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Herbs and Traders in Transit: Border Regimes and the Contemporary Trans-Himalayan Trade in Tibetan Medicinal Plants

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Abstract

This article discusses the contemporary cross-border trade in medicinal plants between Nepal and Tibet. As Tibetan pharmacy extensively relies on raw materials not native to Tibet, long-distance trade in medicinal materials is not a new phenomenon. However, with the recent creation of a Tibetan medicine industry in the People's Republic of China (PRC) and the increasing demand for herbs from India and Nepal, the contemporary herb trade is facing new challenges. Surging trade volumes, notions of patient safety, growing ecological concerns, and the current political situation in Tibet have led to increased efforts at rendering legible and controlling the transit of traders and herbs across the border. The ethnographic account of a Tibetan plant trader's business trip to Nepal serves as a starting point for a discussion of these efforts and the traders' tactical manoeuvres to deal with them. The notion of 'border regimes' is introduced to analyse the regulations, their implementation and side-effects that condition the current situation.

Keywords

Tibetan medicine, Sowa Rigpa, Tibet, China, Nepal, trade, medicinal plants, transnational flows, border studies

Introduction

Sowa Rigpa (*gso ba rig pa*), the Tibetan 'Science of Healing', is not a local tradition. Already the hagiographic accounts of Sowa Rigpa's very beginnings in the seventh century recall an international gathering of eminent physicians from India, China, and Persia as the initial impetus that led to its emergence.¹ Extending from Mongolia and Siberia to Tibet, Ladakh, and the southern slopes of the Himalayas, Sowa Rigpa has a long history of transnational flows of knowledge and people.²

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¹ Meyer 1995, pp. 109–110; Yonten 1989, pp. 33–7.

² See Vogel 1965, Emmerick 1977, and Samuel 2011 for relations between Indian and Tibetan medical knowledge; Aschoff 2003 for an overview of the spread of Tibetan medicine;

As a result, Tibetan pharmacy extensively relies on medicinal raw materials not found on the Tibetan Plateau. The basic ingredients used in the majority of Tibetan formulas, chebulic and beleric myrobalan (*aru* and *baru*) and the Indian gooseberry (*skyu ru*),³ as well as many other highly valued materials, including black eaglewood (*Aquilaria agallocha*), sandalwood (*Santalum* spp.), ocean crabs,⁴ and the so-called 'six superior medical substances' (*bzang po drug*)⁵ are not native to Tibet and have to be imported from other climate zones.

Most of these materials are also commonly used in other medical systems, such as Ayurveda. The main source of imported materials is traditionally the Indian subcontinent. Thus, there is good reason to assume that trans-Himalayan trade in medicinal plants, minerals, and animal parts has played a significant role throughout the history of Sowa Rigpa in Tibet.⁶ Several studies on Himalayan trade mention medicinal herbs.⁷ However, the relevance of the historical trans-Himalayan trade in medicinal substances remains an understudied aspect of Sowa Rigpa.

For the present case it is sufficient to say that trans-Himalayan trade in medicinal raw materials is not a new phenomenon, and dealing with different forms of state rule and frontiers has shaped it for centuries. In some respects, the contemporary transnational plant trade this article is concerned with can be seen as a continuation of Sowa Rigpa's entanglements with the world. In other respects, however, the most recent developments in cross-border trade have made it substantially different from its earlier forms.

Sowa Rigpa recently underwent a quick and far-reaching transformation in the PRC. In 2001 the institution of a nation-wide system of drug registrations

and Grekova 1998, Dashiyev 1999, Besch 2006, Kloos 2010, and Saxer 2010b for various aspects of Sowa Rigpa's history outside Tibet.

³ The full Tibetan names are arura (*a ru ra*, *Terminalia chebula*), barura (*ba ru ra*, *Terminalia belerica*), and kyurura (*skyu ru ra*, *Phyllanthus emblica* or *Emblica officinalis*). Aru, baru, and kyuru are also widely used in Ayurveda, for example in the well-known formula triphala ('three fruits').

⁴ The Tibetan names for black eaglewood, sandalwood and ocean crabs are *arnag (ar nag)*, *tsandan (tsan dan)*, and *digsin (sdig srin)*, respectively.

⁵ Nutmeg—zati (dza ti); clove—lishi (li shi); great black cardamom—kakola (ka ko la); green cardamom—sugmel (sug mel); saffron—kache gurgum (kha che gur gum); and bamboo concretion—chugang (cu gang). Chugang, however, also refers to a mineral found in the Kailash region.

⁶ The term 'Tibet' is used in this article to include all the areas inside the borders of the People's Republic of China where Tibetans live. This decision is not to be understood as an expression of political views but as a choice for simplicity and a way to avoid frequent repetitions of 'the Tibet Autonomous Region and the Tibetan counties and prefectures in Qinghai, Sichuan, Yunnan and Gansu'. The terms 'China' and 'People's Republic of China' (PRC) are used interchangeably, and the term 'Mainland China' is used to refer to the PRC outside Tibet.

⁷ See for example van Spengen 2000, pp. 125–128 & 175; Harris 2009, pp. 172–73.

was announced. Simultaneously, the introduction of Good Manufacturing Practices (GMP) as a compulsory quality standard for the production of all pharmaceuticals sold on the market, including Tibetan medicines, was decreed. Both had been on the Party State's agenda for some time but gained importance in the process of China's WTO entry in the same year. Tight deadlines were set to comply with these new rules and regulations. By the end of 2004 all Tibetan medicine manufacturers had to pass GMP-certification. The provisions made the construction of new factories necessary, and for this purpose substantial new investments were required. Within less than a decade a full-fledged Tibetan medicine industry has been created on the Tibetan Plateau.⁸

The rapid push towards industrialisation confronted Tibetan medicine with the logic of markets and capital, and the necessity of economic success. The total output value of Tibetan medicines rose more than thirty-fold between 1996 and 2006. This massive rise in production volumes has triggering a rocketing demand for medicinal herbs, which in turn has led to concerns about the industry's sustainability and ecological impact, especially since the vast majority of raw materials used are medicinal plants collected from the wild. Several well-known plants are quickly disappearing from places where they were abundant a decade ago. When a certain species becomes harder to find a vicious circle starts:

Today, since the scarcity of these herbs has become evident, people have to rush to get those even low quality herbs. They have to fight to get them... They don't have any kind of longer perspective. If we continue like this... in less than ten years we will be running out of herbs.

This remark by the Tibetan director of a major factory reflects the worries of a majority of Tibetan doctors and pharmacists.¹² The increasing pressure on

⁸ Craig 2006; Saxer 2010a.

⁹ Huang 2006.

¹⁰ Cultivation, despite being encouraged and supported by the Chinese state, has so far not yielded substantial results, except for a few species such as *manu* (*ma nu*, *Inula racemosa*), *ruta* (*ru rta*, *Saussurea lappa* see Arya 1998, p. 246), and *chumtsa* (*lcum rtsa*, *Rheum palmatum*), which are already known to grow well in herb gardens.

¹¹ This was the general agreement among the doctors and pharmacists I talked to between 2007 and 2009. Examples of the plants most frequently mentioned include ""
üpal ngönpo ("ut pal sngon po, Meconopsis sp., a blue-coloured poppy found in the Himalayas), bongkar (bong dkar, Aconitum heterophyllum), solomarpo (sro lo dmar po, Rhodiola crenulata), gangachung (gang ga chung, Gentiana urnula), sumchutigta (sum chu tig ta, Saxifrag sp.) and pangpö (spang spos, Nardostachys grandiflora, Spikenard).

¹² The suggested link between commercial interests, unsustainable harvesting patterns, and decreasing quality ties in with a number of studies carried out in Nepal (Olsen and Larsen 2003; Larsen and Smith 2004; Ghimire, McKey and Aumeeruddy-Thomas 2005a; Ghimire, McKey and Aumeeruddy-Thomas 2005b; Olsen 2005).

plant resources also affects cross-border trade, for example when Nepal enforces an export ban on certain species, or when species growing both in Nepal and Tibet are increasingly imported from Nepal because they become more difficult to find in Tibet.¹³

In addition, the industrialisation of Tibetan medicine in the PRC has to be seen in the context of Tibet's 'March Toward Modernization', as a recent government White Paper puts it,¹⁴ as well as the global, WHO-sanctioned trend towards modernisation and standardisation of traditional, herbal medicines. Both the economic development of politically sensitive Tibet and the industrial production of Tibetan pharmaceuticals are closely linked to the Party State's quest for legibility and control.

In short, the recent developments that frame the contemporary trans-Himalayan herb trade are marked (1) by an unprecedented rise in demand, triggered by (2) the creation of an industry for Tibetan pharmaceuticals, which led to (3) increasing concerns about dwindling resources and long-term ecological effects, and (4) new efforts at rendering cross-border trade legible in the name of quality control, patient safety, and ecological sustainability. These efforts are reflected in the establishment or re-enforcement of 'border regimes' that aim at managing the transit of traders and herbs.

The term 'border regime' is meant to describe a paradox. On the one hand, 'regime' connotes state power. The 'border', on the other hand, is a liminal space where state power is potentially rendered vulnerable. A 'border regime' describes the strategic efforts at tackling this vulnerability with administrative and spatial measures. A border regime is entangled but not equal to the state's larger apparatuses. Border regimes are more flexible, manipulable, and prone to rapid change than their related apparatuses and the legal frameworks on which they are based. Border regimes only exist while they are actively being enacted. As long as they are enacted, they provide a glimpse of the malleability and unruliness of state power and its instruments.¹⁵

My aim is to show that contemporary trans-Himalayan trade in medicinal plants is shaped by a set of three such border regimes and the traders' tactical manoeuvres to deal with them.

¹³ Examples include *serme* (gser me, short for gser gyi me tog), usually identified with Herpeto-spermum penduculosum (Dawa 2002, p. 190), and pangpö (spang spos), Nardostachys grandiflora. The latter is considered to be potentially endangered and is legally banned from international trade.

¹⁴ IOSC 2001 (Information Office of the State Council of the People's Republic of China).

¹⁵ Sociologist Gesa Lindemann (2002; 2009) also uses the term 'border regime', although in a different context. She speaks of socio-biological border regimes guarding the conceptual divide between life and death in the emergency rooms of hospitals.

A new border regime for medicinal plants

Most important for the contemporary cross-border trade are the Chinese drug regulations introduced with the 2001 revision of the Drug Administration Law. The law defines the term 'drug' in a broad way that encompasses anything from vaccines and antibiotics to 'Chinese crude drugs'—the herbs, minerals, and animal parts used in Chinese medicine. ¹⁶ However, the law stipulates far-reaching exemptions for the latter: 'Chinese crude drugs' are neither required to obtain drug registration nor do retailers need special licences to trade them. ¹⁷ Therefore, the domestic market for medicinal raw materials, including the ones used in Tibetan medicine, has largely remained unregulated.

By contrast, imported raw materials are tightly regulated, as the exemptions are only applicable to domestic crude drugs. For imported drugs, the law makes no difference between an antibiotic and a Tibetan herb. The Drug Administration Law and additional regulations issued by the PRC's State Food and Drug Administration (SFDA) stipulate that any drug from abroad needs to be imported by a licensed enterprise through an authorised port. ¹⁸

These provisions initially had no direct effect on the reality of cross-border trade between Nepal and Tibet. In 2007 and early 2008 I met several traders who did not have such a license and were not especially worried about it. However, in the context of the general tightening of control all over Tibet after the unrest in March 2008, the provisions started to be enforced. They became the basis for the current border regime governing the import of medicinal plants to the PRC. This border regime has since rendered trans-Himalayan herb trade much more difficult.

The current system works as follows: each herb requires a separate licence issued by the SFDA in Beijing. Each license costs about CNY 2,200 (USD 320), is valid for two years, and entitles the holder to an indefinite number of imports. The licence document is basically an official certification of a long-term business contract between an importer and a specific supplier, for example a wholesaler in Kathmandu. The idea of such a long-term contract is that raw materials should come from a designated source with stable supplies and traceable origin in order to make the quality controllable.¹⁹

¹⁶ SFDA 2001, Article 102.

¹⁷ SFDA 2001, Article 31, 21.

¹⁸ SFDA 2005; SFDA 2006.

¹⁹ C-Med 2009.

These rules were clearly designed for traders based in the PRC importing crude drugs from abroad, but they were not meant to accommodate the Nepal-based traders who used to travel to Tibet and sell their goods there. The Kathmandu traders were effectually excluded from cross-border trade, as they were not in the position to obtain import licences from Beijing.

Along with the license that entitles a trader to import a specific herb within the period of two years, each import requires a separate import permit, which has to be obtained beforehand. The import permit is issued by the local authorities and specifies the volume of the planned import. The permit is required for customs clearance at the defined authorised port of entry. In the case of cross-border trade between Nepal and the PRC the only authorised port is Dram (also known as Zhangmu) on the Friendship Highway between Kathmandu and Lhasa.

This licensing system also affected the informal trade of medicinal plants on border crossings between Nepal's northern regions and Tibet other than the Friendship Highway. Over the last decade, many roads have been constructed within the TAR, extending the PRC's road network south to the Nepal border. As a result, many of Nepal's northern border areas are now closer to the road network in the PRC than the road-heads in Nepal's Terai. These remote border-crossings have become a welcomed alternative for exporting medicinal herbs from Nepal to Tibet. From the high mountain valleys in Nepal's north it is often only a day's walk to the Chinese border and the road-head, whereas transport to the roads in Nepal's south takes several days. In addition, unlike on the route north to the Chinese border, many bribes have to be paid on the way south to the roads in the lowlands. These factors induced a reorientation of the herb trade towards Tibet, especially in Nepal's north-east—a reorientation which was now put into question with the introduction of the new licensing system. For instance, in the summer of 2008, a truckload of pangpö was seized by the Chinese border authorities at one of the remote crossings in 2008. This incident caused great uncertainty to what extent the new border regime would be enforced even in remote, rural areas.²⁰

The current border regime also mandates that imported drugs—be it herbs, vaccines, or antibiotics—need to be sampled, tested, and cleared by the respec-

²⁰ Personal communication with Karma Bhutia, The Mountain Institute, Kathmandu. The current situation, however, remains unclear. In principle, the SFDA's interim provisions on the import of crude drugs provide for special "frontier ports" through which crude drugs produced near the border may be traded (SFDA 2005a). This might be applicable to some herbs at some of the remote border crossings. Indeed, in August 2009 the cross-border trade of medicinal herbs was allegedly possible again, at least at one of these crossings in far eastern Nepal—whether informally or officially I do not know.

tive drugs testing offices in Shigatse or Lhasa.²¹ The fact that the enforcement of this provision extends to medicinal herbs reiterates the growing importance of assessment and quality control as guiding principles in China's modernisation strategy for traditional medicines.²² In practice, it means that clearance of any import involves two stages, one at the actual border crossing and one before the herbs can be sold.

The border regime guards a spatial as well as a conceptual divide. Not only does it aim at controlling the flow of goods between Nepal and Tibet; its task is also to guarantee an orderly transition of imported raw materials from the domain of nature to the domain of human medicine. Only if a herb successfully passes the quality control test can it be sold and used in production. Each test costs about CNY 1,800 (USD 260), regardless of the batch's size. The larger the batch, the lower the additional cost per kilogram. The current border regime clearly benefits the bigger and penalises the smaller traders.

The licences, permits, and testing requirements are increasingly enforced even for the import of herb samples. The Tibetan medicine factory in Nyalam near the Nepal border, for instance, used to order samples of herbs from Nepal. Only if the quality of these samples was satisfactory would they order bigger quantities. Sampling before bulk ordering is a standard practice in the domestic trade, and the factory, being close to the border, also followed the practice for their imported herbs. In 2008, this became increasingly difficult, as the factory's director explained:

The central government suggested that we may want to get the samples from Qingdao or Shanghai instead. But then the price would just go up and the factory could not cope with that. So right now we still use our old relations with the customs in Dram and try to get samples across. And we also petitioned the SFDA for a permission to import the samples.

When I returned to the Nepal-Tibet border in 2009, no solution had been found and many herbs were now imported through mainland China. They were shipped from the Nepal to India, by sea to Shanghai or Hong Kong, and finally overland back to Nyalam—an hour's drive from the Nepal border. Despite the official claims by China and Nepal to foster trade along the Friendship Highway, the current border regime has made transnational trade in medicinal raw materials considerably more difficult.

The current SFDA-inspired border regime, however, is not the only one affecting the cross border trade. Two more border regimes, one targeting the flow of Tibetan traders between the PRC and Nepal and the other defining

²¹ SFDA 2001, Article 40.

²² See Su 2003.

export restrictions for certain plant species from Nepal also have to be considered. I will come back to these in due course. First, let me introduce the Norling Herb Store, which will help to illustrate the entanglements between border regimes, herbs, and traders.

Traders in transit

The Norling Herb Store is a family business in Lhasa run by Penba, as I will call him,²³ a man in his late thirties. The business had been started by Penba's father Norbu, born in a poor rural family from Henan Prefecture in Qinghai Province. Norbu made a living by touring the area, buying sheep and yak skins, and selling them in Qinghai's provincial capital, Xining. He also started trading clothes, which he would buy in the city and bring back to Henan. Later, he ventured into the booming business of selling cheap Chinese textiles via Lhasa across the border to Nepal. Once he had acquired enough knowledge of the cross-border trade and built up a network of business partners and friends at the border, he recognized the promising prospects of the herbs trade. In 2002, the family moved to Lhasa and started a small herb shop. In 2005, Norbu established a second branch back home, and since then Penba has been in charge of the shop in Lhasa.

Of the 132 types of medicinal materials Penba traded in 2008, eighty percent originated from within the territory of the People's Republic of China and about twenty percent were imported from India and Nepal. In terms of volume, however, the herbs imported from Nepal and India accounted for around fifty percent of Penba's total sales, largely due to the big trade volumes of *aru*, *baru*, and *kyuru*.

Penba and his father were newcomers in the medicinal herbs trade. Nobody in the family was an amchi or had a specific interest in Sowa Rigpa. But being familiar with cross-border trade, Penba's father was quick to understand the opportunities the burgeoning industrialisation of Tibetan medicine was creating. In this sense, the Norling Herb Store was a typical by-product of the industry's creation. Norbu and Penba were in the lucky position of having good relations with one of the major Tibetan medicine companies in the TAR. The company had successfully applied for the import licences on Norling's behalf and Penba and his father were in the position to expand their business even during the politically troubled year of 2008. Several times a year, a mem-

 $^{^{23}}$ All names are pseudonyms. In addition, some details of the protagonists' biographies have been altered to protect their privacy.

ber of the family would travel to Nepal to buy herbs. In autumn 2008, I had the opportunity to join Penba on such a business trip.

For Penba, this was his first journey to Nepal as a businessman. His father considered himself to be too old for the hardships of the road. Penba felt the burden of responsibility on his shoulders. 'My wife says that I have such a good life, travelling to Nepal and all. But actually, it is a big responsibility and not really fun', he told me before we left.

Penba had organised a share-taxi to take us from Lhasa to Shigatse, about 300 kilometres from Lhasa on the way to the Nepalese border. We left early in order to reach Shigatse in time to get the necessary paperwork done and to collect the required import permits. On the road from Lhasa to Shigatse there are several checkpoints where the time of passage is carefully noted and checked. As a reaction to frequent accidents on this road section and as a measure to reduce the speed of the traffic, a minimum travel time between the checkpoints has to be honoured, increasing the total driving time to almost double what it would otherwise be. Our driver, a jolly, middle-aged, Chinese woman from Sichuan, convinced the first checkpoint that she had a passenger on board who was suffering from altitude sickness (me) and needed to get to Shigatse as quickly as possible. To everybody's delight, the stamped and certified slip of paper took us through all the subsequent checkpoints without any wait. Shigatse is in fact higher than Lhasa and the story of the passenger altitude sickness made no sense at all. This anecdote would not be worth telling had it not allegorical value: throughout Penba's journey, the stamped truth on paper was often more relevant than the obvious reality.

Penba had shown me a list of the two-dozen herbs he intended to buy in Nepal. But when I asked him if I could see the licences and import permits he only had two. 'This is enough', he explained, 'last time we had five, but that was two much, a waste of money'. According to Penba's assessment, the current situation was that without licence and import permit, cross-border trade was simply impossible, but that it was not necessary to have a license for each herb.

The experiences the Norling Herb Store had under this new border regime, especially with the drug testing office responsible for clearing the imported herbs, were ambiguous at best. Penba told me that the testing took several months. As long as the herbs were not cleared they could not be sold. Moreover, the testing as such was not to be trusted and the officials involved were largely ignorant when it came to Tibetan medicine. Testing was carried out in a laboratory by laboratory staff.

The people in this drug testing office, they know nothing about Tibetan medicine. You bring them a sample of *aru* and they ask, what is this?—*Aru*.—How do

you spell it? They have no idea! They just put everything in their machine and wait for the results.

Penba had no trust in the testing procedure. 'It's like a gambling machine. If you are lucky you win, otherwise you lose', he said. Indeed, the family had lost almost 50,000 yuan when two batches of herbs Penba and his father imported in summer 2008 were rejected and confiscated.²⁴

Given these experiences with the drug testing office, the safest strategy was simply to avoid the official procedure as much as possible. To accomplish this, the possession of licences was a precondition, but not necessarily for each and every herb. A licence was more like an entry ticket; in much the same way as our Chinese taxi driver had been able to rush us to Shigatse, the mere existence of a licence enabled the officials involved to present coherent documentation to their superiors, regardless of whether a truck was actually passing the border with a couple of dozen herbs instead of two. Once this basic 'document truth' was established, the officials involved were still able to turn a blind eye to the details of a specific import, and, at times, reap the benefits of doing so. The traders, for their part, managed to keep the leeway necessary to do business and escape the quirks of an unrealistic licensing and testing system.

Penba was not overly concerned with all these things. He considered dealing with officials and with ever-changing rules as an integral part of doing business. He was confident that there would always be loopholes that provided pragmatic solutions. Penba was more nervous about dealing with the Nepali wholesalers in Kathmandu. While he was telling me these stories we were sharing a freezing hotel room in Shigatse. Penba spent time jokingly practising his English for these envisioned encounters. He owned a fancy Chinese mobile phone with a built-in language trainer that stuttered sentences like 'He is attracted to fast cars' and 'I could really use a drink right now'.

A Land-Cruiser evacuating an altitude-sick tourist (this time a genuine case) agreed to take us to the border. The Friendship Highway runs across the arid Tibetan Plateau until the peaks of the high Himalayas finally appear in the distance. From the southern rim of the Plateau, the road leads down into the steep canyons towered over by snow-capped mountains. The vegetation changes from the high, arid plateau lying in the rain shadow of the Himalayas to the lush and humid valleys of Nepal. It is in these steep valleys, carved into the Himalayan range, that many of the herbs used in Tibetan medicine grow.

²⁴ I have not had the possibility to witness testing in one of the drug testing offices. However, the identification tests carried out by the laboratories of the GMP-certified Tibetan medicine factories I visited were based on microscopy and chromatographic fingerprinting according to the procedures listed in the Chinese Pharmacopoeia (State Pharmacopoeia Commission 2005). I assume that the same methods are employed by the drug testing offices.

As in Eastern Tibet, the enormous differences in altitude make for a large variety of different habitats.

The border town of Dram lies on the steep slope of one such valley. A narrow road winds down to the town and finally the Nepalese border post of Kodari. The hundreds of trucks trying to pass one another on the narrow road cause a permanent traffic jam and attest to the importance of the Friendship Highway as a trade route. The Friendship Bridge, which marks the actual border between Nepal and China, straddles the boundary between two very different worlds. Coming from China, the far side of the bridge marks the immediate and sudden beginning of the Indian subcontinent. Smells, looks, aesthetics, behaviour, etiquette, humour, ways of doing business and dealing with authorities, the truck drivers and their habits—all are completely different from Tibet. The new and fancy border checkpoint on the Chinese side, an index of correctness and control where everybody wears a uniform, stands in stark contrast to the casual, charming, and slightly disorganised atmosphere in Nepal's immigration office.

Doing business in China and doing business in Nepal require different sets of skills, different strategies and tactics. Creating trustful relationships across these worlds can be a challenge, especially as the contemporary cross-border trade along the Friendship Highway lacks the stability of traditional trading connections between Tibet and the Indian subcontinent, which were encouraged by long-established etiquette and ceremonial.²⁵ Tibetans often complain about Chinese business culture, considering it unethical, solely oriented towards money making, and so on. Remarkably, I have heard Nepali herb traders using almost the same words for their Tibetan costumers: difficult to deal with, always smart, bargaining incredibly hard and invariably looking for their own advantage. Yet again, an Indian wholesaler based in Delhi and Kathmandu complained to me about how difficult it was to do business in Nepal, as everybody just tried to cheat and extort as much money as possible. Crossborder trade inherently makes all parties outsiders in some contexts and insiders in others.

When we arrived in Kathmandu, Penba started calling friends of his father's to help him with his mission. The people he contacted were not just other Tibetans but almost exclusively people from Amdo (Qinghai Province) or even from his hometown. Penba felt ill at ease among the exile Tibetans.²⁶ He

²⁵ Fürer-Haimendorf 1975, pp. 295–97; Ross 1982, p. 44; Fisher 1986; Rizvi 2001, p. 20.

²⁶ While the first wave of Tibetans that emigrated in the late 1950s and 1960s was mainly from Central Tibet, the 'new arrivals', as they are called, predominantly come from Amdo and Kham. The well-established exile Tibetans often regard the new arrivals as overly sinicised (cf. Moynihan 2003, p. 318).

spent the first night in a hotel in Boudha, the part of Kathmandu around the famous *stupa* where many exile Tibetans have settled, but he soon moved to a Chinese business hotel in the tourist area of Thamel, where he felt much more at home.

We usually had dinner in an Amdo restaurant hidden in a dark courtyard, where the menu was in Chinese and the noodles almost as good as back home in Amdo. In Dram we had spent the night in an Amdo hotel, and the moneychanger he had chosen was a woman from Amdo. Even the little Kathmandu hippie-style bag Penba used to carry around his cash he had bought in a shop run by an Amdo woman. Throughout our trip we kept meeting people from Amdo and they were always ready to help us. The obvious strategy for coping with being an outsider in Kathmandu was to rely on these ties of common origin.²⁷

Herbs in transit

In the past, Penba's father had bought herbs from a Marwari²⁸ trader family in Kathmandu. We went to their shop, located in a tiny alley tucked away between New Road and Durbar Square, known as one of the best places to buy medicinal herbs. The Deoras, as they were called, ran a modest little shop amidst many similar ones. Nothing betrayed the fact that they were among the biggest wholesalers in Kathmandu. Their retail outlet in the alleyway primarily served as a contact point; their offices and storerooms were located in other parts of the city.

We were received by Arjun and Raksha, two brothers of the family, and offered tea and Indian sweets. As they had never met Penba before, the brothers treated him with a degree of scepticism. When Penba asked about this or that detail of transportation or the tax levied by the Nepalese Forest Department, Arjun and Raksha lectured him in a slightly arrogant way, making it clear that he could either risk organising everything by himself or take the precaution of enlisting their aid.²⁹

However, the Deoras were also dependent on Penba. Arjun had ventured into the Chinese market, shipping a large consignment of medicinal herbs by sea through Hong Kong. Being unfamiliar with Chinese business culture, he

²⁷ See Samten Karmay (1994, 1996) for a discussion of the significance of place for Tibetan identity.

²⁸ The Marwaris, originally from Rajasthan, are well known for their extensive trade and business networks throughout the Indian subcontinent.

²⁹ The conversations between Penba and the traders in Kathmandu, including the Deoras, were usually held in English.

had been tricked and cheated, and had lost a large amount of money. Finally, he had called Penba's father and asked him if he could store his herbs until they found a buyer. Penba had taken care of the matter and rented storage space in Xining. He had organised transport for Arjun's goods and the herbs were still waiting to be sold. Although transport on the sea route had been cheap, all the additional fees for opportunistic intermediaries and the like had added considerably to the cost of the merchandise. The Deoras counted on Penba to buy the herbs from them and to find a buyer himself. Now it was Penba's turn to show the two brothers how naïve they had been. 'For this quality at this price I cannot sell them', he made clear.

Penba explained that while shipping by sea might be cheaper, transport within China was still comparatively expensive. On the other hand, transport from the border to Lhasa and further to Xining benefited from the fact that most trucks were going the other direction, carrying goods from China to Nepal, and were usually empty on the return journey. As long as one was familiar with the situation, shipping herbs from Nepal to Tibet via the Friendship Highway was a relatively inexpensive matter. A truck from Dram to Lhasa currently cost around CNY 4,500 (USD 660) and from Lhasa to Xining around CNY 7,000 (USD 1,025). As a Chinese truck could carry about twenty tons, the added cost per kilogram of transported goods was therefore only 0.225 yuan to Lhasa (about 900 km) and 0.575 yuan to Xining (1900 km). On the Nepal side, transport from Kathmandu to the border, a mere 111 km, was NPR 1.5 per kilogram (CNY 0.15 or USD 0.02 in November 2008). Per ton and kilometre, transport form Kathmandu to the border amounted to CNY 1.35 (USD 0.2), compared to CNY 0.25 between Dram and Lhasa and CNY 0.3 (USD 0.04) between Lhasa and Xining. In total, Penba calculated CNY 2 (USD 0.29) per kilogram for transport to Xining, including taxes, customs, testing and other costs.

Additionally, an export tax of NPR 3000 (USD 40) per ton had to be paid to the Nepalese Forest Department. This tax was strictly enforced. Penba was under the impression that only a trader in Kathmandu equipped with the requisite export license was allowed to handle the payment of this tax. The Deoras explained that anybody could do so, but that the Nepalese border authorities were known to be difficult to deal with.

The export of medicinal herbs from Nepal falls under the 'Convention on International Trade in Endangered Species of Wild Fauna and Flora' (CITES).³⁰ Several commonly used ingredients in Tibetan medicines are listed in CITES appendix II, which means that they are potentially endangered and exempt from export in unrefined form, unless a special permission is granted. As

³⁰ See http://www.cites.org (accessed 3 September 2010).

Nepal is a CITES member state it is required to control the cross-border trade of restricted species. For Tibetan medicine, the listed species include *pangpö* (*spang pos*), ³¹ *agar* (*a gar*), ³² and *tsandan marpo* (*tsan dan dmar po*). ³³

The enforcement of the CITES, however, remained somewhat unclear and caused great uncertainty at the border. The business with *tsandan marpo*, despite being a listed species, was booming and the prices had risen tenfold between 2003 and 2008. In 2007 the CITES listing was amended as to include powdered and extracted forms of *tsandan marpo*, while the original listing from 1995 had only included logs and wood-chips. When I was in Kathmandu in March 2008, several traders I interviewed claimed that it was still permissible to export *tsandan marpo* in powdered form as a medical ingredient for Tibetan medicine. In November 2008, none of the Kathmandu traders I knew were taking the risk any longer, because the export ban was being enforced more strictly.

Later, when we got to know the Deoras a little better, Raksha told us that his younger brother had served six months in prison because of an alleged attempt to smuggle sandalwood. 'All the paperwork was OK', he said, 'But there is no rule in Nepal'. Because of this incident the family had decided to focus their business more on India and to explore other avenues of trade with China.

Although Penba had no plans to import any of the listed species, the stories about the difficulties with the Nepalese export regime worried him. He eventually decided to play safe and hire a middleman through the Deoras to deal with the formalities on the Nepal side. After this exchange of information on the problems associated with transport and border-crossing, Penba and the two brothers agreed to discuss the future of the Deoras' herbs in Xining at a later stage, and to concentrate instead on the herbs Penba intended to buy. Slowly, the atmosphere warmed up. Penba had a list of about two-dozen herbs, and a discussion about the available qualities and their prices ensued.

The general agreement among traders and people in the Tibetan medicine industry was that herb prices were increasing year by year. In an attempt to quantify this increase, in October 2008, Penba and I compiled a list of the 2005, 2007, and 2008 prices of all the 132 materials he sold in his shop. Based on this data, the average annual increase in price over the previous three years was 13.6% (9.7% inflation-adjusted),³⁴ while the average increase between

³¹ Nardostachys grandiflora, Spikenard, listed in 1997. Since 2007 the export of ground plants is also banned.

³² The resinous heartwood of *Aquilaria* trees.

³³ Pterocarpus santalinus, red sanders or red sandalwood.

³⁴ Inflation adjustment was calculated on the basis of the consumer price index in China published by TradingEconomics, http://www.tradingeconomics.com (accessed 3 September 2010).

October 2007 and October 2008 was 22.6% (15.7%). For the 28 species imported from India and Nepal the three-year-average rise was also 13.6% (9.7%); between October 2007 and October 2008, however, the average increase in price was 25.8% (18.9%).

These numbers indicate that the increase in prices has accelerated, and that this acceleration has been even more pronounced in the case of imported herbs. The latter difference would have been even bigger in Nepalese rupees. However, as the Nepalese rupee has seen a steep devaluation against the Chinese renminbi, the price increase of imported herbs has been cushioned on the Chinese side.³⁵

Penba and I had compiled the inventory before our trip to Nepal. The prices Arjun and Raksha were now presenting to us were again considerably higher. Penba had a list of the prices his family had paid the Deoras five months previously and he was quite shocked to hear the brothers' current offers. He decided to compare these offers with the prices proposed by other wholesalers and insisted that he had to see the herbs before he could make up his mind.

One of Penba's Amdo friends was acquainted with another Indian trader known for his competitive prices, and I was also eager to introduce Penba to a couple of traders in Kathmandu. The next days were hectic. We met several wholesalers, went through the same procedure of asking prices and insisting on seeing the herbs. Some of the storerooms we were brought to were in questionable condition: humid, with crumbling walls, and infested with rats. Penba started to tell everybody that high quality was imperative, as the herbs would otherwise fail the import test. Furthermore, it turned out that most wholesalers actually did not have the quantities Penba needed in stock. They would have to import them from India first, or buy them from other wholesalers.

To discuss each and every herb in detail would go beyond the scope of this article. However, a closer look at two examples may provide an insight into the dilemmas Penba was faced with and the pragmatic decisions he had to take. In the following, I will briefly discuss *baru* and *gyatig*.

Baru

As mentioned above, *aru*, *baru*, and *kyuru* are the three basic ingredients imported in large quantities to Tibet. Penba planned to buy five tons of each. All three are harvested in autumn. While *aru* was available in large quantities

³⁵ Related to the issue of rising prices are the questions, whether the harvesters, the intermediary traders, or the wholesalers profit from the higher prices, and whether the increase is simply the outcome of a growing demand or if other factors are in play. These questions, however, lie beyond the scope of my inquiry.

and good quality, *baru* and *kyuru* were more of a problem. It was already early December but the *baru* we were shown was from the previous year. The new harvest was just about to come in, we were told. We would only have to wait for another two weeks or so. This put Penba in a difficult position, because the import permit he had obtained in Shigatse was only valid for one month and he was increasingly afraid that he might miss this deadline if he agreed to wait and see whether the new harvest or the promised better quality brought from Nepalgunj or even from Delhi would materialise or not. Although the quality we were shown was at times mediocre, he felt that it was too risky to wait. Who could be sure that the herbs would arrive in time? And what if the quality was still not satisfactory?

Most of the *baru* sold in Nepal comes from the lower hills in the western part of the country and Nepalgunj has become an important trading hub. I learned from a well-established trader that the wholesalers were increasingly reluctant to ship large quantities to Kathmandu. 'Before, Kathmandu was the main centre of trade. But now, Nepalgunj has become more important, because you have to pay so many bribes on the way to Kathmandu', he said.

As most of the *aru*, *baru*, and *kyuru* was sold to India anyway, Nepalgunj was an ideally located trading hub. Because of these shifts and Penba's limited time due to his expiring import permit he finally settled to buy the previous year's lower-quality *baru*. Although he was not happy with it, he felt that this was the best course of action under the circumstances. Remarkably, the Chinese border regime, the purpose of which is to ensure steady supplies and stable quality, was in this case the immediate cause of Penba's purchase of inferior *baru*.

Gyatig

Gyatig (rgya tig) belongs to the category of tigta (tig ta), a group of medicinal plants known for their bitterness ([kha] tig means bitter in Tibetan). The first syllable of the name, rgya, refers to rgya gar, India, and denotes the herb's origin. However, in reality most gyatig comes from Nepal. This type of tigta, usually identified as Swertia chirayita, is considered to be the best. The herb is also widely used in Ayurveda.

The market for *gyatig* has seen a veritable boom over the last years and the prices have been rising steadily, albeit with considerable seasonal fluctuation. In March 2008, the price was around NPR 350 (USD 5.10) per kilogram in Kathmandu. A trader working for another factory in the TAR, who was also one of Deora's customers, had paid NPR 390 (USD 5.70) in summer 2009 as an advance for the new harvest that was scheduled to arrive in autumn

(although, by the time I left Nepal he had not managed to get the licences and permits and had not been able to collect his goods). The price Deora offered Penba now in early December 2008 was already NPR 470 (USD 6.90) per kilo. Penba wanted to buy two tons of *gyatig* and Deora turned out to be the only wholesaler we could find who had this quantity in stock.

The whole plant of *gyatig* is used in Tibetan medicine, and as the dried plants are relatively light but bulky they are usually strapped into compressed bales for transport. Deora had a machine to make such bales, and so it was agreed that he would hire his usual labourers to do the job. It took a full two days to package the two tons of *gyatig*. Penba was nervous and wanted to be present while the bales were being made. Anxiously, he told me, 'You don't know what they put into the bales. You find grass, dirt and many other things if you don't check carefully'.

When we arrived at the packaging site, work had already started and Penba did not like what he saw. The *gyatig* was still humid and parts of it had turned black. Turning to Raksha for an explanation he received the reply that this was the condition in which the herbs had been bought from intermediary traders. The monsoon had been long and Dasain, a major Hindu festival celebrated throughout Nepal, had fallen early this year. As people in the villages needed cash for the festival, they had harvested a couple of weeks earlier than usual, while the late monsoon was still going on, and the plants had not yet completely dried. But the quality, Raksha insisted, was still excellent.³⁶

In fact, Penba was not too concerned that some of the herbs had turned black. 'I can still sell them', he said, 'it does not affect the quality too much'. What bothered him, however, was the potential loss of money. Once in Tibet, the herbs would dry fully and thereby lose weight, making the price offered by the Deoras seem even greater. Penba tried to find a solution and negotiate a discount of ten percent in order to compensate for the moisture content. But Raksha argued that he would lose money if he agreed. Knowing that Penba had limited time and he was the only wholesaler who had enough *gyatig* in stock at the moment, Raksha knew that Penba had hardly any room for bargaining.

In the end, Penba bought the *gyatig* at Raksha's price. He had to accept the Deoras' terms because he had no other option. Raksha agreed to instruct the workers to leave the wettest and the most rotten bits and pieces aside but Penba was still very unhappy about the course events had taken.

³⁶ The *gyatig* in question originated from the Kanchenjunga area in eastern Nepal, where The Mountain Institute, an international NGO, has initiated a large-scale cultivation project involving more than 5,000 smallholders.

Again, the quality of the herbs, which would finally be used in the production of Tibetan pharmaceuticals, was not directly dependent on the trader's knowledge and careful selection. A long monsoon and an early Dasain, combined with the local need for cash for the festival, defined the context of this purchase. The example also highlights the peculiarities of the wholesale trade. Buying two tons of *gyatig* is not the same as buying a few hundred kilograms. For smaller quantities Penba would have had several options. Most traders in Kathmandu had some *gyatig* in store. But Deora was the only wholesaler able to deliver the goods within Penba's timeframe.

After a week of herb shopping Penba and I parted. Eight months later, in August 2009, I met him again in Lhasa and he told me what happened on his way back to Tibet. All his plants except the *aru*, for which he had a licence, had been confiscated at the border. The deputy customs officer at Dram, a Tibetan, told him that there was no way he could import herbs without a permit any longer. Penba went to see the chief customs officer, a Han Chinese. He explained that this was the first time he was importing herbs under the new regime and that he had not been clear about the exact requirements. The Chinese leader almost agreed to let him pass with a warning, but finally he called his deputy, who was very upset that Penba had tried to bypass him. The Chinese leader reversed his decision and Penba's herbs were seized.

However, Penba was granted a reprieve of three months to secure the permits for the other herbs. Meanwhile, his goods were kept in a storeroom at the border. Of course, three months was much too short a period within which to apply for and obtain all the permits. After six months Penba had at least managed to get a permit for *gyatig*. He went back to the border and for two weeks he kept going to the customs office every day, trying to find a solution. He started to befriend everybody in the office and, in the end, he managed to retrieve all his goods and transport them to Lhasa. *Gyatig*, for which he now had a permit, needed to undergo testing, and the result was still pending when I last saw him. The herbs, however, were already in Lhasa, where Penba had added a second storey to his storeroom for this purpose. I asked whether he was able to sell the herbs before the results arrived. He said, 'Yes, no problem. If it doesn't pass the test I can always give them another *gyatig*'.

What did Penba do to get his herbs back? How much did he pay? 'Some cigarettes and the bill in a restaurant were enough', he said proudly. No bribes were necessary. Later, the two customs officials came to Lhasa and he managed to invite one of them to his house. A subsequent business trip to the Nepal border passed without further incident. Now that he knew all the officials they were less meticulous about checking his truck; they merely opened a few bags near the rear of the truck, sacks containing the herbs for which he had a licence. They asked him if he had any other goods in the truck and, when he

responded negatively, allowed him to pass. Penba had managed to reach a workable arrangement under the new border regime.

However, a new problem had emerged in the meantime: the tightening of yet another, third border regime, not one to regulate the flow of herbs for the purpose of quality assurance or biodiversity protection, but one to control the flow of people. Penba's passport was about to expire, and with less than six months' validity left he had not been able to obtain another visa to Nepal in July 2009.

Over the last few years, obtaining or renewing a passport has become increasingly difficult for Tibetans in the PRC. Penba was told that he needed an invitation letter from his business partner in Nepal, a copy of his partner's identity card, and a letter from the Nepalese Forest Department, all this in addition to the import licences and the necessary papers in China. Penba managed to get the invitation letter but not the copy of his business partner's identity card. His business partner—not the Deoras but the official one mentioned on his licences—had initially agreed, but subsequently reneged on the grounds that providing Penba with his identity card might raise problems for his own future business plans in China. In the end, Penba asked a driver in Nepal to give him a copy of his identity card. 'Any Nepalese ID will do', Penba said with a smile. The driver agreed reluctantly and the only thing Penba was lacking when I last saw him was a letter from the Forest Department. 'But maybe I can manage without', he said. 'Let's see'.

Conclusions

The border regimes Penba encountered on his business trip reflect both the PRC's and Nepal's efforts to address three problematic areas. The first border regime responds to the concerns over quality related to increasing trade volumes and industrial production by trying to increase legibility (licences, import permits, authorised entry ports) and accountability (quality control testing). The second border regime, enforcing Nepal's CITES obligations more strictly, is a reaction to dwindling resources; and the third border regime constraining the number of Tibetans who can legally visit Nepal and India is a response to the fragile political situation by China's security apparatus. The problematics these border regimes seek to address are enmeshed in, or react to, global discourses and ideas, ranging from patient safety, quality control, and scientific evidence as forged in the arena of 'Global Pharma', '37 to the need to

³⁷ Craig and Adams 2009. For similar efforts to regulate traditional medicine in Nepal see Cameron 2009.

protect the planet's biodiversity,³⁸ and the debate about human rights in Tibet. In this context, all three border regimes are meant to uphold actual spatial borders as well as conceptual divides.

The first border regime separates the imported, untested, raw product of nature from the approved, 'civilised' medicinal raw material, thereby reinforcing the divide between the sphere of nature on one side and culture, society, and technology on the other. The second border regime stemming from Nepal's CITES obligations emphasises the same divide, although for other reasons and with opposite signs. Here, it is not the humans who have to be protected from the potential dangers of the wild raw nature and its products, but nature itself, the nonhuman world, which needs protection against human encroachment—namely in the form of transnational capitalism. And third, by making a simple passport renewal a most difficult procedure for Tibetans (but not for other Chinese citizens), the Party State's security apparatus aims at keeping a distance between the Tibetans in the PRC and those in exile. The Tibetans in exile are blamed for conspiring against the PRC and advocating a return to what the Chinese Party State posits as the feudal 'old society' that was overcome by 'liberation' and a 'march toward modernization'.³⁹ Again, the spatial divide between China and exile is also a conceptual one: the Party's truth against the exiles' lies.

Besides keeping spatial and conceptual spheres apart, the border regimes also impart means for an orderly transition of herbs and people across the divides. However, as Penba's journey vividly illustrates, these means are neither seen as sufficient nor as trustworthy. They are considered to be irrational obstacles that require wit, patience, and determination to be overcome. Consequently, they do not yield the intended outcomes. There is little reason to believe that a stricter import regime leads to a better quality of the imported herbs, for example. On the contrary, Penba's dilemmas and decisions suggest that the unintended side effects of such regulations can affect the quality of medicinal ingredients negatively.

The flexibility of the ways such border regimes are enacted in a particular social context cushions these negative effects to some extent. Nevertheless, the border regimes and their side effects condition the transit of traders and herbs. One the one hand, they are a result of what James Scott has described as 'the utopian, immanent, and continually frustrated goal of the modern state [...] to reduce the chaotic, disorderly, constantly changing social reality beneath it to something more closely resembling the administrative grid of

³⁸ Jia 2004.

³⁹ IOSC 2001.

its observations'.⁴⁰ In other words, they illustrate the ongoing but never fully realised quest for legibility.

On the other hand, the border regimes are socially, locally, and temporally enacted phenomena. The officials in charge not only have to implement the laws and ideologies on which they are based, they also have to make them work, or at least appear to work. For this, they need the traders. The local officials' reluctance to report problems with targets and policies from above is widely known and acknowledged. 41 Since lower-level officials are dependent on the goodwill of their higher-level counterparts in terms of their career perspectives, they are held more accountable to their superiors than to the public.⁴² Reporting problems with the implementation of a specific policy is not expedient in this context. At the same time, local officials enjoy considerable autonomy in the absence of permanent supervision. Whereas the border regimes are designed to manage the transit of traders and goods, their justification derives not only from their capacity for control but also, even more importantly, from facilitating successful trade. In this sense the survival of a border regime rests, ironically, on both officials and traders breaking its rules in order to make it work.

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References

Arya, P. Y. 1998, Dictionary of Tibetan Materia Medica. Trans. Yonten Gyatso Delhi: Motilal Banarsidass.

Aschoff, J. C. 2003, 'The Spread of Tibetan Medicine', in Exile As Challenge: The Tibetan Diaspora, D. Bernstorff and H. Welck (eds) Hyderabad: Orient Blackswan, 367–88.

Besch, N. F. 2006, Tibetan Medicine Off the Roads: Modernizing the Work of the Amchi in Spiti, PhD Thesis, Ruprecht-Karls-Universität Heidelberg.

⁴⁰ Scott 1998, p. 82.

⁴¹ Brown 2002; Tsai 2008.

⁴² Cai 2000, p. 784.

- Brown, M. J. 2002, 'Local Government Agency: Manipulating Tujia Identity', *Modern China* 28, 3: 362–395.
- C-Med 2009, 'SFDA Guidelines on Protection of Traditional Chinese Medicines', Hong Kong Jockey Club Institute of Chinese Medicine, http://www.hkjcicm.org/5news/2/65_e.asp (accessed 8 July 2009).
- Cai, Y. 2000, 'Between State and Peasant: Local Cadres and Statistical Reporting in Rural China', China Quarterly 163: 783–805.
- Cameron, M. M. 2009, 'Modern Desires, Knowledge Control, and Physician Resistance: Regulating Ayurvedic Medicine in Nepal', Asian Medicine 4, 1: 86–112.
- Craig, S. and V. Adams 2009, 'Global Pharma in the Land of Snows: Tibetan Medicines, SARS and Identity Politics Across Nations', *Asian Medicine* 4, 1: 1–28.
- Craig, S. 2006, On the Science of Healing: Efficacy and the Metamorphosis of Tibetan Medicine, PhD thesis, Cornell University, Ithaca.
- Dashiyev, D. 1999, 'Experiences with Comparative Studies of Tibetan Medical Formulae', *Ayur Vijnana* 6: 10–16.
- Dawa 2002, A Clear Mirror of Tibetan Medicinal Plants, Roma: Tibet Domani Association.
- Emmerick, R. E. 1977, 'Sources of the Four Tantras', Zeitschrift der Deutschen Morgenländischen Gesellschaft 3, 2: 1135–142.
- Fisher, J. F. 1986, Trans-Himalayan Traders: Economy, Society, and Culture in Northwest Nepal, Berkeley: University of California Press.
- Fürer-Haimendorf, C. (von) 1975, *Himalayan Traders: Life in Highland Nepal.* London: J. Murray.
- Ghimire, S. K., D. McKey, and Y. Aumeeruddy-Thomas, 2005a, 'Conservation of Himalayan Medicinal Plants: Harvesting Patterns and Ecology of Two Threatened Species, Nardostachys Grandiflora DC. and Neopicrorhiza Scrophulariiflora (Pennell) Hong', *Biological Conserva*tion 124, 4: 463–75.
- 2005b, 'Heterogeneity in Ethnoecological Knowledge and Management of Medicinal Plants in the Himalayas of Nepal: Implications for Conservation', *Ecology and Society* 9, 3: article 6 [online]. http://www.ecologyandsociety.org/vol9/iss3/art6/ (accessed 2 November 2010).
- Grekova, T. 1998, Tibetskaya Medizina v Rossii (Tibetan Medicine in Russia), St. Petersburg: Aton.
- Harris, T. 2009, Silk Roads and Wool Routes. The Social Geography of Tibetan Trade, PhD thesis, City University of New York.
- Huang, F. 2006, 'Traditional Inheritance and Modern Development of Tibetan Medicine', China Tibet Information Center. http://eng.tibet.cn/culture/book/200801/t20080117_ 356090.htm (accessed 12 September 2008).
- IOSC (Information Office of the State Council of the People's Republic of China) 2001, 'Tibet's March Toward Modernization', Government White Papers. http://www.china.org.cn/e-white/20011108/index.htm (accessed 22 March 2010).
- Jia, H. 2004, 'Traditional Medicine "Threatens China's Biodiversity"', Science and Development Network. http://www.scidev.net/en/news/traditional-medicine-threatens-chinas-biodiversi.html (accessed 16 November 2006).
- Karmay, S. G. 1994, 'Mountain Cult and National Identity', in R. Barnett and S. Akiner (eds) Resistance and Reform in Tibet. London: C. Hurst & Co., 112–20.
- 1996, 'The Tibetan Cult of Mountain Deities and Its Political Significance', in A. Blondeau and E. Steinkeller (eds) Reflections of the Mountain. Essays on the History and Social Meaning of the Mountain Cult in Tibet and the Himalaya. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 59–76.
- Kloos, S. 2010, Tibetan Medicine in Exile. The Ethics, Politics, and Science of Cultural Survival. PhD thesis, University of California, San Francisco & Berkeley.

- Larsen, H. O. and P. D. Smith 2004, 'Stakeholder Perspectives on Commercial Medicinal Plant Collection in Nepal. Poverty and Resource Degradation', *Mountain Research and Development* 24, 2: 141–48.
- Lindemann, G. 2002, Die Grenzen Des Sozialen. Zur Sozio-Technischen Konstruktion Von Leben Und Tod in der Intensivmedizin, München: Wilhelm Fink Verlag.
- 2009, 'Geselllschaftliche Grenzregime Und Soziale Differenzierung' [Societal Border Regmines and Social Differentiation], Zeitschrift Für Soziologie 38, 2: 94–112.
- Meyer, F. 1995, 'Theory and Practice of Tibetan Medicine', in J. Van Alphen and A. Aris (eds), Oriental Medicine. London: Serindia Publications, 109–41.
- Moynihan, M. 2003, 'Tibetan Refugees in Nepal', in D. Bernstorff and H. Welck (eds) *Exile As Challenge: The Tibetan Diaspora*, Hyderabad: Orient Blackswan, 312–21.
- Olsen, C. S. and H. O. Larsen, 2003, 'Alpine Medicinal Plant Trade and Himalayan Mountain Livelihood Strategies', *The Geographical Journal* 169, 3: 243–54.
- Olsen, C. S. 2005, 'Valuation of Commercial Central Himalayan Medicinal Plants', *Ambio* 34, 8: 607–10.
- Rizvi, J. 2001, Trans-Himalayan Caravans. Merchant Princes and Peasant Traders in Ladakh, Oxford University Press.
- Ross, J. L. 1982, 'Adaptation to a Changing Salt Trade: The View From Humla', *Contributions to Nepalese Studies*, CNAS, Tribhuvan University 10, 1 & 2: 43–49.
- Samuel, G. 2011, 'A Short History of Into-Tibetan Alchemy', in S. Craig, M. Cuomo, F. Garrett, and M. Schrempf (eds), Studies of Medical Pluralism in Tibetan History and Society. Proceedings of the Eleventh Seminar of the International Association of Tibetan Studies, Bonn 2006, Halle: International Institute for Tibetan and Buddhist Studies GmbH.
- Saxer, M. 2010a, Manufacturing Tibetan Medicine: The Creation of An Industry and the Moral Economy of Tibetanness, PhD thesis, University of Oxford.
- —— 2010b, 'Tibetan Medicine and Russian Modernities', in V. Adams, M. Schrempf, and S. Craig (eds), Medicine Between Science and Religion: Explorations on Tibetan Grounds, Oxford: Berghahn.
- Scott, J. C. 1998, Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed, New Haven and London: Yale University Press.
- SFDA (State Food and Drug Administration of the PRC) 2001, 'Drug Administration Law of the People's Republic of China', Laws and Regulations. http://eng.sfda.gov.cn (accessed 11 October 2008).
- —— 2005, 'SFDA Issues Provisions for Import Crude Drugs (Interim)', What's New. http://eng.sfda.gov.cn (accessed 11 October 2008).
- —— 2006, 'SFDA Specifies Requirements for the Implementation of Provisions for Import Crude Drugs (Interim)', What's New. http://eng.sfda.gov.cn (accessed 11 October 2008).
- Spengen, W. (van) 2000, Tibetan Border Worlds. A Geohistorical Analysis of Trade and Traders, New York: Kegan Paul International.
- State Pharmacopoeia Commission, 2005, *Pharmacopoeia of the People's Republic of China*. Beijing: People's Medical Publishing House.
- Su, G. 2003, 'Protection and Development of the Traditional Medicine in China', China Biodiversity-Related IP Information Network. www.biodiv-ip.gov.cn/english/rdxx_e/ t20040113_24258.htm (accessed 19 December 2009).
- Tsai, L. L. 2008, 'Understanding the Falsification of Village Income Statistics', *China Quarterly* 196: 805–26.
- Vogel, C. 1965, 'Astangahrdayasamhita: The First Five Chapters of Its Tibetan Version'. *Abhand-lungen für die Kunde des Morgenlandes* 34, Berlin: Deutsche Morgenländische Gesellschaft.
- Yonten, P. 1989, 'A History of the Tibetan Medical System', Tibetan Medicine 12: 32-51.