Chapter 3

# The Silk Roads as a Model for Exploring Eurasian Transmissions of Medical Knowledge

## Views from the Tibetan Medical Manuscripts of Dunhuang

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At the beginning of the twentieth century, Wang Yuanlu, a Daoist monk in the western frontiers of China accidentally discovered a cave full of manuscripts near the Chinese town of Dunhuang in Gansu province. The cave, which had been sealed for nearly a thousand years, contained several tons of manuscripts. This cave, now known as Cave 17 or the "library cave," was sealed in the early eleventh century for reasons that are still being debated by scholars.[1] Following this discovery, a race began between the great nations of the time, to acquire as many manuscripts as possible. Today these manuscripts are dispersed among libraries in Paris, London, St. Petersburg, Tokyo, Beijing, and elsewhere and are currently being united on the Internet as part of the International Dunhuang Project, based at the British Library.[2]

The Dunhuang manuscripts are of enormous significance for Buddhist, Central Asian, and Chinese history. Their significance for the history of science and the history of medicine has only recently begun to be explored in European scholarship by Vivienne Lo, Chris Cullen, Catherine Despeux, Chen Ming, and others.[3] Observed in their overall context, the Dunhuang manuscripts are a bit like a time capsule, providing traces of what medicine was like "on the ground," away from the main cultural centers, at this particular geographical location. Being in manuscript form they preserve the benefits of unedited texts, revealing more diverse forms of healing and telling different stories than medical canons preserved in print.[4]

Analyzing the medical material from Dunhuang allows us to observe several continuities, such as the fuzzy borders between what we might term

in English today "medicine," "ritual," "religion," "divination," and "magic."[5] The Dunhuang medical material also provides interesting data with which to analyze continuities between center and periphery. Although the Tibetan medical manuscripts from Dunhuang are singular manuscripts found on the outskirts of both the Tibetan and the Chinese Empires, we do find continuities with later printed texts.

Finally, it is the Eurasian continuity that is the focus of my ongoing research. Two main methodologies are at hand when analyzing Eurasian continuities. One is looking at European and Asian material in a comparative way, and another is trying to uncover specific interactions. Although studying interactions is a complex and difficult matter, particularly because of the nascent state of research into so many relevant areas of exploration, I believe this endeavor is worthwhile. This overview presents some of the directions my research is taking in exploring the Tibetan medicine from Dunhuang as a case study of interactions of medical knowledge along the Silk Roads.

## The Meaning and Metaphor in "Silk Road/s"

The term "Silk Road" both in the singular and plural was coined by the German geographer and traveler Ferdinand von Richthofen at the end of the nineteenth century.[6] Richthofen used the term to refer to the routes along which Chinese silk moved from the Han Empire to Central Asia. Richthofen himself was interested not only in geography but also in the greater historical and cultural importance of these trade routes. Since Richthofen's day, the term "Silk Road" has evolved to refer to the many ways and exchanges connecting China and Europe, along which people, stuff, and ideas were moved and exchanged. The people were traders, missionaries, soldiers, brides, artists, and diplomats, as well as various combinations of these. The stuff they carried was much more varied than just silk and included (among many more) horses, paper, musk, musical instruments, and dumplings. Genes, germs, and immunities were also carried along the way.[7] The ideas included the many religions that traveled across Asia—Buddhism, Islam, Eastern Christianity, Manichaeism, and also some Judaism; medicine and other fields of knowledge that we might term scientific; stories, arts, and technology—including papermaking and printing.

When thinking, researching and writing about the Silk Roads, scholars were initially focused primarily on the two extremes, China and Europe. This focus on terminus points is understandable considering the sources at hand—that is, the sources that were on hand from earliest time to the twentieth

century. All this changed when the great finds along the Silk Roads were excavated at the beginning of the twentieth century. Particularly thanks to the great archaeological discoveries along the Silk Roads of the twentieth century, scholarship gradually shifted to the great expanse in between, slowly uncovering traces of cultural exchanges.[8] These traces, which were buried for over a thousand years, are now slowly being studied. Archaeology of the Silk Road has also been relatively slow because of a combination of political and environmental reasons. But as archaeological research on the Silk Roads progressed, it has become clear that the exchanges mediated by the Silk Roads are much older and more extensive than has been thought in the past.[9]

While I take Khodadad Rezakhani's point on the overuse, misuse, and abuse of the term, I would argue that by dismissing the entire historiography of the Silk Road and the term itself we end up throwing the baby out with the bathwater.[10] Indeed, within the huge bulk of literature dealing with the Silk Road, one can find problems of various sorts, as Rezakhani ably demonstrates, but there have been of late some game changers in this respect, most notably Valerie Hansen's *Silk Road: A New History* (2012), which came out after Rezakhani's article and addresses most, if not all, of the problems Rezakhani raised with regards to the problems of dealing with the "Silk Road." The particular case discussed here—that of Tibetan medicine—serves precisely to amend the overemphasis on China and Europe that Rezakhani is criticizing.

Hansen in her illuminating account of the history of the Silk Road has demonstrated how trade on the Silk Roads was not on a grand scale, neither geographically nor economically. Unlike popular perceptions of vast amounts of silk and other precious items going from China to Rome, with devastating effect on the Roman Empire, the nature of trade as it emerges from the documents unearthed in the oases around the Taklamakan Desert is much smaller and more local. The interactions of trade, as of knowledge, happened at the in-between: between Gandhara and Kucha; between Kucha and Turfan; between Turfan and Dunhuang; between Dunhuang and Chang'an. And, of course, among the vast variety of peoples who dwelled and moved among these sites.

We now know that mediating cultures whose languages were once *lingua franca*s of multicultural empires or spoken by long-distance travelers are as important for our understanding of history as the more well-known cultures of the termini points. The term *lingua franca*s in this context refers to languages that are "contact languages," which "facilitate communication among

people who do not share the same mother tongue."[11] Another significant point regarding *lingua franca*s is that they are transitory and unstable, intertwined with transitory and unstable power and prestige. They are useful as foci since they are, as Jocelyne Dakhlia has pointed out, languages for *communication* rather than languages of *identification*.[12]

And so, when we attempt to study the history of Eurasia, sources in languages such as Tibetan, Sogdian, Uighur, Tocharian (A and B), Bactrian, Khotanese, Hebrew and Syriac, as well as certainly those in Persian and Arabic, can help us fill the huge gaps in the puzzle that is Eurasian history. In some of these cases, entire languages and cultures were buried in the Taklamakan Desert for over a thousand years, with no followers or scholars to speak their word. Our knowledge of them now relies on a small and precarious group of scholars who are scattered around the world.

## Toward a Eurasian Approach in the History of Science and Medicine

In 2006, at the International Conference of Tibetan Studies, I presented a paper discussing close similarities between Ibn Sīnā's *The Canon of Medicine* and an early text of Tibetan medicine, the *Zla ba'i rgyal po* (Lunar king). Many people (including myself) were astonished to discover that there *were* such close similarities.[13] Today, after much collaborative work, I am more astonished that we were astonished.[14] In Central Asia during the second half of the first millennium cross-cultural transmissions and mélanges were happening everywhere and were more of the norm than the exception. So, alongside our delving into the multiple ways of cross-cultural transmissions, we ought to also reflect on why we were astonished. I shall return to this question later.

The notion of "globalized medicine" is usually associated with modernity. The study of ancient medicine teaches us, however, that medicine needs to be treated in a much more "globalized," or, perhaps, interconnected way than was previously assumed. Treating ancient medicine globally, however, is still a rarity in medical history. Just as the treatment of five thousand years of world systems presented in global history publications such as *The World System: Five Hundred Years or Five Thousand Years?* has been, as its authors call it, an "enlargement of scale" of the now more common treatments of five hundred years of world systems, it is also high time for an equivalent "enlargement of scale" in the history of medicine.[15] At the core of these endeavors is the idea that methods and perspectives of "global history," which have been very fruitful in

historical research dealing with the last five hundred years, can also be just as fruitful when dealing with the medieval and ancient world.

As in the context of the five thousand years of world systems, the term "global" or "world" needs to be aptly qualified: we are obviously not speaking of the "globe" or even the "world" as we know it today but, rather, of the "known world" of the time in question. One of the important contributions of this perspective (as discussed in the work of Gunder Frank, Gills, and others) has been showing the limitations of the focus on "civilizations" and bringing to the fore a more united "Eurasian" history and an inquiry into historical *connections* between peoples, places, and ideas. Rethinking dichotomies of "Eastern" and "Western" is key for the way we approach the history of ancient medicine. We have been gaining more and more evidence that allows us to question the constructed dichotomy between "Eastern medicine" and "Western medicine," or "Asian medicine" and "European medicine." We need to think of medicine in a more connected way, in line with current approaches in global history, the history of science, and the history of ideas.

Intensified communications between certain cultures tend to come and go. Some of the material "fossilized" in the manuscripts found on the Silk Road provide a fresh view into some of the interactions, exchanges, and influences that were in one way or another later written out of printed sources. The emerging focus on "exchanges" rather than "cultures" necessarily brings to the fore knowledge stemming beyond cultural elites, with a greater focus on locations where knowledge is more easily subject to change. For this purpose, it is particularly useful to study manuscripts such as those of Dunhuang.

How can we begin to untangle any history of transmissions of medical knowledge along the Silk Roads? I would like to suggest two types of starting points: first, we can follow some of the entangled itineraries of specific texts and key people as they traversed boundaries of language and culture, and second, we can analyze the specific collections of nodes of convergence in which medical manuscripts were found. Taken together, these can help us begin to delineate a picture of the transmission of medical knowledge, a picture that, although no doubt partial and lacking, is important. What I provide here are a few indications in this direction.

## Entangled Itineraries of Texts and People

One illuminating example where we can trace an itinerary of a key text as it moves and gets translated into different languages and cultures is that of

the *Siddhasāra*. This text is a comprehensive medical manual that includes the main theories and practices of Ayurveda that was written or, more likely, edited by Ravigupta of the seventh century.[16] It originated from India, possibly Kashmir, and had widespread influence in various parts of Asia, both in Central Asia and West Asia.[17] Primarily thanks to the work of Emmerick, we can trace the movement of this text across languages, as it traveled both northeast and west. In the ninth century it was translated from Sanskrit into Tibetan as well as into Arabic.[18] Around the tenth century it was translated from Tibetan into Khotanese, and sometime before the thirteenth century it was translated into Uighur.[19]

A Khotanese translation of the *Siddhasāra* was found in Dunhuang. Khotanese manuscripts were found by Stein in Dunhuang and in the Khotan area. The language was unknown at the time. Khotanese is an Iranian language contemporary with Middle-Persian and Sogdian, written in Indian Brāhmī script, with an extensive vocabulary borrowed from Sanskrit. Following Stein's discoveries, Khotanese was deciphered primarily by Hoernle.[20] Khotan was ruled by Tibet from the late eighth century till the mid-ninth century, but it appears that the Tibetan language remained in use in Khotan even after the end of direct Tibetan rule of Khotan.[21] During the tenth century the contacts between the Chinese, Khotanese, and Uighurs intensified as a result of marriage alliances.[22] As a result more members from these ethnic groups settled in Dunhuang, as is attested by the high number of Khotanese texts from this period found in the Dunhuang library cave.[23]

The introduction to the Khotanese translation of the *Siddhasāra*, not found in any other version, gives us an inkling of the process of translations from language to language to language at the time. The Khotanese introduction states that the text was translated from Tibetan, but as the translator found the Tibetan version problematic, he also consulted the Sanskrit original. The introduction also tells us the reason it was translated, suggesting that before this medical knowledge arrived there were many people dying because of the lack of medical knowledge.[24]

The material history of this manuscript provides further dimensions of this text's transmission. The recto of the Khotanese *Siddhasāra* from Dunhuang is a Chinese text (Pelliot chinois 2893). This manuscript was brought to Dunhuang from Khotan by Daoyuan, a Chinese Buddhist monk who traveled to India and, on his way back, stayed in Khotan for ten years before returning to China in the year 965.[25] Interestingly, we also have evidence of the owner

of the manuscript. His name is written in Sogdian script on folio 156 of the manuscript. He has been identified as Zhang Jinshan, an ambassador to Dunhuang from the Kingdom of Khotan.[26] Analysis of Khotanese manuscripts from Dunhuang has shown that the king of Khotan maintained a kind of embassy in Dunhuang, where Khotanese princes lived, sometimes with their Chinese wives. It appears their library of Khotanese manuscripts was given to the monks who collected the manuscripts found in the library cave (Cave 17).[27] So here is a Sanskrit medical text translated into Tibetan, then into Khotanese, carried from Khotan to Dunhuang by a Chinese monk on his way back from India and, finally, in the possession of a Khotanese ambassador in Dunhuang who signed his name in Sogdian.

The *Siddhasāra* was also held in high esteem by Persian and Arabic scholars. Al-Rāzī (b. 864/5, d. ca. 925), from Rayy near modern-day Tehran, incorporated many passages of the *Siddhasāra* into his *Kitāb al-Ḥāwī fī ṭibb* (Comprehensive book on medicine).[28] The *Kitāb al-Ḥāwī fī ṭibb* was translated into Latin in the thirteenth century, and there are many remnants of the *Siddhasāra* in its many Latin versions.[29]

That al-Rāzī incorporated Indian medical knowledge into his writings should not really surprise us. Alī b. Sahl Raban al-Ṭabarī (fl. ca. 820–860), a Christian physician who later converted to Islam, is considered to be al-Rāzī's teacher whether directly, as tradition has it, or indirectly via his writings. He was a native of Marw (Merv) in Central Asia, one of the world's most cosmopolitan centers of learning at the time.[30] Its libraries were so famous that we are told the Middle-Eastern scholar Yāqūt al-Hamawi traveled halfway through Eurasia to access them and spend three years working in them.[31]

Alī b. Sahl Raban al-Ṭabarī wrote an encyclopaedic work on medicine, the *Firdaus al-ḥikma* (The paradise of wisdom). The *Firdaus* includes a long section dealing with Indian medicine. On the whole, this work is considered a compilation of Greek and Indian medicine showing an influx of Persian drugs.[32] His discourse on Indian medicine reflects knowledge of the main Ayurvedic classics, the *Caraka*, *Suśruta*, and the *Aṣṭaṅgahṛdaya saṃhitā* of Vāghbhaṭa. According to Siddiqi, these were translated from Sanskrit either directly into Arabic or via Persian during the early Abbasid period.[33]

In addition to the traces left by specific texts such as the *Siddhasāra*, we can also trace conditions and figures that facilitated such translations and transmissions. Such, for example, is the case of the Barmaks, as analyzed by Kevin van Bladel.[34] Barmak, the father of the Barmakid family, was an educated

Buddhist official from the city of Balkh in Tokharistan, in the valley around the upper Oxus. Thanks to Bactrian documents deciphered in the last two decades, we know that this was an area where Buddhism and its related Sanskrit sciences flourished at the time the Arabs arrived there in the late seventh and early eighth centuries. The Barmak family then became highly influential in the Abbasid court in Baghdad, and the Barmaks' grandson, Yaḥyā, became the tutor and then the powerful minister of the caliph Hārūn al-Rashīd (r. 786–809). Van Bladel has demonstrated how, as a result of his Buddhist roots and his family ties with Tokharistan and Kashmir, Yaḥyā facilitated a substantial translation enterprise from Sanskrit to Arabic in the caliph's court. A major outcome of this enterprise was the monumental translation of the Indian medical classics into Arabic: the *Suśruta*, the *Aṣṭaṅgahṛdaya saṃhitā* of Vāghbhaṭa and the *Siddhasāra* of Ravigupta, mentioned above. These same texts were also translated into Tibetan, a short while later, and thereafter became core texts in the Tibetan medical tradition too. Recent analysis has shown that Muslim physicians' and natural philosophers' interest in Asian works of natural knowledge at this time was not a passing episode but, rather, resulted in long-term influence.[35]

## Multilingualism and Multicultural Aspects of Dunhuang

The study of multiculturalism on the Silk Roads has not received the attention it deserves yet, but the last few years have seen an immense growth. My discussion within the sphere of the history of medicine follows explorations of multiculturalism as they are studied in other Dunhuang and Silk Road areas of study, such as history of art, history of religions, literature, numismatics, economic history, history of ideas, and genetics.[36] In addition to tracing transmissions of key texts and key figures, we can also gain some insights on the processes of transmission of medical knowledge by analyzing specific locations of medical manuscripts in entire collections, coming from locations that served as nodes of convergence, such as Dunhunag and other Silk Roads sites.

The oasis of Dunhuang, where the northern and southern branches of the overland routes around the Taklamakan Desert met, was an important nexus of international trade routes in the ancient and medieval world. For most of its history, Dunhuang was a Chinese town. During the eighth century it became part of the Tibetan Empire and remained under Tibetan rule for about seventy years (781–848). The changing ethnicity of the rulers of Dunhuang

had linguistic and cultural implications. In the second half of the first millennium, the cities of the Taklamakan oases were cosmopolitan seats of sophisticated cultures. Understanding the cosmopolitan nature of medieval Central Asia, where east, south, central, and western Asia interacted in multiple ways, is important for understanding not only the history of Asian medicine but the history of medicine and science at large primarily because of the input of West Asian medicine—exemplified in the works of Ibn-Sīnā (Avicenna) and al-Rāzī (Rhazes)—into Europe. The fascinating letter exchange between al-Bīrūnī (973–1048), born near the Aral Sea, and the slightly younger Ibn-Sīnā (980–1037), from Bukhara, reflects the existence of a large, competent, and interconnected community of scientists and thinkers.[37] Bukhara at this time was an important center of learning and culture.[38] Central Asia at this time was home not only to an assemblage of scientists and thinkers but also religious scholars, poets, artists, and musicians. This was truly an "Age of Enlightenment," which lasted several centuries, when Central Asia was the intellectual hub of the world.[39]

The search for Eurasian cultural interactions was one of the initial main driving forces for Aurel Stein's expeditions. In the application he made for financial support from the British government in India in 1897, Stein promised to supply tangible evidence of cultural exchange in ancient times.[40] The "library cave" that he discovered as a result—and its "polyglot" nature, as Stein put it—indeed supplied some of the evidence he was seeking. Stein himself realized the importance of the "polyglot" nature of the Dunhuang collection. Although Chinese is the most important language of the collection, there are also many documents in multiple languages (including some that were unknown at the time of their discovery): Tibetan, Sogdian, Khotanese, Sanskrit, Uighur, and Judaeo-Persian.[41] Other languages from nearby sites include Syriac, Turkish, Arabic, Tocharian A and B (Agnean and Kuchean) and others.[42] These languages and the cultures that they represent reflect both peoples who resided in Dunhuang and peoples who passed through Dunhuang such as traders, diplomats, and missionaries.

But does multiplicity also mean interaction? With the advance of research in the various languages of the manuscripts of Dunhuang, we are able to ascertain that the different cultures represented in the manuscripts found in the caves of Dunhuang and of other Silk Roads sites were not only present in the same locations but also interacted in multiple ways. Analyzing which texts were found where and in which languages can help us reconstruct processes

of transmission: based on an analysis of the locations and numbers of Sanskrit medical manuscripts excavated in Kashmir, Haḍḍa, Kucha, Kyzil, Tuyuk, and Dunhuang, Ming Chen has reached the conclusion that the route followed by Indian medicine was predominantly from Kashmir via the Turfan area to Dunhuang.[43] The Dunhuang collection, more than being simply a "polyglot" library, mirrors some of this multiculturalism. It includes translations, transliterations, bilingual texts, glossaries, as well as "Berlitz style" phrasebooks for travelers—all pointing to active cross-cultural exchanges. Further evidence for cross-cultural interactions can be derived from evidence of diplomatic embassies and the documentation of traveling monks and of itinerant merchants.

## Tibetan as a Mediating Language and Culture

Tibet was an important point on the trade route between India and China, not only for Buddhist missionaries but also for Arab and Jewish traders.[44] The main attraction of Tibet was its commercial goods—many of them lucrative to the point of being legendary, such as gold and musk. The case of Tibet as a cultural mediator stems from its key position and size during the time of the Tibetan Empire (seventh–ninth centuries), bordering with Tang China in the east and the Abbasid Caliphate in the west, as well as from the role of Tibetan as a *lingua franca* in and around Dunhuang. As a result of the Tibetan domination, the use of Tibetan prevailed among Tibetans and non-Tibetans and many of them became bilingual or multilingual. Tibetan apparently remained the most widely used second language among various local ethnic groups in and around Dunhuang including Han-Chinese, Khotanese, and Uighurs, until the early eleventh century.[45]

## Multicultural Aspects of Tibetan Medicine in Dunhuang

Tibetan medicine developed as a synthesis of Indian, Chinese and Graeco-Arab medical systems.[46] The multicultural character of Tibetan medicine is emphasized in Tibetan medical histories starting from the earliest extant exemplars of this genre, the Tibetan medical history by Che rje zhang ston zhig po, dated to the early thirteenth century. Che rje sets medical knowledge within what he terms "The Seven Schools" (*lugs bdun*), referring to both divine and human realms.[47] Within the human realm, the list refers to medical systems from India, Kashmir, Urgyan (in present-day Pakistan), Nepal (*bal*

*po*), Arabo-Persian (*stag gzig*), Dol po, Uighur (*hor*), Tangut/Xixia (*me nyag*), Khotanese (*li*), Byzantine (*phrom*), Chinese, and Tibetan.[48] Variations of this list become practically standard in subsequent Tibetan medical histories. Medical histories portray the earliest stage of Tibetan medicine as its most multicultural. Is any of this reflected in our earliest extant Tibetan medical sources: the Tibetan medical manuscripts from Dunhuang?

## Mentions of Foreign Places in Tibetan Medical Manuscripts

There are two types of foreign locations mentioned in the Tibetan medical manuscripts from Dunhuang: locations associated with specific medical knowledge and places associated with specific materia medica or other imported goods. The foreign locations associated with imported goods are Persia (*ta zig*), Khotan (*li*), and possibly Kashmir (*kha che*). The manuscript Pelliot tibétain 127 includes a mention of Persia (*ta zig*) as a source of paper, saying: "If there is a bleeding from the nose, use paper from Persia."[49] Another Dunhuang manuscript, IOL Tib J 756, includes a mention of "sugar from Khotan" (*li*).[50] The same manuscript also includes a mention of a particular kind of silk, *kha che dar*—possibly referring to Kashmiri silk, or perhaps Persian brocade, which is to be used in the medical case of having a foreign body stuck in one's throat.[51] The Tibetan medical manuscripts from Dunhuang also contain many foreign names of materia medica, derived from Chinese as well as Persian.

The Tibetan medical manuscripts from Dunhuang mention a number of foreign locations as sources of knowledge. One is a mention of Turks (*drug gu*), referring to cauterization or possibly to bloodletting, saying: "The Turkic [*dru gu*] method [using] iron for cautery [? *sur phug*] is also suitable."[52] In the Tibetan Dunhuang manuscripts, the term *drug gu* or *dru gu* refers either to "Turks" in general or more specifically, particularly from the ninth century onward, to Uighurs.[53] More intriguing is the colophon of Pelliot tibétain 1044, which says: "This type of method comes from a land of the/an Indian king."[54] Interestingly, however, the moxibustion methods described in Pelliot tibétain 1044 are not known to have been used in classical Indian medicine.[55] The next line of the colophon explains that this technique derives from *ha ta na bye*, a Tibetan transliteration of the old Khotanese name *hvatana* for Khotan. Chinese and Tibetan accounts concerning the foundation of Khotan associated the kingdom with the son and ministers of Emperor Aśoka, hence "the Indian king." A number of Khotanese texts within the sphere of popular ritual medicine bear resemblance to Chinese texts, including one that has

Khotanese and Chinese parallel texts. The knowledge reflected in Pelliot tibétain 1044 is predominantly Chinese. So it appears that what is represented in this manuscript is a Tibetan adaptation of a Khotanese medical text, which preserved Chinese notions.

The third mention of a foreign land as a source of knowledge is the reference to Zhang zhung.[56] This appears in the colophon of Pelliot tibétain 127: "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."[57] Among all the mentions of foreign places in the Tibetan medical manuscripts from Dunhuang, there are no references to China. How can we explain this lack? One plausible explanation is the omission of the obvious. The medical culture of Dunhuang that transpires in these Tibetan texts can be best described as being of Sino-Tibetan nature. A comparison between the Tibetan and Chinese moxibustion texts from Dunhuang reveals striking similarities in both form and content. The Tibetan and Chinese texts are structured in similar ways: a list of symptoms, the location on which to apply moxa-cauteries, and the number of moxas to be burnt. The descriptions of ailments that are to be treated by moxa-cautery are also similar. Both the Chinese and Tibetan materials deal primarily with wind (T: *rlung*, C: *feng*) related ailments; genito-urinary and reproductive disorders as well as digestive and abdominal illnesses. Some of the descriptions bear almost literal similarity. Such, for example, is the description found in the Chinese manuscript S6168 dealing with "wind in the face as if there are insects on the face," which bears almost literal similarity to what we find in Pelliot tibétain 1044: "[If] due to wind [*rlung*] illness swellings are forming on the face, and there is itching like a walking insect."[58] It is interesting to note here that the Tibetan measurement word *tshon*, which is a loanword from the Chinese *cun*, is mentioned quite frequently in the Tibetan moxa-cautery texts from Dunhuang.

Another key point of similarity between the Chinese and Tibetan moxa-cautery texts is their links with time reckoning and divination. The Dunhuang manuscript Pelliot tibétain 127 includes not only a medical text on moxibustion (recto, lines 78–184), but also several divination and calendric texts. 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.

The link with Chinese notions is reflected in Tibetan divination texts from Dunhuang that refer to Confucius (rendered as Kongtse) as their author.[59] Among the Tibetan manuscripts from Dunhuang we also find Tibetan translations of Confucian maxims.[60] Indeed we know that Confucian doctrines were taught in the prefectural Dunhuang school and that special rites for his worship were conducted twice a year at the time of the equinoxes, in which the physicians of Dunhuang participated.[61]

One of the texts of Pelliot tibétain 127 is believed to be the earliest Tibetan delineation of the sexagenary cycle. This type of calendric cycle is used in Pelliot tibétain 127 (verso, lines 1–9) for divinatory/astrological purposes.[62] The text preceding the medical one on the recto is also a divination text (recto, lines 1–77). This divination text begins with the words: "Formerly, the gifted man of magical faculties [*'phrul gyi myis*] established this text of divination [astrology, sciences (*gtsug lag*)] as a model [*dpe*] for future generations. It deals with the positive and negative [aspects] of the level of prosperity [*dbang btang che chung*], years of life [*lo srog*] and power [*mthun*]."[63] These categories, which are derived from Chinese divination, are very similar to the ones we know from later sources in Tibetan divination, such as vitality (*srog*), body (*lus*), destiny (*dbang thang*), and luck (*rlung rta*).[64] The mention of the "gifted man of magical faculties" (*'phrul gyi myis*) probably refers to Kongtse.[65] This section of Pelliot tibétain 127 is very similar to IOL Tib J 748, another Tibetan divination text from Dunhuang, ending with what appears to be either a very early Tibetan reference to the Yijing or to divination in general.[66] The two texts are probably two copies of the same original.[67]

This evidence from the Dunhuang manuscripts of an early point in time when Chinese divinatory ideas were brought into Tibetan culture is further corroborated by two other types of evidence. The first are Tibetan narratives ascribing the transmission to the Chinese princesses Wencheng and Jincheng, who married Tibetan kings. The second comes from linguistic data analyzed by Berthold Laufer. Based on the form of the names of the trigrams as they appear in Tibetan in comparison with the Chinese, Laufer has shown that the Tibetan transcriptions have partially preserved the ancient initial consonants and the ancient finals of the Chinese, hence concluding that the transmission occurred during the Tang period.[68]

A key issue regarding the Tibetan texts, which is shared with the Chinese moxibustion charts, is their relation to the notion of "channels." Vivienne Lo has shown that the Chinese moxa-cautery charts from Dunhuang bear

no explicit relationship to the concept of circulating *qi* through an integrated network of channels.[69] This characteristic of the Dunhuang Chinese material is shared with the Tibetan moxa-cautery texts. In this sense the Dunhuang Sino-Tibetan texts appear to be more similar to what we find in Tibetan received texts (e.g., the *Gyushi*) than what we find in Chinese received texts.

With the increasing penetration of the Tibetan script and language in the Han-Chinese society of Dunhuang during the period of Tibetan rule, a practice gradually developed among some local Chinese inhabitants of using the Tibetan script rather than Chinese characters to write Chinese. The influence of the Tibetan rule culminated in the creation of bilingual Tibeto-Chinese communities. Among the Han-Chinese of Dunhuang there seem to have been some who were fluent not only in their native Chinese but also in speaking, reading, and writing Tibetan. There is also evidence that these "Tibetanized" Chinese formed associations or communities, and the practice of writing Chinese using Tibetan script not only was carried out during the Tibetan rule but was being maintained in the tenth century under the Return-to-Allegiance Army.[70] This has resulted in the survival of various kinds of Chinese texts transcribed in Tibetan. Broadly speaking, these consist of Buddhist scriptures, Buddhist eulogies, songs and poems, primers, and a multiplication table.

Within the vast enterprise of sutra copying that took place in Dunhuang during the Tibetan rule, the majority of those responsible for copying the Tibetan texts were in fact Chinese. This would have required sufficient knowledge of Tibetan, or at least of the Tibetan script. The copyists were not simply copying Tibetan graphs mechanically, but they had considerable knowledge of the Tibetan language as well. These Sino-Tibetan aspects bring us to reflect on the nature of these Tibetan medical texts. Rolf Stein, who studied the Tibetan texts of Confucian maxims from Dunhuang, has pointed out that they are not straightforward "translations" but rather "variations." It is impossible, Stein noted, to know whether the texts we have at hand were composed by Tibetans or whether they translated or paraphrased a Chinese text. We are faced with a similar problem regarding the Tibetan moxibustion texts from Dunhuang. But perhaps rather than trying to label them as "Tibetan medicine" or "Chinese medicine in Tibetan" we should regard them as "Sino-Tibetan medicine" or "Dunhuang medicine."

I would like to return to the question of why we were astonished to discover connections between Tibetan and Arabic/Persian medicine with which I began this chapter. Victor Mair, in his brilliant introduction to *Contact and Exchange in the Ancient World*, provides an illuminating discussion of what he terms the "academic pathology" of "extreme indigenousness": a bias to disregard the plethora of data indicating contact and exchange among early people. He considers this bias a result of two factors, one political and the other disciplinary. The political, he points out, is particularly true of the second half of the twentieth century, the outgrowth of a surge in nationalistic consciousness, when "it became impolitic to assert that any significant element of culture needed to be borrowed."[71]

Although he locates this political factor within the twentieth-century nation-state, we can also see it at work in accounts of the history of knowledge. Although many—perhaps the majority, or even all—cultures in different periods regularly adopted and adapted knowledge, in most cases these foreign influences were not acknowledged. Indeed, as Arun Bala has argued, when well-developed cultures undergo intellectual change through knowledge transmission from outside, they often deny the significance of the external culture by ascribing the changes to their own traditions.[72] What Bala's analysis shows is that what matters more than the adoption of knowledge itself is whether a culture—at any particular time and place—also cares to acknowledge it. Similarly, when we look at the early history of medicine and analyze the correspondence (if any) of *being* multicultural and of *declaring* yourself as such, we find that in some cultural contexts foreign knowledge is absorbed into the main culture without any reference to its origins while in other cases we find elaborate descriptions of the sources of foreign medical knowledge.

The multicultural character of Tibetan medicine is emphasized in Tibetan medical histories starting from the earliest extant exemplars of this genre—the Tibetan medical history by Che rje zhang ston zhig po and its numerous variations thereafter. The colophon of Pelliot tibétain 127, speaking about "a compilation of all traditions of medical practice" in addition to being according to the medical practice of Zhang Zhung can be viewed as an early precursor of these accounts from Tibetan medical histories emphasizing the multicultural nature of early Tibetan medicine. Acquiring medical knowledge from different cultures appears to be celebrated in the Pelliot tibétain 127 colophon, and the results of this endeavor is regarded as being superior to what might be found "at the archives." This is quite different from what we can

gather from the Chinese material. Illuminating in this respect is the preface to a Chinese medical manuscript from Dunhuang, Pelliot chinois 2675. As analyzed by Lo, Pelliot 2675 is a moxa-cautery canon that is an abridgment of moxa-cautery techniques of a number of teaching lineages.[73] It was produced in the capital with the purpose of providing a practical text for those who lived in the "outlying regions" and could not obtain sophisticated drugs. The text hence situates itself as disseminating a simplified, practice-oriented knowledge from the capital to the provinces. Here, the knowledge of the "outlying regions" is viewed as inferior to that of the center.

In the Tibetan Pelliot tibétain 127, on the other hand, the location of Dunhuang—and the availability of a variety of medical traditions there—appears to be regarded as advantageous for the author of this manuscript. In similar later accounts this attitude vis-à-vis foreign medical knowledge continues. The references to foreign knowledge in Pelliot tibétain 1044 and Pelliot tibétain 127 are indicative precursors of two distinct characteristics that are key to Tibetan medical history: the influence of foreign knowledge and the acknowledgment of it.

The Tibetan accounts of the sources of its medical knowledge often contain mythical elements, and so while we cannot read them as straightforward historical narratives, we can—and should—take some cues from such texts.[74] These accounts often serve as pointers to strata otherwise forgotten or else rewritten by later historical accounts. Literary narratives of universal histories of knowledge such as we find in the Tibetan medical accounts exemplify different ways of managing relationships between foreign and local knowledge and of negotiating cultural differences. The organization of knowledge from and about different peoples has been a powerful political tool, making claims to comprehensiveness and unity across multiplicities of locales.[75] Such accounts may be seen as a subcategory of "origin narratives" as discussed by Sonja Brentjes: they speak of the origin(s) of a field of knowledge, the motivation for "inventing" or "establishing" that kind of knowledge, and the field's subsequent development.[76] The Tibetan medical manuscripts from Dunhuang reveal the value of looking at sources in the "bridging" languages of the Silk Roads, such as Tibetan, Sogdian, Uighur, Tocharian (A and B), Bactrian, Khotanese, Syriac, and Persian. Through focusing on mediating cultures and languages, multicultural locations and collections as well as specific key texts and figures—such as the ones I have discussed above—we can begin to address the great puzzle of Eurasian history of science.