's 皇甫謐 *Zhenjiu jiyi jing* 針灸甲乙經 (AB Canon of Acupuncture and Moxa-cautery) reordered much of the Yellow Emperor's corpus. And these points related to both acupuncture and moxa-cautery.

The Yellow Emperor corpus is generally thought of as the *locus classicus* for the distinctive acupuncture and moxa-cautery tradition that coalesced in the centuries around the turn of the previous millennium. Three re-visions of this corpus were subsequently edited and printed after the Song period and these form the received

28 See the first sentence of the translation of the excerpts from S.6168 above (Fig. 4a).

29 Pt.1044, lines 26–7.

30 Lo 2001, p. 67. *Huangdi hama jing*, pp. 55–6. It is not clear whether the wood itself is used therapeutically or simply in the preparation of the cautery material. Variations of this passage are to be found in *Waitai miyao, juan 39* and in a section of *Ishimpō 2* entitled 'Methods to Prepare Cautery', the latter being attributed to the lost text *Xiao pin fang* 小品方 (Lesser Grade Remedies); *Ishimpō 2*, p. 58

31 For a discussion of moxa-cautery in the *Gyushi*, see Pasang Yonten Arya 2014.

tradition.³² This received tradition shaped, and continues to shape, the scholarly imagination of medical practice, eclipsing less authoritative writings such as almanacs and the later manuscript tradition which tend to reveal the more extensive use of moxa-cautery rather than needling therapies. The combined evidence therefore suggests a plurality of practice, with moxibustion being more widespread, and in many contexts independent from the acupuncture traditions. In this respect we can say the evidence from Dunhuang reveals a popular moxa-cautery tradition that is more consistent with the classical received tradition of Tibetan medicine – in that it did not integrate with theories of channels or acupuncture – than with the received Chinese tradition, which tends to elide moxa-cautery with acupuncture, as in the catch-all term *zhenjiu* 針灸 (acu-moxa).

In both the Tibetan and Chinese manuscript charts from Dunhuang, we have a quick and easy type of treatment – a treatment that does not require much advance training. The locations described in the Tibetan and Chinese charts and texts are determined only by surface anatomy, and keyed to illnesses not channels. Acupoints with lyrical Chinese titles such as ‘spirit storehouse’, ‘bubbling spring’ or ‘celestial pivot’ are generally eschewed in favour of terse directions to apply moxa-cautery at, for example, a location *liangru shang quepen gu xia er lei jian* 两乳上缺盆骨下二肋間 (between the two ribs under the clavicle and above the breast)³³ or *zai qixia sancun* 在臍下三寸 (3 Chinese inches under the umbilicus).³⁴ Of the some 360 standard acu-moxa locations in Huang Fumi’s 3rd-century work, that are well known in the received acupuncture literature, there are only 22 cited among the c. 50 moxa-cautery locations recorded in the Chinese Dunhuang charts.³⁵ These 22 must, in our view, represent the most widely known and popularly used moxa-cautery locations.

What is it that Flows Around the Body?

One clue to elements of Tibetan medicine that seem to have taken a lead from Chinese precedents can be found

32 The primary medical works attributed to the legendary Yellow Emperor are *Huangdi neijing* and *waijing* 黃帝內/外經 (The Inner and Outer Canon of the Yellow Emperor). Over time, the Inner Canon has been rearranged by editors into three sections, forming separate books: *Suwen* 素問 (The Basic Questions); *Lingshu* 靈樞 (The Numinous Pivot); and *Taisu* 太素 (The Grand Basis).

33 P.3378.

34 P.2662v.

35 Those that are included are: *guanyuan* 關元, *jianshi* 間使, *juque* 巨闕, *baihui* 百會, *zhongfu* 中府 and *zuyangming* 足陽明.

in the descriptions of the Tibetan concepts of *bla/brla*.³⁶ The notion that there is a cyclical vital force which flows around the body in accordance with the lunar cycle is an important notion in Tibetan medicine, which has various practical implications for the practice of moxa-cautery. This force, termed *bla* (or: *brla*) is described as responsible for a person’s vitality and well-being.³⁷ According to the surviving Tibetan medical tradition, sometimes when a person experiences a great shock, the *bla* may be lost. Thereafter, the person may show signs of illness. Determining the location of the *bla* is considered important in Tibetan medical practice, since the use of invasive therapies such as acupuncture, moxa-cautery or blood-letting in an area where the *bla* resides at the time of treatment is seen to be harmful for the patient. According to Tibetan medicine, these invasive therapies are also to be avoided on days of the new or full moon, when the *bla* is said to pervade the entire body for a short time.

Pt.1044 is the earliest extant Tibetan source to refer to such a cycle:

As for the method of cauterisation:

The day of the month (*tshes grangs*) needs to be established and the location of the *brla* (*bla*) [needs to be] calculated.

Apply accordingly [when] it [the *bla*] is not descending.³⁸

The idea that a vital force flowed around the body in accordance with the lunar cycle, and was vulnerable to damage from invasive therapies, appears in Chinese medical sources both before and after the period of Dunhuang.³⁹ In the c. 50 Chinese calendars found in Dunhuang and dated between the 9th and 10th centuries, there are two hemerological methods mentioned: that of the transfer of the daily spirit (*riyou* 日遊, relevant particularly to childbirth) and that of the location of the human spirit in the body (*renshen* 人神, relevant particularly to acupuncture and moxa-cautery). According to Harper, the Chinese iatromantic texts in Dunhuang stand apart from other manuscripts on medieval divinatory arts, and have their own distinct place within a larger body of technical literature, which includes medical literature.⁴⁰ While the annotation on *renshen* found in Dunhuang calendars, however, dates only from the end of the 9th century, the medical idea of the spirit flowing around the body emerged much earlier in China.

36 Yoeli-Tlalim 2014, pp. 99–100.

37 For a thorough overview of the cyclical vital force see Gerke 2011, particularly ch. 5.

38 Pt.1044, lines 53–4.

39 Lo 2001, pp. 61–99; Harper 2005; Arrault 2010.

40 Harper 2003, pp. 471–512, pp. 486–7.

Lo and Harper have shown that the principle of the human spirit moving within the body is found in iatromantic treatises dating to the Han period, and was soon after integrated into the medical practice and theory of classical medical treatises such as those compiled into the *Huangdi neijing lingshu* 黃帝內經靈樞 (*Lingshu* for short).⁴¹ The earliest known exemplar of the notion of the human spirit (*renshen*) or (*renhun* 人魂) in circulation has been dated to an iatromantic manuscript found at a 1st-century CE Han dynasty site in Wuwei 武威 (close to Dunhuang).⁴²

The concept of a circulating 'human spirit' had thus made up an integral part of the Chinese acu-moxa traditions since the Han period. It closely mirrored ideas about the circulation of *renqi* 人氣 'human Qi', which in early treatises of the Yellow Emperor corpus was also conceived as a small entity moving around the body, rather than the more fluid-like substance that we imagine today. The Wuwei manuscript also provides the earliest reliably dated evidence of acupuncture at named locations on the body as it records the *Huangdi zhibing shenhun ji* 黃帝治病神魂忌 (Yellow Emperor's Soul and Spirit Prohibitions in Treating Illness), which warned of using moxa-cautery at different parts of the body according to a patient's age.⁴³ Great caution was taken in order to ensure the safety and free flow of the *hun* 魂 (soul) and *shen* 神 (spirit) as it moved predictably according to these cycles. Harper has shown that the Chinese material from Dunhuang provides examples of various types of *renshen*, but he has suggested that those based on days of the lunar month may have been the most widely disseminated and influential, to the point of being general knowledge in medieval society.⁴⁴ Classical texts such as *Huangdi neijing lingshu* had already repeated the notion that the Qi and the *shen* 'spirit' travel in and out of the body, and identified 365 locations suggesting an annual cycle. By the 7th and 8th centuries, many Chinese medical books record cycles of the human spirit and related treatment prohibitions as a staple part of the acupuncture and moxa-cautery traditions, including three manuscripts in the Dunhuang collections (P.2675, S.5737 and P.3247) and the numerous calendars which refer to the *renshen*.⁴⁵

The notion that a spirit travelled around the body on lunar and diurnal cycles, taking up lodging at knowable locations, was part of a shared Sino-Tibetan medical culture that was emerging in the cultural interactions around

Dunhuang. In the Chinese case, there is a textual lineage of iatromancy from antiquity to the medieval period, and evidence of this tradition survives in illustrated manuscript form in Japan, as we shall see, and as prohibitions which are integrated into the received Chinese medical sources. But the concept of the circulating *renshen* lost its central position in the scholarly Chinese medical tradition. In contrast, in the Tibetan case, this tradition has remained very much alive as an integrated part of the written and practical tradition.

A graphical reflection of the Sino-Tibetan nature of the *bla/renshen* 人神 (human spirit) notion can be seen in manuscripts which have both Chinese and Tibetan inscriptions.⁴⁶ Both the Chinese and Tibetan moxa-cautery texts reflect links with time reckoning and divination. The Tibetan scroll Pt.127 is in fact a compilation of several different texts: the moxa-cautery text discussed above (*recto*, lines 78–184), along with a number of divination and calendric texts on the rest of the *recto* as well as the *verso*. These different texts appear to have been written by the same hand. We also find such juxtapositions of medical and divinatory texts among the Chinese texts. Indeed, common to the Tibetan and Chinese cultures of the prohibition texts and charts was this circulation of the spirit, conceived of astromedically as a vulnerable orb or planet circulating around the system in need of careful protection.

Origins of Moxa-Cautery Method: the Land of the Indian King?

As we dig beneath the surface of the Dunhuang manuscript traditions that describe the transmission of moxa-cautery techniques, many strata of medical practice are revealed. These may help us to identify aspects of medical technology that were most mobile, and amenable to moving from one linguistic and cultural sphere to another.

At the close of Pt.127 a final statement tells us that the preceding moxa-cautery procedures have wide-ranging cultural origins:

This text (*yig*) on medical practice (*dpyad*) is not even [to be found] at the archives (*phyag sbal*). It is a compilation of all traditions of medical practice (*dpyad yig thams cad*), in addition to being compiled according to the indigenous (*?phugs pa*) medical practice (*dpyad phugs*) of Zhang Zhung.⁴⁷

41 Lo 2001.

42 Lo 2001, Arrault 2010.

43 Lo 2001, pp. 82 and 88. *Wuwei*, modern edn: Zhang Yanchang and Zhu Jianping (eds) 1996, pp. 22–3.

44 Harper 2005, pp. 149–53.

45 Arrault 2010, see n. 27.

46 Kalinowski 2003, p. 149.

47 Pt.127, lines 183–4. See Yoeli-Tlalim 2013.

Even more intriguing is the colophon of Pt.1044, saying: ‘This type of method comes from a land of the/an Indian king’.⁴⁸ The moxa-cautery practices which are described in Pt.1044 – as in the other Tibetan moxa-cautery chart and text – are not known to have been used in classical Indian medicine. Indian cauterisation practices are delineated, for example, in the chapter devoted to cauterisation in the *Aṣṭāṅgahṛdaya saṃhitā*. Although the Tibetan term for moxa-cautery – *me bsta’* – was used in the 11th century by the translators of the *Aṣṭāṅgahṛdaya saṃhitā* to render the Sanskrit term for cauterisation (*agnikarman*) in Tibetan,⁴⁹ we know that the Indian cauterisation practices are *fundamentally different* from the moxa-cautery practices found in Pt.1044.

Indian cauterisation practices are discussed in the chapter devoted to the subject in the *Aṣṭāṅgahṛdaya saṃhitā* (ch. 30 of the *Sūtrasthāna* part)⁵⁰ where there is a brief discussion on two types of burning: one by placing an alkaline paste (for treating conditions like haemorrhoids or diseases of the eyelids) and the second is thermal cautery (S: *agni karma*) – used on the skin, muscles, veins, tendons, joints and bones, for treating ‘diseases like black mole, weakness of body parts, headache, adhimāṅtha (a disease of the eye), warts, cysts etc. Burning of the skin should be done either with a lighted wick, tooth of a cow, rock crystal, arrowhead or others (such as pippalī, excreta of a goat, iron-rod, piece of bangles)’.⁵¹ Burning is also used for treating haemorrhoids, rectal fistula, tumors, various types of ulcers, illness of the eyelids, bleeding, blue mole or surgical wounds. There is also a chapter devoted to cauterisation (*agnikarman*) in the *Suśruta* (ch. 12).

How then should we read this reference to a ‘land of the/an Indian King?’

The next line in the colophon provides us with an intriguing clue. It explains that this technique derives from *Ha-ta-na-bye*, a Tibetan transliteration of the old Khotanese name *hvatana* for Khotan.⁵²

Khotan, an oasis kingdom on the southern branch of the Silk Road, was a major centre of Buddhist learning in the 1st millennium. Chinese and Tibetan accounts on the

foundation of Khotan associate it with the son and ministers of Emperor Aśoka – hence ‘the Indian king’. The view of Khotan as an Indian colony endured, even until the 10th century when its rulers continued to bear Indian names.⁵³

The population of Khotan was ethnically mixed, as was its culture, bringing together Indian, Chinese and Iranian elements.⁵⁴ We can also trace Tibetan cultural input, primarily as a result of Tibetan rule of Khotan from the late 8th century till mid-9th century. During the 10th century the contacts between the Chinese, Khotanese, and Uighurs intensified as a result of marriage alliances.⁵⁵ An instructive description in this regard appears in the Tibetan 9th or 10th century *History of Khotan* (*Li yul lung bstan pa*):

Li (Khotan) being a country where Indians and Chinese met, the common language agrees with neither Indian nor China. The letters agree one by one with India. The customs of the people agree for the most part with China. The religious customs and the religious language agree for the most part with India.⁵⁶

Khotanese manuscripts were found by Stein in Dunhuang and in the Khotan area. The language, an Iranian language contemporary with Middle-Persian and Sogdian, written in Indian Brāhmī script, with an extensive vocabulary borrowed from Sanskrit, was unknown by the 20th century. Following Stein’s discoveries, Khotanese was deciphered by Hoernle.

The Khotanese manuscripts and fragments date from the 5th to the 10th centuries and most of them are Buddhist. The Khotanese Buddhist texts include both translations from known texts (mostly from Sanskrit) as well as some local compositions.⁵⁷ With a Buddhist culture based mostly on Sanskrit sources, it is not surprising that Khotanese medical texts predominantly reflect links with Ayurveda: these include a Khotanese version of Ravigupta’s *Siddhasāra*⁵⁸ and the so-called ‘Jivaka Pustaka’, the title given by Bailey to a 73-folios long, Khotanese and Sanskrit bilingual, medical text.⁵⁹ The text is incomplete and contains no colophon.⁶⁰

Beyond this level of learned medicine, we also find a host of texts which can be viewed as belonging to a more popular strand. Some of these correspond to the testimo-

48 Pt.1044, l. 52: *rgya gar gi rgyal po’I yul nas byung ba’i dpyad rnam gchlg las*; Luo Bingfen et al. 2002, p. 238.

49 This point was made by Fernand Meyer. Meyer 2002. RYT wishes to thank Fernand Meyer for sharing his paper with her.

50 Murty 1991, vol. 1, pp. 343–53.

51 Ibid., vol. 1, p. 350.

52 We are grateful for the help of Peter Zieme for the suggestion that *Ha-ta-na-bye* is a Tibetan transliteration of the Old Khotanese word *hvatana*, the geographic designation being *hvatana-kṣīra*, and the language *hvatana*. *Encyclopaedia Iranica* 2016, online entry for Khotan (accessed 10/10/2016).

53 Emmerick [1992] 1997, pp. 1–3.

54 Emmerick 1979.

55 Rong Xinjiang 2004, pp. 57–62 and pp. 60–1.

56 Quoted in Emmerick 1979b, p. 169 (from Emmerick’s edn, pp. 20–1). For the proposed dating, see Thomas 1935, I, p. 42. Thomas suggested that the text was composed in the Dunhuang area.

57 See Maggi 2009; Emmerick [1992] 1997.

58 Emmerick 1980.

59 India Office Library ms. Ch ii 003 - 10L KHOT, pp. 87–110.

60 For an English translation, see Konow 1941. See also, Hoernle 1917, pp. 415–32; Emmerick 1980; Emmerick 1979a.

ny of the Tibetan *History of Khotan* text quoted above, stating that the ‘customs of the people agree for the most part with China’. These are yet to be studied properly, but some of these popular medical texts can be pointed out. They include, for example, a number of fragments from the Crosby Collection (78+79; 104+105; 184+185; 190+191), which mention needles and cauterisation.⁶¹

There are also a number of Khotanese texts within the sphere of popular ritual medicine, such as omen texts and divination texts based on the 12 year cycle, which appear to bear resemblance to Chinese and Tibetan texts, some also including Chinese parallel text.⁶² It is thus wholly understandable how Pt.1044 could be a Tibetan adaptation of a Khotanese medical text which preserved Chinese notions – or at least that this is how its author could have perceived it.

A Uighur Parallel

The process of transcreation did not stop there. Elements of the illustrated Dunhuang medical traditions continued to have traction around the Taklamakan Desert. One Uighur manuscript fragment testifies to the longevity of the local tradition. A Uighur chart preserved on the northern route around the desert survives in the Turfan collection at the Berlin-Brandenburg Academy of Sciences and Humanities (Fig. 6).⁶³ A preliminary dating by Müller has placed the texts on this scroll in the 11th–12th centuries, but according to Dieter Maue, this dating needs to be revised.⁶⁴

Once again, we see the basic elements of the early moxa-cautery charts: the simple outline anterior view of figures with striated rib cages, 11 black dots marked on the upper body wherein the medical significance of the texts resides, the lines linked to terse captions, for example, *bašta* the ‘head’, *köküztä* the ‘chest’, *talta* ‘the spleen’. Other lines point to captions indicating places on the forearm and the knee. Where the lines on the first figure indicate spots on the head, and the upper body, the blocked text next to it describes symptoms also located in the head: ‘heat in the head’, ‘curling tongue’ and ‘unclear speech’. In the Uighur case there is also a new feature integrated into the chart. The treatments themselves seem to include medical recipes to be combined with moxa-cautery. The recipes include instructions on how to prepare complex remedies with animal substances, horn, fat and a form of pepper, measured according to standardised weights.

The Uighur figures reveal a shared Buddhist quality to medical figure drawing – the central figure sits in *padmāsana* (Lotus Posture), with hands positioned in a Buddhist gesture, possibly *dhyāna-mudra*.⁶⁵ The rough execution and the slightly angled view of the central and right-hand side figures associate the Uighur chart with the Tibetan moxa-cautery chart. The figures are also less standardised than the Chinese versions, and the hairdos a rather elaborate curly coiffure, neatly restrained, perhaps a version of the way the Tibetan figures have their hair swept back from the face in a ribbon. More modesty is evident in the substantial underwear of the figure on the right, although clearly outlined breasts in the naked upper body of the figure on the left identify one of the figures as a nude female. Their empty pupil-less eyes lack the lively intentionality of the Tibetan figures, but in contrast to the Chinese versions they are wide open, which serves to convey a certain individual expressiveness, if yet a passive receptivity.

61 Emmerick 1993.

62 Maggi 2009. A text combined with drawings where demons causing children’s illnesses are depicted together with a collection of formulas against demons. Khotanese with Chinese parallel text (Ms. Ch 00217 a–c; Maggi 1996, pp. 123–37. Reproductions in Whitfield *et al.* 1990, pp. 90–1 (no. 69).

63 Mainz 0725, p. 2.

64 Dieter Maue, pers. comm.

65 Müller 1923, pp. 21–6.



Figure 19.6 A Uighur moxa-cautery chart with remedies. Mainz 0725, p. 2. © Berlin-Brandenburg Academy of Sciences and Humanities

Continuities Beyond the Medieval World

Fortunately for us, the Chinese prohibitions protecting the flow of the human spirit were transmitted to Japan from the 10th century onwards, where many lost Chinese medical traditions are preserved in text and manuscript.

As a result, while the illustrated tradition is otherwise lost in the transmitted Chinese literature, it is preserved in prohibition texts in Japan which demonstrate direct continuities with the Tibetan and Chinese medieval moxa-cautery charts.

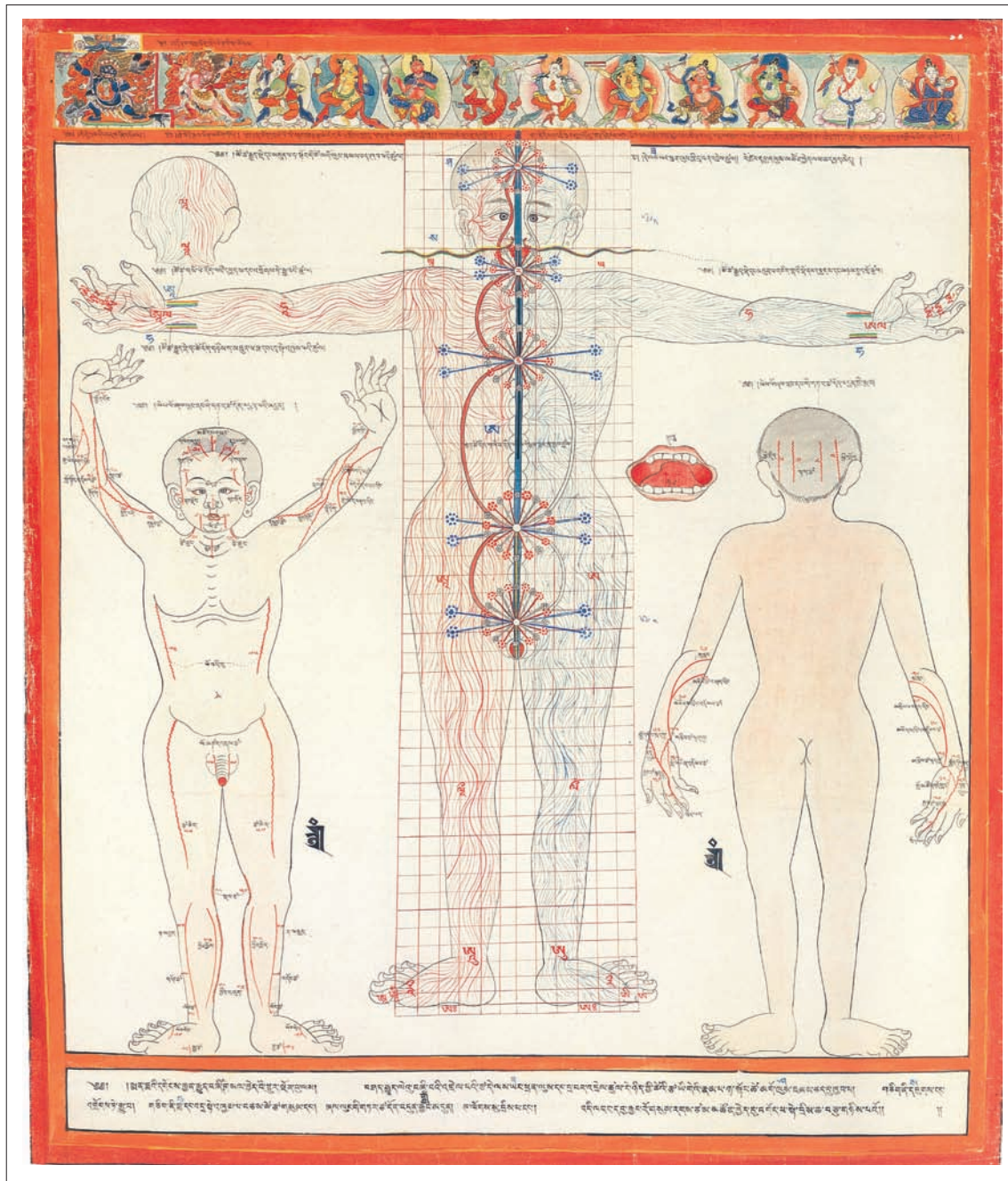


Figure 19.7 The circulation of *bla* in the body: the different locations are marked by syllables. Tibetan Medical Painting no. 12 (Ulan Ude set)

In Tibet we also find a later visual depiction of the flow of the *bla*, represented in the Tibetan Medical Paintings, which illustrate Sangye Gyatso's (1653–1705) *Blue Beryl*. Medical Painting no. 12 has a visual depiction of flow of the *bla*, as it was synthesised with Indic tantric notions found in the *Kālacakra Tantra*, where each day of the lunar month (and the flow of the *bla*) is associated with a syllable (Fig. 7).⁶⁶

Meanwhile in Japan, we find the *Hama jing* 蝦蟆經 (Toad Canon), extant in several 18th-century illustrated

Japanese manuscripts, testifying to further continuities in this pan-Asian tradition. The pairing of a practical tradition of moxa-cautery and acupuncture practice with calendrical prohibitions survives therein over some eight centuries from north-west China (modern Gansu) from the time of the Han dynasty Wuwei manuscripts to the Dunhuang cave library manuscript collection, and then on another millennium to the *Hama jing*.⁶⁷ Once again we see the black

66 Gerke 2011, ch. 5.

67 Tamba no Yasuyori 984, *Ishimpō* 2. The *Hama jing* survives in an 1823 woodblock edition known as the *Weisheng huibian* 衛生彙編. Five 19th-century illustrated Japanese manuscripts at-

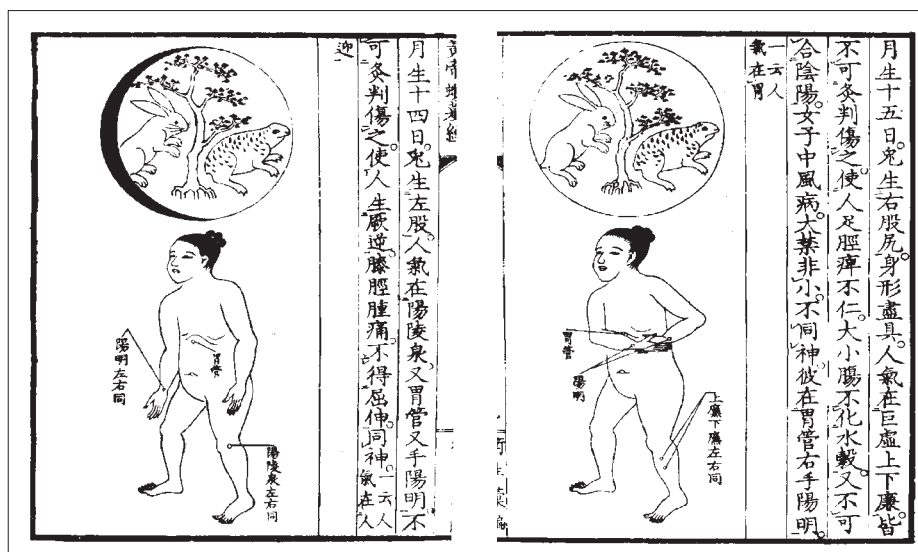


Figure 19.8 The Toad and the Hare in the Moon. Acu-moxa prohibitions on the full moon and the day before the full moon, to protect the passage of the human spirit. *Hama jing*, Zhongyi guji, Beijing, 1984, pp. 16–17

and white outline images of the body with lines indicating strategic black dots on the body; in this case the dots mark the place where the Qi or the 'human spirit' resides on a particular day of the lunar cycle, and where treatment is contra-indicated. The toad in the manuscript title alludes to the toad and hare that traditionally reside in the moon, much as in Europe we might see a pareidolic man in the moon. Each of the 30 figures depicted in the *Hama jing* illustrates where the human spirit resides on one day in the lunar cycle, with a sketch of the moon itself marking the progression, the dark sides of the moon's phases gradually obscuring and then revealing the two animals until they are both visible at the full moon (Fig. 8).

Comparatively long textual explanations in the Japanese editions of the *Hama jing* list the perils of damaging the human spirit – from minor reactions like redness of the eyes, to violent death, and many instances of sexual and

reproductive disorder. Just as in the surviving Tibetan tradition which imagines the *bla* flooding the body once a month at full moons, it was deemed particularly inauspicious to treat at the full moon when 'it is not fitting to harmonise Yin and Yang [engage in sexual intercourse]; women will be struck by Wind illness. Greatly prohibited, not insignificant. On the sixth day of the lunar month sex will bring on carbuncles and ulcers'.⁶⁸

The *Hama jing* concludes with a short and unusual treatise that captures the plural nature of the moxa-cautery traditions.⁶⁹ The moxa-cautery materials were to be prepared under an effigy of Bian Que 扁鵲, a well-known patron of the acupuncture traditions, and the treatment was conducted in a ritual space sanctified by the Celestial Physician and the Celestial Master, deities in the oldest recorded institution of Daoism. The incantation, which is fully transcribed, reflects the bureaucratic character of Celestial Master Daoism. It exorcises malevolent spirits, and poisons contracted from ghosts, wind, cold, and impurities of the diet, and calls on the assistance of Daoist deities and the animals of the constellations:

To the left, the empress, Mother Queen of the West. To the front, the Vermilion Bird. To the rear, the Black Warrior 玄武, (the Herdboy?) and Weaving Girl cause me to moxa you.

It then concludes:

The needle does not encounter the spirit. In piercing I do not cause harm or injury. Sickness and illness quickly be

test to the illustrated tradition. Kokkai Toshokan 国会図書館 (National Library); Kyōdai Fujikawa Bunko 京大富士川文庫 (Fujikawa Library at Kyoto University) [edn with commentaries by Mori Yakushi 森約之 in 1860]; the private Tokyo Mukyukai kan-narai Library 無窮会神習文庫 [edn with commentaries by Mori Risshi 森立之 c. 1830, privately owned by Ota Shojirō 太田晶二郎]; of unknown location formerly in the possession of Tomioka Tessai 富岡鉄斎 (1836–1924). Both editions with commentaries refer to a further lost manuscript owned by *Is-shūdō* 聿修堂. The 5th edition, in hanging scroll form, dating to 1831, was rediscovered by Nagano Hitoshi in the archives of the Naitō Kinen Kusuri Hakubutsukan 内藤記念薬博物館 (Naitō Memorial Museum for Medicine). This may be a copy of Tamba no Motoyasu's original text since it attempts to copy his original seal (i.e. '廉夫' and '丹波元簡'). The 'rediscovery' and naming of this copy is described in Nagano 2001, p. 414 *et passim*.

68 *Huangdi hama jing* 1984 reprint, p. 164.

69 Partially reproduced in *Zhi zhubing xiang bei zhou* 治諸病向背咒 (Incantation used with directional orientation for treating various medical disorders), *Ishimpō* 2, p. 59.

gone. Urgent, urgent, in accordance with the statutes and orders,⁷⁰

and the final instructions: 'In all cases when treating illness recite the incantation thrice, and afterwards moxa and needle them'.

This passage provides us with a unique social and religious context for the preceding thirty illustrations of the flow of the human spirit in the *Hama jing*, and so brings this chapter to a neat conclusion with evidence of the survival of both content and illustrative genre in medical literature transmitted into modern times. The practitioner, most probably a Celestial Master Daoist, has created a ritual Chinese environment to optimise cauterisation and acupuncture treatment, and as a part of his preparations he must know and avoid the exact location of the human spirit as it flows on its lunar cycle around the body, for fear of injuring it and causing terrible damage to the patient.

Conclusion

The structure of the moxa-cauterisation charts, the simple black and white figures with their brief, instructive, captions provided a seemingly infallible short-cut to cross-cultural therapy, a quick and easy visual code available to all those with basic literacy. The simple diagrammatic representations could override barriers of language and education, obviating the need to know complex medical theories, and give the impression of facilitating the transmission of medical knowledge through focusing on the essentials. The Tibetan and Chinese moxa-cauterisation texts represent very similar but not identical styles of practice. We have to imagine that at some point during the 9th–10th centuries in the Dunhuang region medical writers and copyists fused concepts of the Tibetan *brla* spirit with Chinese lunar cycles of the circulation of Qi and the *renshen* 'human spirit'.

Sensitised to these nuances we begin to perceive the charts as an empty vessel into which could be poured new and culturally specific concepts of the body and its internal workings; each time moving from one context to another the charts become evidence of a new collective endeavour, stimulating changing outputs and interpretations. The Tibetan chart is not simply a copy of the Chinese charts; it is not a passive acceptance of the priority of Chinese

knowledge, but represents a way of adapting foreign techniques to enhance local know-how – the two colophons of the related Tibetan moxa-cauterisation texts are forms of legitimating the new fusion with a new trans-cultural imperial and religious identity.

Collectively, the moxa-cauterisation and prohibition charts offer direct witness to a medieval visual exegesis that seamlessly reconciled divergent meanings. They are vivid testimony to the success of the simple medieval line diagram in facilitating practical therapies – not just spontaneously in isolated places as distant as medieval Europe and Japan, but in the execution of 'travelling medicine', 'travelling light' as it passed through the scribes and medical practitioners in and around Dunhuang.

Bibliography

Primary Sources

Manuscripts

- Mainz 0725, Berlin-Brandenburg Academy of Sciences and Humanities Melothesia Astromedical text Lat. 7028, fol. 154 r^o (BNF)
 Pelliot tibétain 1058 (BNF)
 Pelliot tibétain 127 (BNF)
 Pelliot tibétain 1044 (BNF)
 Plut. 73.41, Biblioteca Medicea Laurenziana, Florence
 Stein Or.8210/S.6168 (BL)
 Stein Or.8210/S.6262 (BL)
 Wuwei 武威 Hantanpo 旱灘坡 medical manuscripts (Eastern Han).
 Modern edn: *Wuwei Handai yijian yanjiu* 武威漢代醫簡研究, Zhang Yanchang 張延昌 and Zhu Jianping 朱建平 (eds) 1996, Beijing: Yuanzheneng chubanshe

Printed Sources

- Beiji qianjin yaofang* 備急千金要方 (Recipes Worth A Thousand Gold for Emergencies) (comp. 650–9), Sun Simiao 孫思邈 (d. 682). Reprint, Shanghai: Shanghai guji chubanshe, 1995.
Huangdi hama jing 黃帝蛤蟆經. 1823 woodblock edn known as the Weisheng huibian 衛生彙編. Kokkai Toshokan 国会圖書館 (National Library); Kyōdai Fujikawa Bunko 京大富士川文庫 (Fujikawa Library at Kyoto University) [edn with commentaries by Mori Yakushi 森約之 in 1860]; the private Tokyo Mukyukai kan-narai Library 無窮會神習文庫 [edn with commentaries by Mori Risshi 森立之 c. 1830, privately owned by Ota Shojirō 太田晶二郎]; of unknown location formerly in the possession of Tomioka Tessai 富岡鉄齋 (1836–1924). Reprint: Beijing: Zhongyi guji chubanshe, 1984.
Huangdi neijing suwen 黃帝內經素問. Edn, 762, Wang Bing 王冰 (ed.). Beijing: Zhongyi guji, 1994.
 Huangfu Mi 皇甫謐 *Zhenjiu jiyi jing* 針灸甲乙經 (AB Canon of Acupuncture and Moxa-cauterisation) 3rd century. Tr. Unschuld, P.U.U. and H. Tessenow 2011, *Huang Di nei jing su wen*, Berkeley/ Los Angeles: University of California Press.
Ishimpō, Tamba no Yasuyori 丹波康賴 984. Reprint, 1993. Beijing: Huaxia.
Qianjin yifang 千金翼方 (Supplement to Recipes Worth A Thousand

⁷⁰ The use of the term, *jiji ru li ling* 急急如律令 (Urgent, urgent, in accordance with the statutes and orders) often implies that the practitioner is speaking with the authority of an ordained priest of the Celestial Master; cf. the use of this formula throughout *Qianjin yifang* ch. 29–30. See Sivin 1995, ch. VII, n. 18. Our italicisation.

- Gold) (comp. c. 682) Sun Simiao 孫思邈 (d. 682). Reprint, 1955. Beijing: Renmin weisheng chubanshe.
- Rgyud bzhi (Four Tantras) (*bdud rtsi snying po yan lag brgyad pa gsang ba man ngag gi rgyud*), 1982. Modern edn: *Bod ljongs mi dmangs dpe skrun khang*, Lhasa, 2000.
- Waitai miyao 外臺秘要 (c. 752), Wang Tao 王燾. Reprint, 1993, Gao Wenzhu 高文鑄 (ed.). Beijing: Huaxia chubanshe.
- ### Secondary Sources
- Akasoy, A., C. Burnett and R. Yoeli-Tlalim (eds) 2008, *Astro-Medicine: Astrology and Medicine, East and West*, Florence: Sismel.
- Arrault, A. 2010, 'Esprit humain (renshen) et esprit du jour (riyou)', in Despeux (ed.), 285–332.
- Arya, Pasang Yonten 2014, 'External therapies in Tibetan medicine: *The Four Tantras*, contemporary practice, and a preliminary history of surgery', in Hofer (ed.), 64–89.
- Chang Che-chia 張哲嘉 2006, 'Riyong leishu [yixue men] yu chuantong shehui shumin yixue jiaoyu' 日用類書「醫學門」與傳統社會庶民醫學教育 (The medical sections of everyday encyclopaedias and the education of ordinary people in traditional society), in Mei Jialing (ed.), 167–85.
- Cohen, S. 2014, *Transformations of Time and Temporality in Medieval Art*, Leiden: Brill.
- Cong Chunyu 叢春雨 1994, *Dunhuang Zhong yiyao quanshu* 敦煌中醫藥全書, Beijing: Zhongyi guji chubanshe.
- Dalton, J. and S. van Schaik 2006, *Tibetan Tantric Manuscripts from Dunhuang: A Descriptive Catalogue of the Stein Collection at the British Library*, Leiden: Brill.
- Dalton, J., T. Davis and S. van Schaik 2007, 'Beyond anonymity: paleographic analyses of the Dunhuang manuscripts', *Journal of the International Association of Tibetan Studies* 3, 1–23 (available online).
- Despeux, C. (ed.) 2010, *Médecine, Religion et Société dans la Chine Médiévale*, Paris: Collège de France.
- Dotson, B., Kazushi Iwao and Tsuguhito Takeuchi (eds) 2013, *Scribes, Texts, and Rituals in Early Tibet and Dunhuang*, Wiesbaden: Reichert-Verlag.
- Emmerick, R.E. 1979a, 'Contributions to the study of the Jivaka-pustaka', *BSOAS* XLII 2, 235–43.
- 1979b, 'The historical importance of the Khotanese manuscripts', in Harmatta (ed.), 167–77.
- 1980, *The Siddhasāra of Ravigupta*, Wiesbaden: Franz Steiner Verlag (2 Vols.)
- [1992] 1997, *A Guide to the Literature of Khotan*, (2nd edn), Tokyo: International Institute of Buddhist Studies.
- 1993, 'Notes on the Crosby collection', in Skalmowski and van Tongerloo (eds), 57–64.
- Emmerick, R.E. and M. Macuch (eds) 2009, *Persian Literature. Companion, vol. 1: The Literature of Pre-Islamic Iran*, London: Tauris.
- Gerke, B. 2011, *Long Lives and Untimely Deaths: Life-span Concepts and Longevity Practices among Tibetans in the Darjeeling Hills, India*, Leiden/Boston: Brill.
- Glaze, F.E. and B.K. Nance (eds) 2011, *Between Text and Patient: The Medical Enterprise in Medieval and Early Modern Europe*, Micrologus Library 39, Florence: SISMEL/Edizioni del Galluzzo.
- Harmatta J. (ed.) 1979, *Prolegomena to the Sources on the History of Pre-Islamic Central Asia*, Budapest: Akadémiai Kiadó.
- Harper, D. 2003, 'Iatromancie', in Kalinowski (ed.), 471–512.
- 2005, 'Dunhuang iatromantic manuscripts P.2856 r^o and P.2675 v^o', in Lo and Cullen (eds), 134–64.
- Hartnell, J. forthcoming 2017a, 'Bloodlines. Medicine and cosmology in France, China, and Mexico', in *Essays on Manuscript Illustration*, Brepols.
- forthcoming 2017b, 'Medicine's image', in Hourihane (ed.), 326–43.
- Herrlinger, R. 1970. *History of Medical Illustration: from Antiquity to AD 1600*, Munich: Pitman Medical & Scientific Publishing.
- Hoernle, R.A.F., 1917, 'An ancient medical manuscript from eastern Turkistan', in *Commemorative essays presented to Sir Ramkrishna Gopal Bhandarkar*, Poone: Bhandarkar Oriental Research Institute, 415–32.
- Hofer, T. (ed.) 2014, *Bodies in Balance: the Art of Tibetan Medicine*, New York: Rubin Museum of Art.
- Hourihane, C. (ed.) forthcoming 2017, *The Routledge Companion to Medieval Iconography*, New York: Routledge, 326–43.
- Kalinowski, M. (ed.) 2003, *Divination et société dans la Chine médiévale: Étude des manuscrits de Dunhuang de la Bibliothèque nationale de France et de la British Library*, Paris: Bibliothèque nationale de France.
- 2005, 'Mantic texts in their cultural contexts', in Lo and Cullen (eds), 109–33.
- Konow, S. 1941, *A Medical Text in Khotanese: ch. II. 003 of the India Office Library*, Oslo: Dybwad.
- Kuriyama, S. 1999, *The Expressiveness of the Body*, New York: Zone.
- Lalou, M. 1941–2, 'Texte médical tibétain', *Journal asiatique* 233, 209–11.
- Landau A.S. (ed.), 2015, *Pearls on String: Artists, Patrons, and Poets at the Great Islamic Courts*, Baltimore: Walters Art Museum and University of Washington Press.
- Li Jianmin 李建民 2002, 'Aihuo yu tianhuo – jiu liaofa yanshenzhi mi 艾火與天火灸療法延伸之密' (Moxa fire and celestial fire: the riddle of the evolution of cauterization treatment), *Ziran kexue shi yanjiu* 21.4, 320–31.
- Lo, V. 2001, 'Huangdi hama jing (Yellow Emperor's Toad Canon)', *Asia Major* 14.2, 61–99.
- 2002, 'Spirit of stone: technical considerations in the treatment of the jade body', *BSOAS* 65.1, 99–128.
- 2005a, 'Quick and easy Chinese medicine', in Lo and Cullen (eds), 227–51.
- 2005b, 'Self-cultivation and the popular medical traditions', in Lo and Cullen (eds), 207–225.
- 2010, 'Manuscrits de Dunhuang et de Khotan sur la moxibustion', in Despeux (ed.), 239–84.
- Lo, V. and C. Cullen (eds), 2005, *Medieval Chinese Medicine*, London: Routledge.
- Lo V. and He Zhiguo 何志國 1996, 'The channels: A preliminary examination of a lacquered figurine from the Western Han period', *Early China* 21, 81–123.
- Lo, V. and Y.D. Wang 2013, 'Blood or Qi circulation? On the nature of authority in Rashīd al-Dīn's *Tānksūqnāma* [The Treasure Book of Ilkhān on Chinese Science and Techniques]', in Akasoy, Burnett and Yoeli-Tlalim (eds), 127–72.
- Lo, V. and R. Yoeli-Tlalim (eds) 2007, *Asian Medicine: Tradition and Modernity* 3.2, Special Silk Roads Issue [whole issue].
- Lo, V., Berlekamp, P. and Y. Wang 2015, 'Administering art, history, and science in the Mongol Empire', in Landau (ed.), 53–85.
- Luo Bingfen et al., (eds) 2002, *Dunhuang ben: Tufan yixue wenxian jingyao* 敦煌本: 吐蕃醫學文獻精要 (The Dunhuang Manuscripts: Essentials of Tibetan Medical Literature), Beijing: Minzu chubanshe [Tun hong nas thon pa'i bod kyi gso rig yig cha gces bsds. Pe cin: Mi rigs dpe skrun khang].
- Ma Jixing (ed.) 1998, *Dunhuang yiyao wenxian jijiao* 敦煌醫藥文獻輯校 (The Dunhuang Medical Texts Edited and Collated), Jiangsu: Jiangsu guji chubanshe.
- Maggi, M. 1996, 'A Chinese-Khotanese excerpt from the Mahāsāha-

- srapramardani', in *La Persia e l'Asia centrale da Alessandro al X secolo*, Rome: Accademia nazionale dei Lincei, 123–37.
- 2009 'Khotanese literature', in Emmerick and Macuch (eds), 330–417.
- Meyer, F. 2002, 'Quelques traces parmi les sources de la médecine tibétaine: Les manuscrits médicaux tibétains de Dunhuang', paper delivered at the *Colloque Franco-Japonais: Interactions et translations culturelles en Eurasie* (EPHE et Université de Tokyo), Paris, 12–13 December 2002 (unpublished).
- Mei Chia-Ling (Mei Jialing) 梅家玲 (ed.), *Shibian zhong de qimeng: wenhua chongjian yu jiaoyu zhuanxing (1895–1949)* 世變中的啟蒙: 文化重建與教育轉型 (1895–1949), (Out of Turmoil Comes Enlightenment: Cultural Reconstruction and Educational Transformation 1895–1949), Taipei: Maitian chubanshe.
- Müller, R. 1923, 'Ein Beitrag zur ärztlichen Graphik aus Zentralasien (Turfan)', *Archiv für Geschichte der Medizin*, 15 November, (70th birthday Festschrift for Karl Sudhoff), 21–6.
- Murty, K.R. Srikantha (tr.) 1991, *Vāgbhaṭa's Aṣṭāṅga Hṛdayam: Text, English Translation, Notes, Appendix and Indices*, Varanasi: Krishnadas Academy.
- Nagano, Hitoshi 2001, "'Koutei Gamakyō" Rinmo Insha Kyū Shohon no Shutsugen 黄帝蝦蟇經 臨模影写旧鈔本の出現' (Emergence of the Rinmo copy of *Hama jing*), *Shinkyū Osaka 鍼灸大阪* (Osaka Journal of Acupuncture and Moxibustion) 61, 5–9.
- Rachmati, G.R. 1932 'Zur Heilkunde der Uiguren II', *Sitzungsberichte der Preußischen Akademie der Wissenschaften*, 401–48.
- Ramble, C. and U. Roesler (eds) 2015, *Tibetan and Himalayan Healing: an Anthology for Anthony Aris*, Kathmandu: Vajra Publications.
- Rong Xinjiang 2004, 'Official life at Dunhuang in the tenth century: The case of Cao Yuanzhong,' in Whitfield (ed.), 57–62.
- Scherrer-Schaub, C. (ed.) 2012, *Old Tibetan Studies dedicated to the Memory of R.E. Emmerick: Proceedings of the 10th Seminar of the IATS 2003*, Leiden: Brill.
- Sivin, N. 1995, 'Taoism and science', in Sivin, *Medicine, Philosophy and Religion in Ancient China*, Aldershot: Variorum, ch. vii.
- Skalmowski, W. and A. van Tongerloo (eds) 1993, *Medioiranica: Proceedings of the International Colloquium Organised by the Katholieke Universiteit Leuven 21–23 May 1990*, Leuven: Peeters.
- Smith, P. (ed.) forthcoming, *Entangled Itineraries of Materials, Practices, and Knowledge: Eurasian Nodes of Convergence and Transformation*, Pittsburgh: University of Pittsburgh Press.
- Thomas, F.W. 1935, *Tibetan Literary Texts and Documents Concerning Chinese Turkestan*, London: Royal Asiatic Society.
- Takeuchi, Tsuguhito 2012, 'Old Tibetan Buddhist texts from the post-Tibetan imperial period (mid-9th cent. to late 10th cent.)', in Scherrer-Schaub (ed.), 205–16.
- Uebach H. and J.L. Panglug 1988, *Tibetan Studies: Proceedings of the Fourth Seminar of the International Association for Tibetan Studies*, Munich: Bayerische Akademie der Wissenschaften.
- Uray, G. 1988, 'New contributions to Tibetan documents from the post-Tibetan Tun-huang', in Uebach and Panglug (eds), 515–28.
- Whitfield, R. et al. 1990, *Caves of the Thousand Buddhas: Chinese Art from the Silk Route*, London: British Museum Press.
- Whitfield, S. (ed.) 2004, *The Silk Road: Trade, Travel, War and Faith*, London: British Library.
- Xie Guihua 谢桂华 2005, 'Han bamboo and wooden medical records discovered in military sites from the north-western frontier regions', in Lo and Cullen (eds), 77–105.
- Yamada, Keiji 1998, *The Origins of Acupuncture, Moxibustion and Decoction*, Kyoto: International Research Centre for Japanese Studies.
- Yearl, M.K.K. 2011, 'Bloodletting as recreation in the monasteries of medieval Europe', in Glaze and Nance (eds), 217–43.
- Yoeli-Tlalim, R. 2010, 'Tibetan 'wind' and 'wind' illnesses: towards a multicultural approach to health and illness', *Studies in History and Philosophy of Biological and Biomedical Sciences* 41.4, 318–24.
- 2013, 'Central Asian mélange: early Tibetan medicine from Dunhuang,' in Dotson, Iwao and Takeuchi (eds), 53–60.
- 2014, 'Medicine, astrology, and divination' in Hofer (ed.), 90–109.
- 2015, 'Between medicine and ritual: Tibetan 'medical rituals' from Dunhuang,' in Ramble and Roesler (eds), 739–46.
- forthcoming, 'The Silk-Roads as a model for exploring Eurasian transmissions of medical knowledge: views from the Tibetan medical manuscripts of Dunhuang', in Smith (ed.).
- Yonten, Pasang 2014, 'External therapies in Tibetan medicine: the Four Tantras, contemporary practice, and the preliminary history of surgery', in Hofer (ed.), 64–89.

Online Resources

Encyclopaedia Iranica: www.iranicaonline.org.