

10 The emergence of the Traditional Mongolian Medicine industry

Communism, continuity, and reassemblage

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Traditional Mongolian Medicine (henceforth “TMM”)¹ constitutes an important part of Asia’s Sowa Rigpa industry today and participates in the large-scale phenomenon of Asian medical industries more generally. Sowa Rigpa is the Tibetan term for “science of healing,” and commonly used by scholars to refer to the family of Tibetan, Mongolian, and Himalayan medical traditions based on a singular corpus of classical Tibetan texts and the ethical and epistemological foundation of Tibetan Buddhism. TMM is prevalent in all Asian areas with populations of Mongolian descent or influence, such as Mongolia, parts of China (especially Inner Mongolia), and Russia (Buryatia, Tuva, Kalmykia), and more recently also in the global Mongolian diaspora including, most notably in terms of practitioner numbers, Poland. While in Russia, Sowa Rigpa is called “Tibetan” rather than “Mongolian” medicine and is not properly recognised or industrially developed, TMM is fully integrated into Mongolia’s national health system and officially counts as China’s third-largest “minority medicine” in terms of economic value. Thus, TMM accounted for 166 million USD or about 25 percent of the total sales value of the transnational Sowa Rigpa pharmaceutical industry in 2017, of which 162 million USD were generated in China and about 4 million USD in Mongolia (Kloos et al. 2020). Even at a superficial glance, then, it is clear that TMM constitutes a significant part of Sowa Rigpa today and that China dominates TMM at least in economic terms. Yet, these observations are neither reflected in the growing scholarly literature on Sowa Rigpa generally, which tends to focus on Tibetan and Himalayan medicine, nor in the scant body of work on Mongolian medicine specifically, which tends to ignore China. This chapter addresses these gaps by tracing the reassemblage of Mongolian medicine during the twentieth century and examining

its emergence as an industry in the twenty-first century in both Mongolia and China.

Although TMM’s “Mongolian” identity is rarely questioned, it is actually a relatively recent phenomenon. Until at least the middle of the twentieth century, what is now called “Mongolian medicine” (*Mongol anagaakh ukhaan*) was referred to by Mongolians as “*tuvd emneleg*” (Tibetan medicine) or “*lameen emneleg*” (Lama medicine). Indeed, Tibetan medicine constituted Mongolia’s sole professional health resource since the seventeenth century, when it was institutionalised there along with the Gelugpa monastic order as part of the Fifth Dalai Lama’s expansion of Central Tibetan hegemony. Between 1662 and 1937, over 100 Tibetan medical schools (*manba datsan*) were established in Inner and Outer Mongolia (Ganbayar and Tumurbaatar 2007), and Mongolian doctors wrote over 230 medical texts in the Tibetan language (Bold 2013: 190), some of them becoming part of the wider Tibetan medical canon. Despite adaptations to the Mongolian climatic, ecological, and social context, and the integration of elements of pre- or non-Buddhist medical traditions (Mongolian, Indian, Chinese), Mongolians essentially practiced a variant of Tibetan medicine. How, then, did this regional branch of Tibetan medicine become “Traditional Mongolian Medicine,” and how did it subsequently turn into a modern industry? How did an institution that asserted Tibet’s hegemonic power over Mongolia transform into a symbol of a separate national identity and finally into an economic resource competing for market shares? In order to trace this remarkable reassemblage, it is necessary to take a wider perspective, expanding the limited historical, geographic, and conceptual scope of existing literature.

According to the scant English-language literature available on this topic, the most remarkable feature of TMM during this timeframe is its discontinuity. Thus, many Western scholars speak of a “revival” of TMM after Mongolia’s democratic reforms of 1990, framing communism as a near-death experience (e.g. Gerke 2004; Kletter et al. 2008; Pitschmann et al. 2013), while others go even further, assuming that there was little left to be revived and thus regarding post-communist TMM as a new “invention” (Janes and Hilliard 2008). Counterbalancing such tropes of radical discontinuity and the narrow focus on Mongolia, I suggest that a more productive way of understanding contemporary TMM is to focus on its *continuity* (cf. Scheid 2002). I argue that rather than being completely interrupted or destroyed by a monolithic spectre of communism, TMM – like Buddhism or shamanism (Humphrey 1983; Shimamura 2019) – was actually reassembled in various ways in different locales, which together facilitated its contemporary commercialisation, industrialisation, and gradual alignment with global health (Kloos 2020). Given the undeniable historical ruptures of the twentieth century – the Stalinist purges in Mongolia, the Cultural Revolution in China, and the large-scale introduction of biomedicine being only the most prominent ones – and their profound impact on Asia’s medical traditions, then, Sowa Rigpa’s outstanding feature is its continuity. Rather than simply a

¹ Both in Mongolia and in most scholarly literature on the topic, the term “Traditional Mongolian Medicine” is used in English. Although problematic on several levels, it is the product of – and reflects – the historical processes and ethnographic reality described in this chapter. Although, as described below, the term only emerged during the 1950s, for simplicity’s sake, it is used here for the Mongolian branch of Sowa Rigpa both before and after the 1950s.

historical achievement, this continuity needs to be understood as an ongoing process that requires constant efforts and adjustments to be secured, whether in the context of communism or neoliberal market reforms.

At the forefront of such contemporary efforts and in marked contrast to foreign scholarship, Mongolian literature on TMM strongly emphasises historical continuity, albeit across much larger timeframes. For example, Mongolian academician Bold Sharav (2013) covers 5000 years of medical history in his book *The History and Development of Traditional Mongolian Medicine*, and renowned Inner Mongolian scholar B. Jigmed traces TMM back to well before the twelfth century CE (Jigmed 1981; Wang and Bao 2017). However, the focus of these historiographies lies on the more distant past, and their scholarly strength and details diminish the closer they approach the present. In short, Mongolian medical historiography only partially fills the gap left by foreign scholarship as far as TMM's development over the last century is concerned. Furthermore, while not sharing the discontinuity bias of English-language literature, it tends to have a strong nationalist bias that equally requires critical scrutiny. Thus, such longue-durée historical narratives suggest both implicitly and explicitly that TMM existed long before Tibetan influence in Mongolia and is therefore originally Mongolian. While foreign influences are generally acknowledged, many Mongolian doctors and scholars systematically highlight TMM's Indian origins (e.g. Ganbayar and Tumurbaatar 2007), thereby reducing Tibet to a mere stopover on the path of medical knowledge from India to Mongolia. Yet despite archaeological findings from the Neolithic, indicating practices like bloodletting, piercing, acupuncture, and trepanation (skull drilling) (Bold 2013: 34–43); pre-Buddhist written sources describing shamanism, herbalism, and various Dhom therapies; as well as a pre-Tibetan influx of Indian medical scriptures, there is no evidence for an *institutionalised, systematic and codified* medical tradition in Mongolia before the introduction of Tibetan medicine.

Without denying the existence of various medical practices among (proto-)Mongolian people, then, TMM as we know it today clearly belongs to the Sowa Rigpa family. As such, this chapter traces its so-far understudied development and transformation from the beginning of the communist era in Mongolia in the 1920s through the democratic reforms and economic liberalisation of the 1990s and into the present day, offering a critical history of the Sowa Rigpa industry in Mongolia and Inner Mongolia. I argue that contemporary TMM and its industry are best understood in terms of a pharmaceutical assemblage (Kloos 2017), shaped by various processes of de- and reterritorialisation, and the coming together of seemingly incompatible elements such as Buddhism, communism, “traditional” medicine, and “modern” science. Using ethnographic data and policy documents collected in Mongolia, the Inner Mongolia Autonomous Region, and Liaoning province between 2014 and 2018, I specifically highlight the important yet ambivalent roles played

by the Mongolian and Chinese governments in the emergence of a TMM industry. This chapter is thus structured in three parts. The first outlines the transformation of TMM during communist times, the second traces the policy developments of the 1990s and 2000s that enabled its industrialisation, and the third offers ethnographic insights into the TMM industry today. I conclude with a summary of TMM's trajectory since the early twentieth century, a discussion of the influence of government policies on its development as an industry, and reflections on its configuration as a pharmaceutical assemblage. While necessarily providing only a brief overview of multiple and complex histories, this chapter aims to contribute to a bigger picture of contemporary Sowa Rigpa and its historical development, and lay a solid foundation for further, more specialised research into Mongolian medicine.

Continuity under communism

Mongolia

The establishment of Tibetan medicine in Mongolia coincided with the fall of the Mongol Yuan dynasty in China and the general demise of Mongol power in Asia. In the late seventeenth century, both Outer and Inner Mongolia became part of the Manchu Qing Empire, where they would remain for more than 200 years until its collapse. In 1911, Outer Mongolia claimed independence (Tibet following suit in 1912), while Inner Mongolia, which had been subject to much stronger Chinese influence and control, became part of the newly established Republic of China. While Tibet enjoyed its regained independence relatively undisturbed until 1950, Outer Mongolia became a site of conflict between Mongolian nationalist, Chinese, White Russian, and Bolshevik agendas, until the Mongolian revolution of 1921 ended this tumultuous period with the establishment of an autonomous Mongolian government, closely aligned with the Soviet Union. In the same year, Mongolia's first hospital (the Central Army Hospital) opened, employing one Hungarian and ten lama doctors, and in 1923, the country's first drug store began selling both European and Tibetan medicines (Bold 2013: 218–223). In 1924, after the death of Mongolia's nominal ruler, the *Bogd Khan* Jebtsundamba Khutugtu, the Mongolian People's Republic was established, through which the Soviet Union forcefully installed a communist regime in Mongolia. New biomedical institutions were founded, such as the first more advanced Western-style hospital in 1925 (still also employing lama doctors) and the first biomedical college in 1934, while successive waves of collectivisation, land expropriation and violent political purges placed Tibetan medicine – strongly linked to the Buddhist monastic system – under increasing pressure. In the first major repression in 1933–1934, many lama doctors were arrested, and on 13 March 1937 the Revolutionary Party passed a resolution encouraging the further

development of “scientific medicine,” as “traditional medicine ... had the potential to become a weapon in the lamas’ hands to strengthen religious influence” (quoted in Bold 2013: 223). Shortly thereafter, the 1937–1938 Stalinist purges began. Over 18,000 lamas and thousands of intellectuals, government officials, Buryats, and Kazakhs were executed, and 746 (i.e. almost all) monasteries were destroyed (Sandag and Kendall 1999). Almost as an afterthought, in April 1938, the sale of Tibetan medicine was officially banned (Bold 2013: 223), but by that time, both Tibetan medicine and Buddhism had ceased to exist in Mongolia as institutions.

Yet Tibetan medicine did not completely disappear in Mongolia in 1938. The lama doctors who had received ten-year prison sentences during the 1933–1934 repression not only survived the second, deadlier purge but in some cases were even asked to treat high communist officials from their prison cells. Upon their release in the 1940s, some of them secretly continued their practice and even taught small numbers of students, as did others who had managed to hide in the remote countryside (Banzragch and Gerke 2002). As *Khamba Lama* Damdinsuren Natsagdorj, the founder of the largest private TMM hospital in the country today, told me, “People think that during communism, all of Mongolian medicine was destroyed. But that’s not true, only the government thought so. Actually, not even the government ... there were very good old lamas who kept the lineage alive.” The names of some of these lamas are listed by Munkh-Amgalan and Tsend-Ayush (2002: 41) and Bold (2013: 224). Indeed, not only did communist officials continue to seek treatment from traditional doctors even after persecuting them but, as old officials and doctors told me, later on they also supplied them with imported *materia medica* to produce medicines that would have been otherwise unavailable. As in Tibet during the Cultural Revolution, it was the perceived clinical efficacy of such medicines – in many cases far superior to the biomedical care available at the time – that prevailed over political ideology.

By the late 1940s and early 1950s, the reputation of TMM was such that Anastasia Filatova, the Russian wife of Mongolian General Secretary Yumjaagiin Tsendenbal, sent a Mongolian *emchi* (practitioner of TMM) to Moscow in order to treat the Russian war hero and previous Chief of Staff of the Soviet Army, Georgy Konstantinovich Zhukov. Marshal Zhukov had commanded the First Soviet-Mongolian Army Group against Japan in 1938–1939, where he not only developed battle maneuvers that he later effectively employed against the Nazis in World War Two but presumably also came in contact with Mongolian lama doctors who had been forced to disrobe and join the army during the purges. While we do not have exact details about this, it appears that Marshal Zhukov remembered the efficacy of TMM when biomedicine failed to improve his condition after a heart attack in 1948 and specifically requested the services of a Mongolian *emchi*. We neither know this *emchi*’s name nor the exact year of his visit to Moscow (mid to late 1950s), but the outcome of his trip suggests that the treatment was successful. Not

only did Marshal Zhukov continue to resort to TMM for the rest of his life – albeit through the more easily available Buryat practitioner Lenkhoboev² – but news about this also significantly improved its legitimacy, setting in motion developments that would shape TMM in Mongolia until today.

Upon the suggestion of Filatova and with the active support of Tsendenbal, a pharmacology laboratory was founded in 1959 at the Institute of Biology of the Mongolian Academy of Sciences in order to conduct scientific research on the history and pharmacology of TMM (Mongolian Ministry of Health 2012: 33; Bold 2013: 231). In 1973, this laboratory was upgraded to the “Institute for Natural Products Chemistry and Pharmacology” and supplied with high-end instruments from Germany as well as extraordinary staff salaries, with the aim of developing standardised recipes and technological methods (Munkh-Amgalan and Tsend-Ayush 2002: 40) for producing medicines in its “Manufactory of Traditional Medicine” (Pitschmann et al. 2013: 946).³ In a further upgrade, the Institute for Natural Products was transferred to the Ministry of Health and reorganised as an “Institute of Folk [or People’s] Medicine” in 1981. While the Manufactory of Traditional Medicine was the first factory producing multi-compound Mongolian medicines in Mongolia, an unrelated “Herbal Company” had already been established in 1968, cultivating and selling crude Mongolian medicinal herbs to China, North Korea, and domestic Mongolian doctors who secretly manufactured their own medicines. In 1990, that company also began producing Mongolian medicines according to classical recipes and accordingly changed its name to “Traditional Medicine and Herb Company.” However, it was the Institute of Natural Products/Folk Medicine and its Manufactory as the only official institution for Mongolian medicine until the 1990 Democratic Revolution that served as the foundation for much of TMM’s post-socialist development in Mongolia. In 1996, the institute was expanded into a “Traditional Hospital Health Science Centre.” It then became the “Traditional Medical Science, Technology and Production Corporation” (short: “Corporation”) in 1998 and was renamed in 2015 as the “Institute of Traditional Medicine and

2 See Sablin (2019: 102), who provides a detailed account of Tibetan/Mongolian medicine in the Soviet Union.

3 The account given here is based on original Mongolian government documents and corroborated by information from the website of the Institute of Traditional Medicine and Technology of Mongolia (www.sci-tradmed.mn). I am grateful to D. Gunbilig for his help and recollections regarding this. However, there exist partly conflicting published accounts regarding the history of this institution. According to Bold (2013: 238), research on Mongolian medicine already began in 1950, and a “Traditional Medical Institute” was established only in 1976 (Bold 2013: 231). Munkh-Amgalan and Tsend-Ayush (2002: 41) call the 1959 institution a “Medical Studies Laboratory,” while a survey report published by the Mongolian Ministry of Health (2012: 33) calls it “Drug Research Laboratory.” The same report mentions that it was expanded as a “Natural Science Institute” in 1973 and an “Academy for Traditional Medicine” in 1980.

Technology.” It remains the only government-owned and operated research and production center for TMM today.

The central figure in these developments was academician Tsend Haidav, the director and driving force of the pharmacology laboratory and its successor institutes from 1959 until 1990. A pharmacologist with additional training in phytochemistry, Haidav pioneered modern scientific research on Mongolian medicinal plants and texts, laying the foundations for modern TMM in Mongolia under very difficult political conditions.⁴ Between 1960 and 2009, he published over 200 research articles and monographs on “Mongolian folk medicine” or simply “Mongolian medicine” (e.g. Haidav et al. 1962; Haidav and Zakrividoroga 1965; Haidav 1975, 1977), thereby not only providing a scientific basis to what communism had hitherto dismissed as superstitious, feudalist and unscientific but also giving it its contemporary identity as “Mongolian medicine.” Despite uneasy and heavily restricted relations between Mongolia and China, this mirrored and was no doubt influenced by developments in Inner Mongolia, where official attempts to modernise and integrate ethnic medicine into the regional health care system began in the late 1950s, culminating in China’s official recognition of “Mongolian medicine” as distinct from Tibetan or “lama” medicine in 1962 (Sajirahu 2007).

Haidav was neither a doctor nor a pure scholar but was rather driven by the practical desire to formulate new medicines based on traditional Mongolian *materia medica*, as well as to develop the necessary standards and technologies to mass-produce them. Indeed, during his career, he “discovered” and developed over 100 high-value herbal pharmaceutical compounds, most of them based on TMM (see e.g. Haidav et al. 1985).⁵ While this makes him the founding father of Mongolia’s modern TMM industry, it also placed him in a controversial position among Mongolia’s TMM practitioners. One major criticism was that Haidav never took Mongolian medical knowledge seriously, approaching it not as an authoritative science and epistemology but simply as a resource for scientific-commercial bioprospecting. To some extent, this attitude lives on in his former students, some of whom now hold powerful positions and contribute to contemporary government policies, although it is met with strong resistance from other quarters of the Mongolian TMM community. Even so, Haidav could not have accomplished what he did without the cooperation of old *emchi* (Munkh-Amgalan and Tsend-Ayush

2002), who had managed to preserve medical texts, instruments, and practical knowledge despite communist persecution.⁶ Not surprisingly, however, given Haidav’s above-mentioned attitude as well as his failure to acknowledge their contributions in his publications, many of these practitioners remained suspicious of Haidav. As one former communist official told me: “I feel sorry now that whenever I heard about a good *emchi*, I referred him to Haidav. There was always a misunderstanding, because Haidav never took Mongolian medicine seriously, he had a very different worldview. All the doctors went away disappointed after meeting him.” Some witnesses even recall that Haidav was in contact with the KGB and denounced doctors who were reluctant to work with him in order to have their old texts confiscated. If discontent with all this could not be openly voiced under communism, it broke out during the first conference on TMM in post-communist Mongolia in 1991. Haidav was verbally attacked by old practitioners who saw themselves and their expertise sidelined even after the democratic reforms and TMM’s official rehabilitation. More than a voicing of old grievances, this was a power struggle over who would control the newly legitimate TMM profession and its emerging pharmaceutical industry. Even though the field of TMM has grown larger and more diverse since the early 1990s and is certainly not limited to Haidav’s “school,” it was Haidav and his students more than the old lama doctors who gave TMM its contemporary form in Mongolia.

Inner Mongolia

Across Mongolia’s southern border, Chinese communism similarly reassembled Tibetan medicine in Inner Mongolia and other regions with significant Mongolian populations into a TMM industry, but with important differences. The communist Inner Mongolia Autonomous Region was established in 1947, two years before the People’s Republic of China but 23 years after the Mongolian People’s Republic. In contrast to Mongolia, TMM in Inner Mongolia remained relatively unaffected by an otherwise tumultuous period between 1911 and 1947, shaped by internal strife, the Japanese invasion, the Chinese civil war, and various Mongolian resistance movements. It was only with the establishment of a communist government in 1947 that the monasteries, which constituted TMM’s institutional backbone in the region, were forced to close down. However, although the lama physicians

4 For more biographical information on Haidav (in Mongolian), see www.sci-tradmed.mn (About Us, Our Pride-Directors).

5 These compounds were available in pharmacies already well before 1990, sold under trade names such as Barbadin, Arjiremy, Dendroniside, Altan Utas (“golden strings”), or Tameta-3. Although based on TMM pharmacopoeia, most of them were not classical TMM formulations but newly developed products.

6 In addition to working with old lama physicians who had remained in Mongolia, Haidav also had two monks of partly Tibetan origin repatriated from India. Since they had fled the Mongolian communist government together with Diluwa Khutugtu Jamsrangjab in 1931, this was an extraordinary achievement that testifies to the privileges afforded to Haidav and the importance given to his research on TMM.

had to disrobe and – if young enough – marry, traditional medicine itself was not outlawed, allowing them to continue their medical and pharmaceutical practices privately, and pass on their knowledge to apprentices (often their sons). Official efforts soon began not only to establish a modern biomedical infrastructure but also to reform, modernise, and integrate what was soon called “Mongolian medicine” into the region’s health care system. According to Chinese medical historians, the first modern TMM college in China was founded in 1952 in Hohhot (Tao et al. 2017). Then, in 1954, the Inner Mongolia Autonomous Region established a Mongolian-Chinese medicine branch, which expanded into a department in 1956 (IMAR 2015: 27). Such early official initiatives notwithstanding, Inner Mongolian physicians remember the decade between 1947 and 1956/58 as a period of transition, when the old institutional establishment of “lama medicine” had been abolished but not yet replaced by the new institutional infrastructure of “Mongolian medicine.”

In many ways, Mongolian medicine’s fate in Inner Mongolia was strongly connected to that of Chinese medicine in the rest of mainland China. Initially attacked by the Communist Party, in the mid-1950s Chinese medicine began to be reframed in positive terms as a “legacy of the motherland” and officially recognised as a valid medical system called “Traditional Chinese Medicine” (TCM). A Research Academy for TCM was established in Beijing in December 1955, providing an institutional basis where TCM knowledge was to be standardised into a national curriculum and taught to doctors of Western medicine (Taylor 2005: 84). In Inner Mongolia, this political shift created space for Traditional Mongolian Medicine, or “Mongolian-Chinese Medicine” (often implying a combination of TMM and TCM), to undergo a similar process of recognition, upgrading, and modernisation. In 1957, the first Mongolian-Chinese pharmaceutical company was founded in Hure (the former site of a Tibetan Buddhist monastery, about halfway between Tongliao and Fuxin), with funds provided by high government officials who had been successfully treated by a famous local lama physician. In 1958, TMM began to be officially taught at the Inner Mongolia Medical School in Tongliao (founded in 1956) and the Baotou Medical School, and in 1960 the country’s first TMM Research Unit was established in Liaoning (Tao et al. 2017). In these institutions, Tibetan medicine was systematically translated into Mongolian language and script, paving the way for the official recognition of “Mongolian medicine” as a legitimate medical system, distinct from Tibetan or “lama” medicine, on 21 February 1961 (Saijirahu 2007).

The years from 1958 to 1966 thus constituted a more optimistic period of reorganisation and gradual growth. Inner Mongolian biomedical students and doctors were sent to the countryside as village health workers, but also to learn TMM from former lama physicians. The latter, similarly deputed as “barefoot doctors,” were also invited to teach in the colleges in the cities. Small district clinics opened in towns, offering rudimentary biomedical care as well as TMM, and hospitals in the bigger cities began to produce

and prescribe TMM formulas. TMM physicians also began to publish a corpus of medical case studies, a well-established genre in Chinese medicine (Scheid 2007) but unique in the context of Sowa Rigpa. Although the barefoot doctors’ program was expanded after 1965 and became national policy in 1968, the development of TMM was interrupted by the Cultural Revolution (1966–1976). Now it was Inner Mongolia’s turn to have its temples and monasteries – which, although closed down, had remained physically intact until then – destroyed, while a large section of the intellectual and cultural elite, including many old TMM physicians, was killed or imprisoned. While research and expansion were impossible, however, even during these difficult times TMM was not completely outlawed, as evidenced by the foundation of the “Mongolian Medicine Company” in 1970 in Fuxin (today: Fuxin Pharmaceuticals Co.), the first official pharmaceutical producer specialised exclusively on TMM in China.

The end of the Cultural Revolution marked the beginning of TMM’s modern growth and development phase, which continues in the present day. In contrast to Mongolia, where the impact of communism on TMM was both longer and more severe, the continuity of TMM in Inner Mongolia had never been seriously questioned, even if its reassemblage was similarly radical. Substantial government investment led to the foundation and expansion of TMM institutions, including hospitals, pharmaceutical factories, and colleges. In 1978 alone, for example, research on TMM was officially resumed; the Jelimu Medical College for TMM was founded at the Inner Mongolian National Medical School in Tongliao, later to become the foremost TMM institution in the Inner Mongolian Autonomous Region (IMAR); a TMM hospital was established in Fuxin; and a new production plant was built at the Mongolian Medicine Company in the same city. This gradual resumption of work was coupled with moderate growth from the late 1970s through the mid-1990s, setting the foundation for the emergence of a TMM industry and a much faster pace of development.

The emergence of a TMM industry

In the early 1990s, TMM was well integrated into local and regional public health systems in the Mongolian areas of China, but it was by no means an industry. TMM hospitals and individual practitioners produced their own medicines for direct clinical use, without commercial motives and outside of national pharmaceutical regulations. This began to change in 1992 when China’s decision to transition to a “socialist market economy” set in motion TMM’s industrialisation. As state subsidies were reduced, TMM hospitals were for the first time confronted with the need to generate income, leading to a gradual expansion and commercialisation of hospital pharmacies into pharmaceutical companies. In 2001, China joined the WTO, which mandated regulatory standards also for the emerging TMM pharmaceutical industry, including the implementation of Good

Manufacturing Practices (GMP) by 2004. Together with the increasing privatisation of hitherto government-owned TMM factories, the introduction of GMP significantly accelerated TMM's industrial development. A major next step was the establishment of a multi-department centralised management structure for the TMM industry, initiated by the IMAR Health Bureau in 2005. As a result, 90 percent of all Inner Mongolian league cities had "Mongolian-Chinese Medicine Bureaus" by 2015 (IMAR 2015). In 2006, the IMAR made the official "Decision to Promote Mongolian-Chinese Medicine Industry Development" that crucially increased financial assistance and salaries, pre-empting similar, subsequent suggestions and policies on the national level (e.g. 17th National Congress 2007, Chinese State Council 2009, 18th National Congress 2012). In another major promotion of the TMM industry in 2013, the IMAR government raised the status and standards of TMM hospitals, banned the reduction of existing TMM facilities, standardised TMM drug processing, included over-the-counter (OTC) TMM drugs into the subsidised category of "basic pharmaceuticals," and lowered the health insurance premium on TMM. If in 2006, 86 TMM hospitals operated in Inner Mongolia (not counting other Mongolian regions of China), by 2015 this number had increased to 122 (IMAR 2015). The 13th Five Year Plan (2016–2020) finally gave equal value to biomedicine and "traditional" medicines including TCM, Tibetan medicine, and TMM, providing yet another boost to the development of these medical industries.

On a much smaller scale and at a slower pace, TMM policy development followed a similar trajectory in post-communist Mongolia. After the peaceful revolution in 1990, Mongolia not only transitioned to democracy and a market economy but, in the words of one TMM practitioner, "suddenly realized that we have a national identity and a traditional medicine." Yet, in contrast to Inner Mongolia, there were no books or experienced teachers, nor any kind of TMM infrastructure. What did exist, still, were oral traditions and a few old texts that a small number of lineage/lama physicians had managed to preserve and, in some cases, pass on to students, as well as Haidav's research centre. While the old physicians and their students began to practice openly and establish clinics in 1990, the main priority was to create official institutions – schools, hospital departments, factories – to build a foundation for modern TMM. Here, Haidav's students and affiliates, already well connected to the Mongolian People's Revolutionary Party (which remained in power until 1996), proved most influential. Haidav was appointed as a government consultant and his research institute became Mongolia's foremost governmental TMM institution, consisting of a drug manufacturing unit, a TMM hospital, and a research center. Also, in 1990, a Traditional Medicine Department was founded at Mongolia's Health Sciences University, with Dr N. Tumurbaatar, a neurologist and acupuncturist with little knowledge of TMM, as its head. The first batch of 24 TMM professionals graduated in

1993, including Dr Tserendagva, the current principal of the International School of Mongolian Medicine, as the oft-renamed Traditional Medicine Department is called since 2016.

TMM's transition in Mongolia into a legitimate part of the country's health care system and later into a small industry is best illustrated by briefly recounting the professional trajectories of four contemporary practitioners. The first account is of Dr Boldsaikhan, head of the Mongolian Association for Traditional Medical Sciences, who represents Haidav's institute and Mongolian state institutions for TMM, but also one of Mongolia's oldest medical lineages. A student at the Health Sciences University of Mongolia in the 1970s, he secretly learned TMM from his father who was a lama physician, and from Otoch Luvsandanzanjantsan (1914–1993), the reincarnation of the founder of Lameen Gegeen monastery and Mongolia's first medical school.⁷ Having completed both his official training at university and his unofficial training in TMM, Boldsaikhan joined Haidav's institute in 1980 and in 1990 became head of the research institute on medicinal plants at the Corporation. Later, he also served as the head of the TMM clinic at the Ulaanbaatar Central Hospital Nr. 1, while moving from the Corporation to the System Science Research Center at the Mongolian University for Science and Technology.

Never affiliated to Haidav but also part of the state's medical establishment, Dr Mendsaikhan was the head of the 400-bed Internal Medicine Department of Mongolia's Military Hospital during the communist era. He also secretly studied TMM from old lama doctors since 1984, after he had witnessed them curing diseases that he could not treat with his modern resources. In 1990, he was among the first batch of TMM students to enrol at the Traditional Medicine Department and simultaneously founded Mong-Em, a TMM clinic and drug manufacturer, in an old building of the Military Hospital.⁸ "It was difficult to develop Mongolian medicine in the 1990s, because everyone only knew European medicine," he remembers. Still, he persevered, privatised the company in 1996, bought the building with his life savings in 2000, and today runs Mong-Em – comprising a 40-bed hospital, an outpatient clinic, and a TMM factory – together with his wife, daughter, and some 40 staff, while simultaneously serving as director of the State Dermatology Hospital since 2014.

Khamba Lama Natsagdorj, founder and president of Manba Datsan hospital and Otoch Manramba university, recounts that he began to study Buddhism and TMM in 1975 under an old lama named Chatrabal:

7 This medical school (*manba datsan*) was established in the 1680s as one of eight colleges of Lameen Gegeen monastery in Bayanzurkh, located in today's Bayankhongor aimag.

8 This 150-year-old Russian building had served as the headquarters of Baron Roman von Ungern-Sternberg during his 5-month stay in Ulaanbaatar (then Urga) in 1921. Due to the building's bad shape and increasingly strict regulations, Mong-Em was forced to demolish this historical building in 2020 and begin construction of a new hospital and factory.

My teacher did not wear monk's robes, and I of course was no monk then but studied at college. After six years, he gave me permission to treat a few patients and from then on, I practiced medicine secretly. Meanwhile, in 1980 I had ordained as a monk to study at the Mongolian Buddhist University.⁹ In 1988, I went to Dharamsala in India to study at the Men-Tsee-Khang. When I came back in 1990, everything had changed. I told my teachers that I wanted to start a Manba Datsan, a TMM school and medical center. They thought it was a good idea, but they were scared. I had no money, so I borrowed money from the government to build Manba Datsan. Such a short time after communism, people had big eyes when they saw me, a monk, going into the government offices to ask for money to build a TMM school! [laughs] But I did it, I founded a small medical center and in 1991, also Otoch Manramba College. All of this was a lot of work.

This was the first private TMM college in Mongolia and has graduated over 500 TMM doctors since then. Today, Manba Datsan operates an 80-bed hospital and a TMM factory, with future plans including new centres in Tuva and Bulgaria, as well as potential joint ventures with Chinese and Taiwanese investors to gain access to these export markets.

If Natsagdorj's brand of TMM is closely aligned with Buddhism, then Dr Baatar emphasises his unbroken medical lineage (*jud*, from Tibetan *rgyud*) of nine generations. A weightlifter and athletic instructor during communism, he suffered an accident in 1980 that left him with chronic health problems. Biomedicine hardly offered any relief, so after six years, he secretly went to an old lama physician, Dorj "Odi" Damdinjav. "He may have been afraid of the communists ...," Dr Baatar remembers. "After checking me, he sent me away with only three doses of medicine. I was disappointed, because I had travelled a long way just to see him, but he told me, 'if this doesn't cure you, I won't be a doctor anymore.' And I was amazed, after only two doses I was completely well again. So I went back to see him again and the same year, I started to learn from him." In 1990, Dr Baatar began to treat patients free of charge and after Dorj's death in 1997, he enrolled in college to get an official medical license. In 2002, he formally established "Otoch Odi" clinic, which soon attracted large numbers of patients, especially those suffering from hepatitis and (liver) cancer, due to Dr Baatar's highly effective lineage recipes. From 2015 onwards, Dr Baatar also founded a medical laboratory, an agricultural company cultivating medicinal plants, a charitable foundation, and a pharmaceutical factory (Oditan) that commercially produces larger quantities of medicines as well as herbal OTC products.

Although brief, these four accounts illustrate some of the diverse strands of contemporary TMM in Mongolia, which complicate simplistic dichotomies such as TMM and biomedicine, Buddhism and communism, old lineages and new institutions. They also share important commonalities. For example, they all reveal a relaxation of restrictions against TMM and Buddhism well before the end of communism, where not only Haidav could openly conduct research on TMM at the Mongolian Academy of Sciences, but also old lama *emchi* could be invited to treat patients at the Military Hospital, and young men could ordain as monks in an official Buddhist University. They all involve personal experiences of TMM's clinical effectiveness, which often constituted a turning point in their personal and professional lives. All of them were also, in different ways, centrally involved in the rehabilitation of TMM, which after more than half a century of communism proved to be a slow and arduous process. While a fundamental understanding and appreciation of TMM may have been lacking among both the general population and officials, the Mongolian government soon began to create a policy and regulation framework for TMM's post-communist development (cf. Mongolian Ministry of Health 2012).

In 1991, the Mongolian Ministry of Health created the position of "Traditional Medicine Specialist," who was charged with drafting the "Main Directions of Development of Traditional Medicine 1991–1995." The second issue of these Main Directions for the period 1996–2000 was drafted and approved five years later, playing a vital role in providing TMM care to the population, especially at the provincial level. Both strategy papers led to the adoption of the "Government Policy on Developing Mongolian Traditional Medicine" in 1999, which provided the first proper legal basis for the development of TMM. This policy included the "Development Agenda 1999–2015," which outlined concrete measures to increase the utilisation of TMM by integrating it into national health services. This was followed in 2001 by a Government Drug Policy that set the regulations for both prescription and OTC herbal medicines. The first official safety requirements for herbal medicines appeared in 2002, subjecting TMM medicines to laboratory tests for bacteria, fungi, and heavy metals. In the same year, the first of three Action Plans to implement the 1999 Policy was approved for the period 2002–2006, while subsequent Plans covered the periods 2006–2010 and 2010–2018. In 2003, an "Encyclopedia for Traditional Medicinal Substances and Prescription Control" was published, with the aim of strengthening quality control regarding 182 substances and 177 traditional formulas. The first General Requirements were instituted for TMM drugs and their manufacture in 2005 (these were updated in 2007 and periodically thereafter), while new State Standards mandated periodic inspections of TMM manufacturers to ensure quality control.

The development of a policy and regulation framework for the industry coincided with that of a professional TMM infrastructure, beginning with the above-mentioned Traditional Medicine Department at the Mongolian

9 The Mongolian Buddhist University was established in 1970 at Gandan monastery (Gandantegchinleng Khiid) in Ulaanbaatar, the only major Buddhist monastery in Mongolia that had escaped destruction under communism.

Health Sciences University (1990) and Natsagdorj's TMM College "Otoch Manramba" (1991). After the first domestic conference on TMM in 1991, the First International Symposium on TMM was organised in September 1995 in Ulaanbaatar, bringing together TMM scholars and practitioners not only from Mongolia but also Inner Mongolia, Buryatia, and Tuva. Since then, five more such international conferences have taken place, in Ulaanbaatar (2006, 2016, 2021), in Ulan Ude, Buryatia (2008), and in Hohhot, Inner Mongolia (2012). The fact that four of these six international symposia took place in Ulaanbaatar underscores the Mongolian capital's nodal position in the TMM world. In 1996, the Darkhan City Medical College established a Department for Traditional Medicine to train TMM nurses and in 1999, the Association of TMM Doctors and Researchers was founded in Ulaanbaatar, which over time established branches not only in the city but also across the Mongolian countryside and in Poland. Despite these numerous institutional developments, TMM itself developed only very slowly in Mongolia during the 1990s, having had to start almost from scratch after the end of communism. In the 2000s, industrial development picked up speed, with pharmaceutical production output tripling between 2001 and 2008 (Kloos et al. 2020). TMM's growth also made it a more interesting career option, leading to the foundation of new TMM colleges and college departments. Thus, in 2009 two new departments for TMM opened at the Ach and Etugen private universities; in 2013, the TMM department of Monos Medical University (founded in 2000) split off and became Shine Anagaakh Ukhaan ("New Medicine") College; and in 2014 the private Mongolian National University also established a Department for TMM. With university departments graduating up to 500 TMM professionals a year by 2017, the government introduced a standard TMM curriculum in 2012, about 60 percent of which consists of biomedical subjects.

Between 2010 and 2013, along with the expansion of Mongolia's higher education infrastructure for TMM and a more general economic boom, the TMM pharmaceutical industry underwent rapid growth: in the space of just three years, it more than quadrupled its production volume and value (Kloos et al. 2020). This not only inspired official visions of developing TMM into a profitable export industry but also triggered a new wave of laws and regulations that aimed at least partially at facilitating this development. Thus, in 2014 a new law required all TMM producers to officially register their drugs, a process that was largely completed by 2016. Higher pharmaceutical production standards were also introduced, moving towards full GMP compliance by 2020. In 2017, finally, the first official TMM pharmacopeia, including 80 single herbs and 80 multi-compound formulas, was written by the Corporation and approved by the government.¹⁰ Government initiatives thus combined with considerable

¹⁰ This pharmacopoeia is based on the Corporation's older manual for TMM doctors, which consists of instructions on which drugs to use for which indications and on recipes provided by Natsagdorj.

individual labour, dedication, and investment to create the necessary policy, regulatory and professional infrastructure for a TMM industry to emerge. Yet despite similar patterns of development in Mongolia and Inner Mongolia, the status quo of TMM north and south of the Gobi differs dramatically.

The TMM industry today

The TMM industry is flourishing in Inner Mongolia and other regions of China with Mongolian populations (notably Liaoning, Jilin, Qinghai, and Xinjiang), generating some 162 million USD in 2017 through pharmaceutical production alone (Kloos et al. 2020). According to official figures (Celimuge et al. 2016), there were 94 TMM inpatient hospitals above township level, 54 licensed pharmaceutical units, and 25 commercial TMM pharmaceutical companies (18 of them in the IMAR) operating in China, not to mention hundreds of private clinics and small pharmaceutical producers. Pharmaceutical companies such as the large Inner Mongolian Mongolian Medicine Co. in Tongliao and the China Mongolian Medicine Factory Center in Hohhot, produce medicines licensed for the regional or national market, according to stringent GMP standards. Licensed pharmaceutical units, on the other hand, are mostly hospital factories that produce exclusively for their own internal hospital use and are required to follow Good Production Practices (GPP), which gives them more freedom to produce medicines according to traditional protocols. Not least for economic reasons, most TMM hospitals operate their own hospital factories, while private practitioners without their own pharmaceutical production rely on more expensive commercial TMM pharmaceuticals. However, there also exist many private practitioners in Inner Mongolia who manufacture and prescribe their own medicines on a small scale according to their own traditional standards, without any government interference.

While many such small manufacturers as well as hospital factories strive to produce the best quality of medicines possible and make efforts to source their raw materials from clean sources in remote Inner Mongolian areas or even Qinghai, commercial factories often use cheap, cultivated herbs and substitute ingredients that are expensive or hard to source. Like substitutes, cultivated herbs are widely considered to have weaker potency and are prone to contamination with pesticides (cf. Wu 2015). Furthermore, large parts of Inner Mongolia are heavily affected by environmental pollution, compromising the quality of both wildcrafted and cultivated herbs. Producers in Mongolia refer to such concerns to highlight the superior quality of their own unpolluted, wildcrafted medicines, but Inner Mongolian practitioners also admit to this problem. One doctor in Tongliao, who ran a private clinic where he sold both Mongolian and Tibetan medicines, told me: "There is a big difference between Tibetan and Mongolian medicines. The quality of Tibetan medicine is very good: if I prescribe 20 days of medicine, the patient usually recovers completely.

Mongolian medicine, on the other hand, is weak - 20 days are not enough.” Indeed, it is not uncommon for Inner Mongolian TMM hospitals to prescribe six or more herbal pills as a single dose of medicine to their patients, while in Tibetan medicine and in Outer Mongolian TMM, the standard dose consists of one large or three small pills. A first-hand report from an employee of a large TMM company even described routine counterfeiting practices, where Tibetan medicine is mixed with cheap local herbal powder and repackaged as Mongolian medicine.

Despite this, many Mongolians travel to Inner Mongolia to avail themselves of superior TMM hospital facilities or to take advantage of free university tuition to study TMM.¹¹ The Inner Mongolia University for Nationalities in Tongliao and the Mongolian Medicine and Sciences University in Hohhot are the two flagship institutions for TMM in China, each graduating about 200 TMM professionals per year, but there are also several colleges and four professional schools offering lower-level TMM degrees. The International Mongolian Hospital of Inner Mongolia in Hohhot is the world’s largest TMM hospital – and China’s largest minority medicine hospital – with over 1500 beds and some 2000 staff. Built in 1957 as the “Inner Mongolian Chinese and Mongolian Medicine Hospital,” it originally offered both TMM and TCM as well as biomedicine, but separated from its TCM branch in 2006 and moved to its present location in 2012. Other outstanding TMM hospitals include the 600-bed Affiliated Hospital of the Inner Mongolia University for Nationalities in Tongliao, founded in 1968, and the 350-bed Liaoning Province Mongolian Medicine Research Hospital in Fuxin, founded in 1980. Although a small city with less than a million inhabitants, Tongliao is considered the main center for TMM in China. It was officially named “Mongolian Medicine City” in 2017, in recognition of its long history of TMM scholarship, its highly regarded TMM school, and its several important TMM hospitals and pharmaceutical companies. Other important centers for TMM are Hohhot, the Inner Mongolian capital and administrative center, as well as Ulanhot, Hulunbuir, Xilinhot, Hure, and Fuxin in Liaoning province.

By comparison, the TMM pharmaceutical industry in Mongolia, valued at roughly 4 million USD in 2017 (Kloos et al. 2020), appears very small. Today, seven official TMM producers – all based in the capital Ulaanbaatar – provide about 15 tons of medicines to some 200 public and private TMM clinics and hospitals¹² and about 200 TMM doctors based abroad (the vast

majority in Poland). Besides the companies mentioned above – the Institute of Traditional Medicine and Technology (“Corporation”), Manba Datsan, Mong-Em, and Oditan – these include also Ariun Mongol (“Armon”), Dr Khatanbaatar’s Liver Disease Center, and a new company run by Dr Ogtonbaatar. In addition, there are up to 50 unofficial manufacturers that produce another estimated 10–15 tons of medicines per year mostly for use in their own clinics, which do not appear in any official statistics but are included in the above-estimated value of 4 million USD. Not included in this number is the relatively large and profitable education sector, with six university TMM departments (all in Ulaanbaatar) and one TMM professional school in Darkhan; hospital and consultation fees; and the rapidly expanding sector of OTC herbal products based on TMM. Some 60–70 percent of medicinal raw materials are imported from China and India, while the remainder – mostly steppe plants – are wildcrafted in the Mongolian countryside by the producers themselves, equipped with official permits.

How can the difference in TMM’s industrial development between Mongolia and Inner Mongolia be explained, given the similar patterns of policy development in both places? Why is TMM thriving in China, where Mongolians constitute a disadvantaged minority, while it is struggling in independent Mongolia, the capital of which functions as the centre of the TMM world? Talking to TMM practitioners and producers in both countries, the problem seems easy to sum up: in contrast to China, Mongolia’s TMM pharmaceutical industry is scarcely profitable. One simple explanation would be Mongolia’s small population and a weak economy, limiting the domestic market for TMM but encouraging a more cosmopolitan, international outlook among practitioners and producers than in Inner Mongolia. Until recently, however, China’s Mongolian regions also had small populations and weak economies. Interview data reveals broad agreement on a different explanation, centred on two key factors: Soviet communism and Mongolia’s post-communist politics. As Dr Natsagdorj told me, “You have to understand one thing: between 1938 and 1990, there was continuous government propaganda against TMM. Many Mongolians are still under this influence, so there is not much demand for TMM.” Dr Ganzorig, a Dharamsala Men-Tsee-Khang trained physician who runs the Naidan Traditional Medicine Center at the Pethub monastery¹³ in Ulaanbaatar, similarly explained: “The thing is that the Mongolians’ mentality changed under communism. Most people forgot the old concepts of health and illness. So as traditional doctors today, we have to use modern concepts when we talk to our patients, otherwise they won’t accept or even understand us.” And when I asked Dr Purevjav at Mong-Em in Ulaanbaatar whether TMM was a symbol of Mongolian national pride,

11 According to Tserendagva, the Dean of the International School of Mongolian Medicine at the Mongolian National University of Medical Sciences in Ulaanbaatar, 300–400 Outer Mongolians go to Inner Mongolia every year to study TMM.

12 Official numbers are dated, sometimes refer to even older data, and can be contradictory (Mongolian Ministry of Health 2007, 2012). According to these and informal interview sources, however, there were 175 hospitals and clinics exclusively offering TMM in 2014, compared to 140 in 2012 and 115 in 2007.

13 Pethub Stangey Choskhor Ling monastery was founded in 1999 by the Indian ambassador to Mongolia, the 19th Bakula Rinpoche from Ladakh.

like Tibetan medicine for Tibetans, she replied: “Not really. There was too much Soviet influence for too long. Because of that, even now everything needs to be modern, scientific, proven ...”

The market for TMM in Mongolia is thus still very small, even though TMM’s popularity has grown considerably since 1990. While the impact of Soviet communist repression is keenly felt by Mongolian TMM practitioners even three decades after its end, they are also well aware of the role of successive post-communist governments. Expressing a widely shared sentiment, Dr Natsagdorj told me: “We have a TMM policy, we have a medicine law that includes TMM, we have a drug law, we have TMM development programs ... On paper, it all looks very good, but in reality, there is not much support.” Even the Deputy Health Minister Amarsanaa admitted in a 2014 interview: “The government has a good policy and strategy for TMM, but there is no funding, and therefore no implementation ... So TMM in Mongolia is only growing naturally, not because of government help.” While the Mongolian government is certainly operating with limited means, the absence of funding was also a matter of priority, as one TMM expert told me: “Most politicians have a business background, so they are not very interested in developing TMM.” The MoH’s Center for Health Development, charged with licensing doctors and overseeing medical education, is a good case in point: when I visited the centre in 2014, only one out of 70 staff was responsible for TMM. Asked whether this reflected the importance given to TMM by the government, the concerned officer laughed and replied, “yes.”

Despite the country’s impressive TMM policy and regulatory development, then, in the absence of tangible financial and administrative support, the industry has not benefitted from these policies as it has in China. One good example was the government’s requirement for all second and third-level hospitals to have a TMM unit/department, the successful implementation of which is documented in official statistics (e.g. Mongolian Ministry of Health 2012: 23). In practice, however, “traditional medical services” offered in such units may be acupuncture, electricity treatment, light, water, oil, and mud therapies, massage, bloodletting, moxibustion, cupping, or physical exercise. The actual coverage of TMM in Mongolia is therefore much lower than such official numbers suggest, stagnating at about 3 percent of all healthcare. Furthermore, this government initiative is undermined by unequal health insurance coverage, where TMM was covered by only up to 117,000 MNT (48 USD) per patient in 2017, as compared to 350,000 MNT (144 USD) for biomedicine. Excess costs have to be paid by public hospitals themselves or, in the case of private hospitals, the patients. Especially in the wake of the 2016 economic crisis, TMM has thus become a financial burden, initiating its slow disappearance from public hospitals and accelerating its shift to the private sector. This, in turn, increasingly moves it out of the reach of poorer and middle-class patients, who formerly constituted its core clientele. Another example of the government counteracting its own TMM

development policies was the successful “Family First Aid Kit” distributed by the NGO Vansemeruu. Containing basic TMM formulas along with simple descriptions of their indications and dosage,¹⁴ these kits proved highly popular in rural and nomadic areas. However, the project died when the Mongolian government announced it would take over its funding, causing Nippon Foundation, its original funder, to withdraw, but then never followed up on its promise.

None of this means that the government’s management of TMM is the only problem. Another issue, Dr Mendsaikhan from Mong-Em explained, are Mongolian medicinal plants, which in contrast to non-endemic ingredients (which constitute 60–70 percent of Mongolian medicines) cannot simply be bought and imported according to demand: “They are a very limited resource, especially now with climate change and desertification. This is why running a TMM company is not very good business, because we can’t expand much.” Nor does the comparatively well-developed TMM industry in China mean that all is well there. As mentioned above, environmental pollution, counterfeiting practices, and industrial-scale herb cultivation are all seen to be having negative impacts upon the quality of these medicines.

Even on a more general level, Inner Mongolian doctors and scholars point to mounting difficulties. In his study on the development of the TMM industry, Wu Lan (2015) argues that despite a consistent annual growth rate of 30 percent since 2001, TMM is struggling, having first been replaced by biomedicine and TCM, and more recently outcompeted by Tibetan medicine, which today ranks just behind TCM in popularity in China. One physician in Tongliao district told me:

Today, TMM doctors have high certificates, there are many new medicines, they are packaged very nicely ... Also, the quantity of TMM produced has increased a lot, our medicines are sold everywhere, and there are more and more TMM doctors and nurses. So it looks like TMM is flourishing. But personally, I don’t believe TMM has a good future. The quality of our medicines is going down, it’s nothing special anymore. And for TMM to develop well, we need the freedom to follow our own culture and medicine. But the government doesn’t give us this freedom, and they don’t respect our medical tradition.

A senior doctor from Hure made a similar point:

Socially, politically and economically, the TMM industry is doing very well here in China, that’s true, but this doesn’t mean TMM itself is doing

14 These kits were partially inspired by the *haichi* household medicine delivery model developed in Japan (see Futaya and Blaikie, this volume).

well. Some rich people make a lot of money with TMM, but TMM is not just for money. Human life is more important, and it's our duty to help people. In my opinion, the biggest problem is that we cannot practice as we want - the government controls us too much, there is no freedom, and government officers don't understand TMM.

Conclusion

Beginning with a brief outline of pre-modern medicine in Mongolia, this chapter has traced the transformation of a regional branch of Tibetan medicine into Traditional Mongolian Medicine and, most recently, the TMM industry. By analysing English, Chinese, and Mongolian textual sources as well as oral histories and interview data of officials, senior practitioners, and Mongolian scholars, it provides a first critical account of the emergence of modern TMM in Mongolia and China. While Western medical anthropological scholarship often focuses on the destructive, disruptive impact of communist rule on Mongolian and Tibetan medicine, the data presented here offers a more nuanced picture. Most obviously, communism was introduced at different times, took different forms, and had different attitudes vis-à-vis "traditional medicine" in Stalinist Mongolia and Maoist China. Furthermore, we have seen that even in Mongolia, where TMM undeniably suffered the brunt of communist destruction, communism proved to be not only a disruptive but also a productive force. Thus, after the brutal deterritorialisation of Tibetan medicine during the Stalinist purges in the 1930s, the communist government began to tentatively reterritorialise it as "Mongolian medicine" two decades later through Haidav, preparing the ground for the emergence of a TMM industry in the post-communist period after 1990. Although in comparatively less violent ways, the same process of de- and reterritorialisation occurred in the Mongolian regions of China, where "lama medicine" was similarly uprooted from its old institutions and reestablished as "Mongolian medicine" in secular, modern, state-controlled facilities, which later played a central role in TMM's industrialisation.

TMM's actual industrialisation began with Mongolia's democratic revolution in 1990 and China's switch to a "socialist market economy" in 1992. It was driven by TMM's increasing integration into the respective states' health care policies, pharmaceutical regulatory frameworks, and administrative structures. While this integration followed similar trajectories in both countries, China's TMM industry today outperforms Mongolia's by a ratio of more than 40 to 1 in terms of economic value. Professionals on both sides of the border explain this discrepancy by referring to the massive destruction and repression under Soviet communism on the one hand and to the absence of effective government support and economic development plans for TMM in Mongolia since the 1990s on the other. Ethnographic data shows, however, that TMM on both sides of the Gobi struggles with the role of the state, as

well as shrinking supplies of good quality raw materials, caused not only by the rapid expansion of the industry in the past two decades but also by the effects of climate change, desertification, and environmental pollution. While the TMM industry continues to expand on the domestic and international levels, these issues are likely to grow, as will the profits and stakes involved.

I have argued that the development of TMM during the twentieth century is more productively understood in terms of continuity rather than discontinuity. Recent medical historiography by Mongolian scholars and several decades of government policy interventions, as well as the individual efforts of a large number of practitioners and stakeholders, can all be read as attempts to ensure TMM's continuity. In the contemporary context, continuity thus refers to the selective construction of both a traditional and national past, alongside particular visions of TMM's future as a competitive modern industry. As the brief accounts of different practitioners' professional trajectories illustrate, this transformative process cannot be adequately described or analysed in terms of a clash between tradition and modernity, nor can its result – the TMM industry – be accurately labeled as an instance of "alternative modernity" (e.g. Hsu 2009) or "neo-traditionalism" (Pordié 2008). Rather, it constitutes an assemblage that brings together old and new elements in a new entity, whose past and future continuity still remains to be settled. This particular assemblage, furthermore, is pharmaceutical since, like most Asian medicines today, TMM is largely based on pharmaceuticals and their production, regulation, and distribution (Kloos 2017). In short, the very existence, shape, and development of contemporary TMM is inextricably connected to its pharmaceutical industrialisation, in similar – but perhaps even more direct – ways than TCM (Chee; Campinas, this volume), Kampo medicine (Arai et al.; Futaya and Blaikie, this volume), or Ayurveda (Kudlu; Madhavan and Soman, this volume). We have seen how in both Mongolia and China, medical texts, knowledge, lineages, and what Adams et al. (2011) call a "Sowa Rigpa sensibility" were not only preserved by outstanding lama physicians under most difficult circumstances, but also underwent a radical reassemblage that changed both the contents and the nature of this medical tradition. Based on classical texts and old knowledge as much as modern technology and government regulations, TMM's industrial reassemblage not only acquired a new name and identity, but also a new history and future. What used to be a relatively stable and well-established regional branch of Tibetan medicine thus became a modern industry of Mongolian medicine.

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Conclusion

Assembling Asian pharmaceuticals

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What can we learn about Asian medicines through a sustained scholarly focus on their historical trajectories and current configuration *as industries*? What can observations generated through such research tell us about regional and global patterns of pharmaceutical development, production, regulation, and flow, or indeed about contemporary Asia more broadly? Constituting one of the first collective enquiries into Asian medical industries, this volume invites reflection upon these questions and a host of others besides. Exploring a broad range of contexts from a variety of disciplinary perspectives, these case studies offer numerous insights into the specific regions and medical traditions upon which they focus. At the same time, they present us with a range of commonalities that not only facilitate comparative analysis but also show these industries to be much more than an assortment of localised, unconnected, and inward-looking “traditional medicine” production sectors. What the chapters collectively reveal instead is a distinct phenomenon that is gathering momentum and carrying increasing significance at various scales, yet has not been adequately defined or investigated to date.

Each medical tradition discussed in this volume clearly has its own unique history, identity, and lived reality. A vast literature attests to the importance of medical texts in establishing the epistemological and theoretical foundations of these traditions, as well as to the way medical lineages, institutions, and fields of practice have both sustained and transformed them over time, in relation to wider social and medical change.¹ All of these factors have shaped medicine production and circulation in highly specific ways, resulting in a diverse array of socioeconomic, institutional, industrial, and pharmaceutical forms. When placed within a comparative framework, however, the medical industries of China, India, Japan, Mongolia, and Nepal also appear as parts of something much

¹ For example, see: Leslie (1976), Zimmermann (1987), Leslie and Young (1992), Scheid (2002, 2007), Taylor (2005), Unschuld (2010 [1985]), Berger (2013), Lei (2014), Gyatso (2015), and Salguero (2017).