

# Learning Processes in a Tibetan Medical School

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Ph.D. Thesis

University of Edinburgh 2002



## Thesis Abstract

The focus of this research is learning processes in a Tibetan medical school in the Tibetan refugee settlement of Norzinling at Dhorpatan in the Baglung district of West Nepal. The school in Dhorpatan has the special quality of being the only Bön medical school outside of Tibet. Part of the thesis compares the Buddhist and the Bön medical systems of Tibet and the way medicine is taught in the school in Dhorpatan with other contemporary Tibetan medical schools, Tibetan monastic education, Brahmanical schools in South India, Islamic education in Yemen and Morocco, and modes of knowledge in Medieval and Renaissance Europe. The distinctive features of Tibetan medical education will be discussed such as the strong emphasis on memorisation and lineage.

The process of acquiring competency as a Tibetan medical practitioner is a process of acquiring new ways of perceiving and knowing. The Tibetan medical system, like all medical systems has its own rules of pathology, nosology, diagnosis and therapeutics, which accord to a specific cultural cosmological scheme. A discussion will be made of the various elements of Tibetan medical theory and practice and the way that they relate to Bön and Buddhist cosmological notions. The research shows how the students pass through various stages of a journey into a new world of meaning. They are introduced to modes of perceiving, knowing, and practice, that are initially strange and unfamiliar, with the aim that as they go deeper into this journey, the students will gradually come to inhabit this new world of meaning; what was initially strange and unfamiliar becomes taken for granted - an unquestioned mode of being in the world.

The research focuses on how the students learn medicine in the three main areas of medical activity in the school: the classroom, the pharmacy, and clinical interaction. In the context of the classroom, the research focuses on the various elements of the course syllabus and the techniques that the students and the teacher use to facilitate understanding. In the pharmaceutical context, the focus is on the ways in which the students learn about the medicines, and the way that ingredients should be processed and combined to make medicinal compounds. In clinical interaction, the focus is on how the students are inducted into the practice of diagnosis, and therapeutics. A discussion will also be made of the use of ritual in the healing process.

Rather than adopting a simple propositional view of knowledge transmission, whereby the students are taught the facts of the system in a purely cognitive way, the research will consider

wider techniques involved in the learning process. The research presents the ways in which through clinical interaction the students develop performative memory. The approach taken draws on a body of recent literature on learning that moves away from the acquisition of propositional knowledge and focuses on the situated nature of learning

## Acknowledgements

I would like to give my gratitude to all the numerous people who have made this research possible by their kind assistance. In particular I would like to thank Lupon Tenzin Namdak, Lupon Tenpa Yundrung, and Norbu Lama of Triten Norbutse Bönpo monastery in Kathmandu. I would also like to thank the Dhorpatan Tibetan Settlement officer Jigme Wangduk for his assistance and his great sense of humour. Above all I would like to thank Amchi Gege, Geshe Tenzin Dargye, Nyima Samphel, and all the medical students at the school in Dhorpatan for their help. I am also very grateful to Fernand Meyer for his comments on the ideas presented in various sections of the thesis. I am also deeply grateful to my two supervisors, Jonathan Spencer, and Roger Jeffery, for their invaluable assistance. Finally, I would like to thank Isabelle Henrion-Dourcy for her support and companionship throughout this research.

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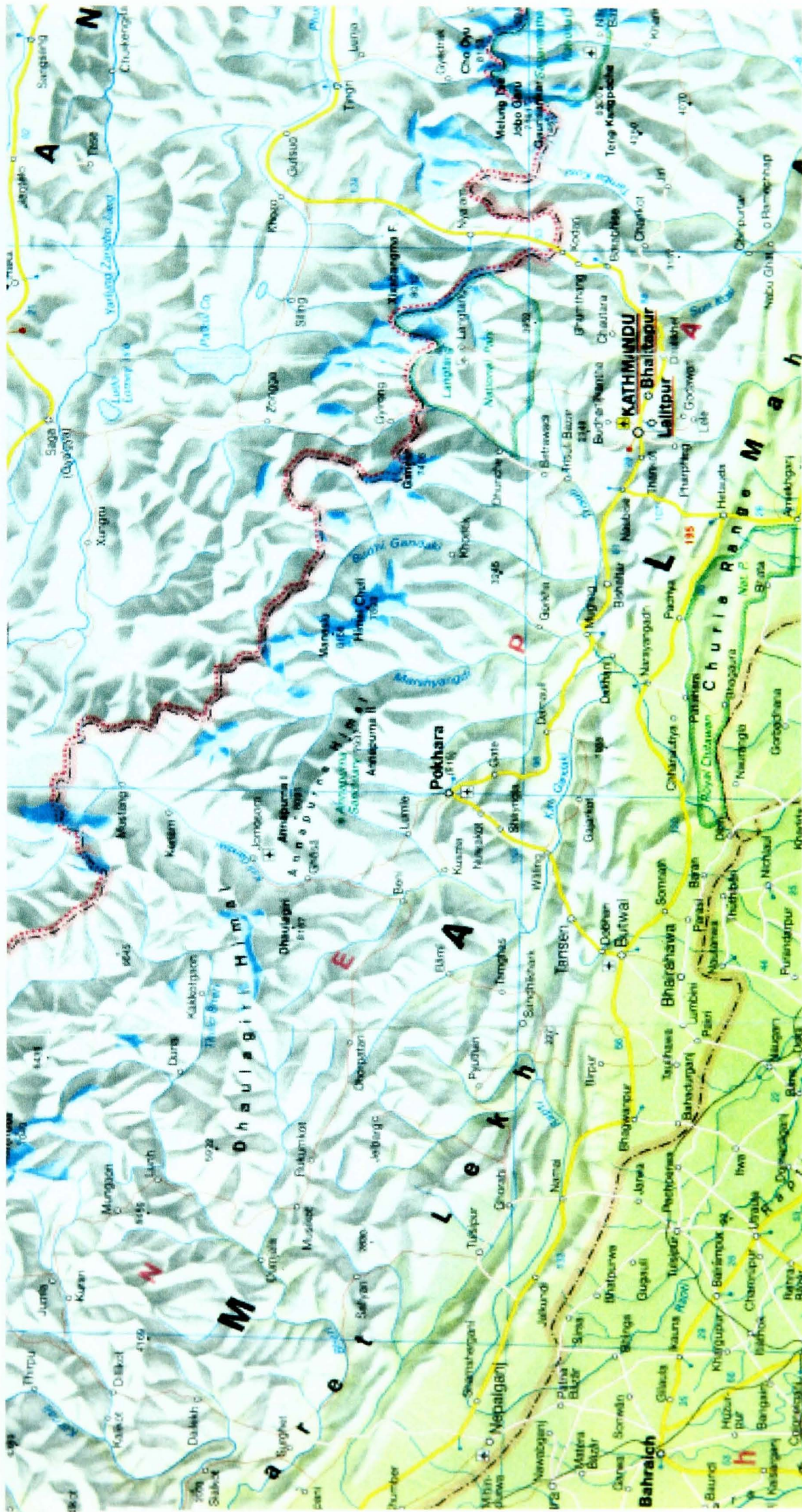
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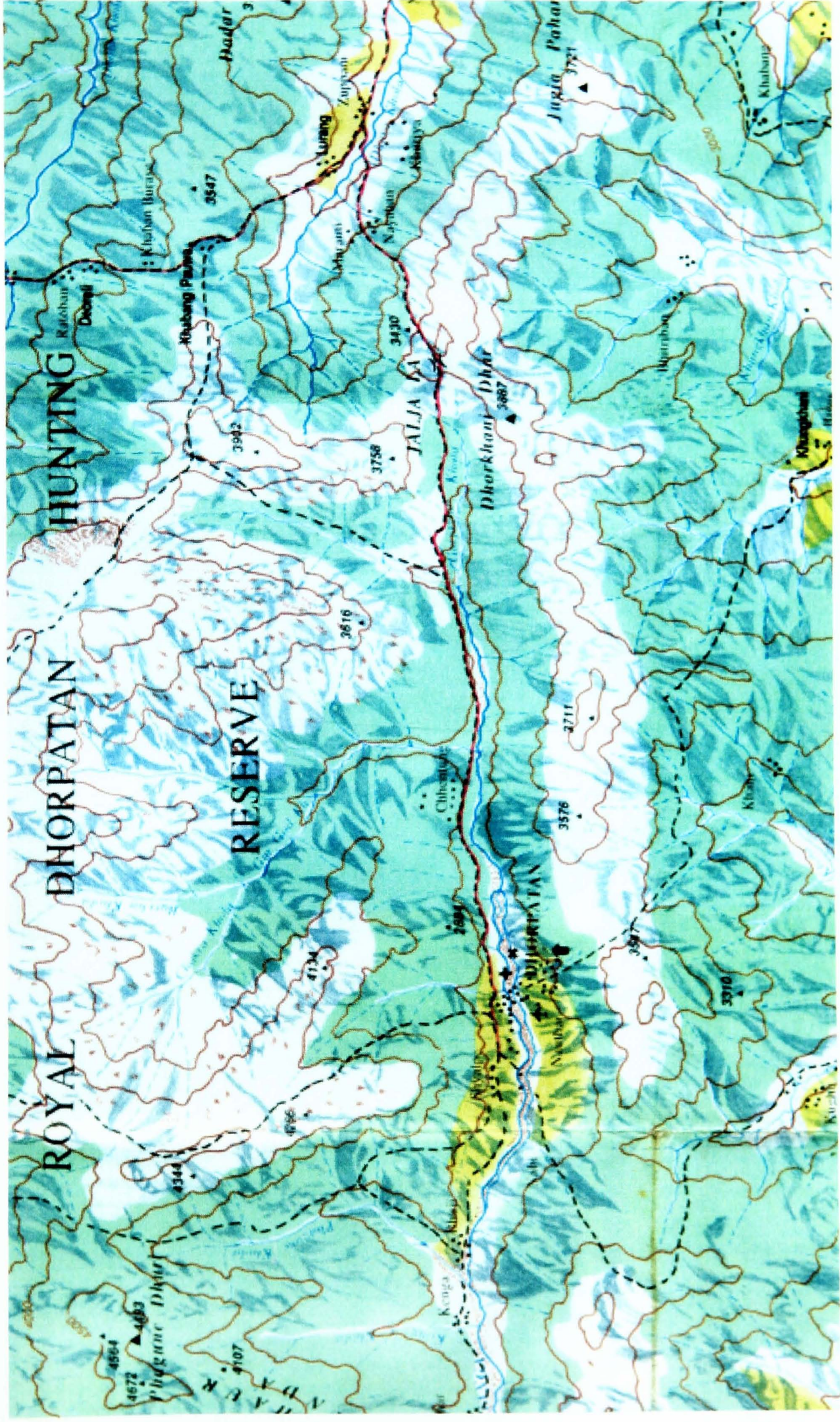
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# Introduction

## Themes and Methodology

This thesis is about the learning process in a Tibetan medical school situated in the valley of Dhorpatan in the Baglung district of west Nepal. The school was founded in 1990 by Tsultrim Sangye, a Bönpo monk and Tibetan medical doctor. He had left Tibet several years before coming to Dhorpatan, and had been staying at the Menri Bönpo Monastery at Dolanji in Himachel Pradesh. Tsultrim Sangye is the name he received when he became a monk, but he is known to everyone as Amchi Gege (see Plates 6 and 7). He studied Tibetan medicine with his grandfather and other local Tibetan doctors in his home in Khyungpo in the Kham region of east Tibet.

There are a number of reasons why I chose this location to carry out my research. I first heard about the school on a visit to Triten Norbuste Bönpo monastery in Kathmandu, from the head teacher of the Bönpo religion, Lopon Tenzin Namdak. He stressed that the school in Dhorpatan is a Bönpo medical school, and that the main text that is used in the school is not the Tibetan Buddhist medical text, the *Gyushi*, but a Bönpo medical text, the *Bumshi*. Intrigued by this I wanted to discover the nature of Bönpo medicine and how it compares to Tibetan Buddhist medicine. A further point of interest was the extent to which Amchi Gege's method of teaching reproduced the traditional pattern he had experienced in Tibet, and whether or not he had incorporated new elements into the medical education. Another advantage of the school in Dhorpatan was that Amchi Gege's ten students were at different stages in the course curriculum, and I thought this would be helpful in gleaning insights into the learning process. The school has the additional interest of having a clinic which serves the medical needs of both the Tibetan and Nepalese communities living in the valley, and a pharmacy, where locally gathered plants, and raw medicinal substances that are brought from Kathmandu, and occasionally Tibet, are processed into medicines.

The research is based on fieldwork, which I conducted in Dhorpatan between September 1996 and August 1998. During this period I also visited the Tibetan Medical Schools at Dharamsala, Sarnath, Darjeeling, and the Lhasa medical institute,

for comparative material. In addition I spent short periods of time at the Menri Bönpo Monastery at Dolanji in Himachel Pradesh and Tritten Norbutse Bönpo monastery, gathering information about the Bönpo religion.

In the medical school in Dhorpatan, learning occurs through a threefold process in three separate arenas: the students first memorise the main medical text, and then they receive teaching on it from Amchi Gege in the classroom; along with this the students learn by engaging in medical practice in clinical and pharmaceutical contexts. During my research I carried out participant observation in each of these arenas of learning. I observed teaching in the classroom, and in the pharmacy I recorded the ways the students learn how to make medicinal compounds. I also attended several medicine gathering trips in the local hills. In clinical contexts, I observed and recorded the ways that the students were inducted into clinical practice. In addition to gathering information about the community, the school, and the medical world, through informal interaction, I also formally interviewed all the students and Amchi Gege on several occasions, and selected people within both the Nepalese and the Tibetan communities.

The person who provided me with the most assistance during my research was the young head lama of Dhorpatan, Geshe Tenzin Dargye (see Plates 6 and 8). He helped me with most matters to do with medicine in the school, the clinic and the community, and with numerous other research concerns. Although he had not specialised in Tibetan medicine, he was reasonably familiar with its theories and practices. He had also worked in the clinic situated in the Dolanji Tibetan refugee settlement, and for six months as an assistant in the hospital at the nearby town of Chandigarh, and had thereby acquired a familiarity with the procedures and concepts of biomedicine. These characteristics, taken in combination with the fact that he speaks good English, meant that he was invaluable to me in my attempts at understanding the Tibetan medical worldview. As a Bönpo *Geshe*, he also has a very extensive knowledge of Tibetan religion and ritual. A significant number of diseases that I witnessed in Dhorpatan were thought to be caused by various classes of harmful spirits. As the treatment of these disorders usually involved the performance of ritual, in these instances it was Geshe Tenzin Dargye who assumed the central role in the healing activities. This will be discussed fully in chapters seven and eight. I

also benefited greatly from the assistance of the senior medical student in the school, Nyima Samphel (see Plate 10).

The thesis has two broad themes: it looks at the way the students learn medicine in the school, and it considers the nature and status of the knowledge that they learn. The model that I have used to understand the learning process moves away from the view of learning which emphasises the internalisation of propositional forms of knowledge. In the course of the thesis I demonstrate that the learning process also involves non-discursive, tacit forms of knowledge, which are essential to the development of expertise; these forms of knowledge by their very nature can not be transmitted in a discursive form, but are acquired through practice. I draw on a body of recent literature on learning, which emphasises the situated nature of learning. The central mechanism of situated learning is what Lave and Wenger (1991) refer to as 'legitimate peripheral participation'. In the medical school in Dhorpatan the students are gradually inducted into medical practice by engaging in medical practice under Amchi Gege's supervision. The training in the medical school is thus a form of apprenticeship. But if we are to understand how the students develop practical skills in medicine, we should avoid reducing apprenticeship to a process, which consists exclusively of imitation, repetition, and the internalisation of a fixed body of knowledge. Learning should not be viewed strictly as a cognitive process occurring in the heads of individuals; it is a wide-ranging process involving the interaction of the mind, body, agency, and social context.

In my analysis of the learning process in the school I follow Dreyfus and Dreyfus's (1986) study of the acquisition of skills, which lead to expertise. They identify a process, which involves five stages from novice to expert. For the novice, knowledge is primarily propositional and decontextual. As the student moves through the various stages towards expertise, knowledge becomes increasing non-discursive and situated. In the context of the medical school, what was once memorised, studied and recollected, becomes the performative memory of medical practice. At the level of expertise, knowledge is a mode of being in the world.

The approach that I have taken to understand the learning process in the school in Dhorpatan parallels similar research carried out by Byron Good on the way the medical world is constructed at the Harvard medical school (Good 1994 1993). For

over four years Good carried out a study of 'The New Pathway to General Medical Education' at the Harvard medical college. It involved interviewing 50 students from the graduating class of 1990, interviewing faculty staff, and participant observation in several of the basic science classes. Good also moves away from the traditional concern of studies of medical education with the reproduction of medical knowledge as propositional knowledge. His aim is to concentrate on the phenomenological dimensions of medical knowledge, 'how the medical world, including the objects of the medical gaze, are built up, how the subjects of that gaze - the students and the physicians - are reconstituted in the process, and how distinctive forms of reasoning about that world are learned' (Good 1993:83). Good adopts Foucault's notion of medical discourses, 'as practices that systematically form the objects of which they speak' (Foucault 1972:49). But his aim is to expand on this notion by bringing subjective agency back into the world of discourses. He quotes the charge made by Dreyfus and Rabinow that Foucault's discussion of discursive practices presents a picture of 'intentionality without a subject, a strategy without a strategist' (1982:187 quoted in Good 1994:69). In a like manner, my aim in this thesis is to document the power of discursive practices, which I experienced in the medical school in Dhorpatan.

As with Good, part of my methodology was to go through the learning process myself. On most days I had a lesson at 10 a.m. for one hour with Amchi Gege. During each of my lessons, Geshe Tenzin Dargye acted as translator, and Nyima who also knows a little English helped out whenever necessary. It must be said, however, that even with the help of these two very competent people, and three Tibetan dictionaries, the lessons were often far from easy. Sometimes we could spend half of the lesson trying to understand the meaning of one word. However, in the time that I spent at the school I did manage to make some reasonable headway into the teachings, and a large part of what I will say about the way the students learn medicine in the classroom, draws on my own experience of being taught by Amchi Gege.

The learning process for the students begins with memorising the main medical text, they then receive explanations on it from Amchi Gege in the classroom; in this way the students build up their store of medical knowledge. Initially this knowledge

is mostly of a propositional, decontextual nature. Performative memory is developed when the students situate this knowledge in pharmaceutical and clinical contexts. Therefore, a major focus of my research in Dhorpatan was how the students are inducted into medical practice through clinical interaction. From the outset of my stay at the school I noticed that Amchi Gege nearly always used one or two of his students as his assistants when he was consulting a patient. This was partly because most of the patients who came to the clinic were Nepalese, and Amchi Gege needed the student to serve as translator. But Amchi Gege also used this opportunity to demonstrate to the student aspects of medical practice. In the first period of my stay, Amchi Gege's clinical assistant was whoever was the nearest student at hand. After some months, he formalised this by developing a rota system where each student served as his assistant in turn for a period of two weeks.

As each student served in this capacity, I asked him or her to explain to me what occurred in the clinical interactions. For every patient, I recorded a set series of information. I began with the patient's ethnic group, age, sex, religion, and abode. I then recorded what the patient said about his or her condition, details about the diagnosis, the disease category that was finally decided upon by Amchi Gege, and the forms of treatment that were adopted. By asking the student to give me this information I was able to assess their experience of the clinical interaction, and the extent to which they had learned through it.

As Lave (1988) has indicated, patterns of learning can only be fully understood by considering the social, political, and cultural contexts in which they occur. This brings me on to the second major theme of the thesis, the nature and status of Tibetan medical knowledge. Tibetan medical knowledge is considered to derive from the enlightened insight of the Medicine Buddha; it is therefore perfect, complete, and beyond dispute. Consistent with this view of the sacred nature of Tibetan medical knowledge, are the particular modes in which it is passed on: the strong emphasis on memorisation, oral transmission, the personal relationship of the master and the student, and the importance of the medical lineage. These themes recur throughout the thesis, but I will discuss them in detail in chapter four.

## **Dhorpatan: The People and the Place**

Dhorpatan is the name given to a valley in the Baglung district of west Nepal lying south of the Dhauligiri mountain range (see map 1). The bottom of the valley is some 3000 metres above sea level, the surrounding hills reaching up to 4500 metres. Despite this altitude, the region for most of the year is green and luscious. This is due to the high levels of precipitation in the area, the northern limit of monsoon rains being the Dhauligiri mountain range situated just to the north. From June to August there is almost incessant cloud cover and rain during the day, which invariably clears by nightfall leaving a bright starry sky. Often, during the spring and autumn months, convection currents draw clouds up from the lower foothills which come intermittently swirling in to the large plain lying at the western extremity of the valley; they crawl and twist along the plain, eventually dispersing again into the sky.

The valley itself marks the southern boundary of the Dhorpatan Royal Hunting Reserve, this being one of Nepal's nine National Parks (see map 2). The region is host to an abundance of fauna and flora, including many types of medicinal plants (see Plate 4). The valley sides are largely forested, mostly with coniferous trees, but deciduous trees are also strongly present. In the summer, a soft pleasant smell of pine resin wafts through the valley. There are also many rhododendron groves, which when in full blossom impart spectacular threads of colours through the forest.

Until quite recently the quickest way of getting to Dhorpatan across land was to walk from Pokhara. Since the construction of the roads to Baglung and to Tansen, people now start their trek from one of these towns. Most commonly, people take the bus from Pokhara to Baglung. Outside the monsoon season it is possible to travel a little further to the small town of Beni. From there one takes the footpath north west along the Myangdi River passing through the villages of Tatopani, Dharpang, and Takam, and after three days arriving at the village of Lumsum. At this point one leaves the river and climbs up the densely forested mountain path up to the Jaljala pass. In this forest it is rumoured thieves and spirits lie in wait for unsuspecting travellers. The long haul up the Jaljala takes about four hours. At the top is a small Tibetan shrine heavily adorned with prayer flags and the small offerings of Tibetan passers-by. Unless one has met other Tibetans on the route, this is the first visible

indicator on the path of the Tibetan settlement. From here Dhorpatan lies a further four hours along a thickly wooded path.

Less frequently people take a southern route to the valley. This involves walking through the southern foothills from the town of Tansen. It takes about the same time. Approaching Dhorpatan from this direction affords spectacular views of the plains at the bottom of the valley and the surrounding hills. The valley runs east west along the Uttaraganga River. The large flat plain along the valley floor makes it highly suitable for grazing animals. The plain is broadest at the western end of the valley, and up until the 1980s an airstrip situated here was frequently in use; now it is overgrown and hardly noticeable. The National Park Office is located at this end of the valley. Surprisingly few tourists visit the region. Occasionally trekkers used to pass through the valley on their way to Dolpo, which is another two weeks walk from Dhorpatan. Also a few times each year helicopters used to bring tourists with a penchant for hunting, but there was certainly nothing in Dhorpatan like the tourist industry that exists in some of Nepal's other National Parks. In 1998 Dhorpatan was closed to foreigners due to the escalation of Maoist activity in the area.

The valley is host to six Nepalese ethnic groups and a Tibetan refugee settlement, which up to now have had a peaceful coexistence. The Tibetan refugee settlement in Dhorpatan is known as *Nor dzin ling*, which means 'The Place of Wealth'. It was one of the first four Tibetan refugee settlements to be established by the International Committee of the Red Cross and the Swiss Association for Technical Assistance between 1961 and 1962. The other three settlements were Jawalakhel in Kathmandu, Hyanga in Pokhara and Chialsa in Solu-khumbu. There are currently 13 Tibetan refugee settlements spread through eleven districts in Nepal. About half of the refugee population live independently outside of the settlements, mostly in Kathmandu valley. Hagen (1994) and Forbes (1989) have given accounts of the early history of the settlement at Dhorpatan.

The refugee settlement consists of five camps situated at various locations along the valley (see map 3). It takes approximately one hour to walk from the first to the last. There are presently around 250 Tibetans living in the five camps in Dhorpatan. Throughout the valley there are also many Nepalese homesteads, but on the whole these are only used from spring to autumn when the Nepalese come from the lower

valleys to grow crops and graze their animals. During these months the valley is very active, as in addition to the 250 Tibetans it is host to around 1000 Nepalese.

The Tibetans have been living in Dhorpatan for over forty years now. Many of them were born and educated in Nepal. This is the case for nine of Amchi Gege's ten students. However, the long years in exile have not diminished in any way their sense of national identity, and there remains a strong feeling that their stay in Dhorpatan is temporary and that at some point they will return to Tibet. When the Tibetans first arrived in India and Nepal they brought with them their old religious and political affiliations, and these were mostly organised along regional lines. As Goldstein (1978:396) puts it, '(t)he obstacles facing the Tibetans were not just external ones. They came from widely disparate regions in Tibet where they spoke mutually unintelligible dialects, operated under different socio-political systems, and were traditionally hostile'. One of the main tasks of the Dalai Lama's government-in-exile has been to break down these old allegiances and instil in the Tibetans a shared sense of national identity. There are a number of reasons why it should want to pursue this initiative: to consolidate its own power; to attract international support for the Tibetan cause; and to present a more effective opposition to the Chinese.

The government was set up in 1960 at Dharamsala in Himachel Pradesh and comprises four ministers chosen by the Dalai Lama (the *Kashag*), and an assembly of seventeen elected deputies who represent the refugees according to the three main regions<sup>1</sup>, and the five principle religious sects (Fürer-Haimendorf 1990). The Tibetan refugee settlements have a democratically elected hierarchy of leaders whose responsibility it is to liase between the people and the representative of the Dalai Lama's government responsible for that settlement, known as the 'settlement officer'. The government does not have legislative powers and Tibetans are not obliged to follow its policies. Though in 1969 the Tibetan administration implemented a voluntary program of taxation, it still relies heavily on international aid. In addition to catering for the material needs of the refugees, it is also responsible for the preservation and regeneration of Tibetan religion and culture. This is the responsibility of the Council for Religious and Cultural Affairs. Through its publications, and its control over education in the Tibetan refugee settlements, the

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<sup>1</sup> Central Tibet (*U-tsang*), northeast Tibet (*Amdo*), and east Tibet (*Kham*).

government has successfully generated and maintained a sense of Tibetan national identity.

About a third of the Tibetans in Dhorpatan follow the Bön religion of Tibet, the rest are Buddhist.<sup>2</sup> Of the 120, 000 Tibetan refugees who came to Nepal and India, about 1000 are followers of the Bön religion. As the administration set about the task of constructing the new national identity for the Tibetans, the Bönpo found themselves increasingly peripheral to this definition.

In 1967 a Bönpo settlement was established at Dolanji near Simla in the Shiwalik hills. This is the location of the new Menri<sup>3</sup> monastery. Cech (1987) has carried out a detailed study of the history, and social and cultural identity of this settlement. In the early years the Bönpo had no political representation in Dharamsala. This changed in 1977 when the Bön religion was officially recognised as a sect of Tibetan religion<sup>4</sup>, and the Bönpo were allowed one representative in the Assembly of the Tibetan People's Deputies. A further embracive gesture was made by the Administration in 1978 when Sangye Tenzin, the thirty-third abbot of Menri monastery, officially received the title of 'throne bearer' (*tridzin*) from the Dalai Lama; this title is traditionally bestowed on the heads of the four Buddhist sects (Cech 1987).

Although a notion of a common Tibetan identity was strongly evident among the Tibetans in Dhorpatan, residential patterns indicate that regional and religious affiliations remain important. There is a clear distinction between the two camps on the eastern side of the valley, where the residents are mostly from the Tewa region of Tibet and follow the Bön religion, and the three camps on the western side of the valley, where the residents mostly originate from Kham and are Buddhist. The majority of the Buddhists follow the Karma Kagyu sect. I never witnessed any conflict in Dhorpatan amongst the Tibetans deriving from regional or religious affiliations. From conversations I had with refugees who had lived in the settlement since the early days, it appears that this has been the general pattern in the settlement. Throughout the time that I was there the only monks and lamas in Dhorpatan were Bönpo. The Buddhist families had no qualms about using their services. There

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<sup>2</sup> See appendix A for an outline of the Bön and Buddhist religions of Tibet.

<sup>3</sup> The original Menri monastery was located in Central Tibet. It was destroyed by the Chinese in the period following the 1959 occupation. Menri remains the principal monastery of the Bön religion.

<sup>4</sup> Although this is a positive development, the Bönpos consider themselves to be a completely separate religion and not merely a fifth sect of Tibetan Buddhism.

appeared to be a consensus amongst the lay people that Buddhist and Bönpo practices amounted to very much the same thing.

In recent years the new settlement officer had implemented a number of innovations to improve living conditions and opportunities for the Tibetans. Up until recently biomedical provision in the valley had been somewhat erratic. In the early years of the camp a Swiss doctor was in permanent residence at the Namdru Tang; now all that remains of this are the ruins of the building, which housed the clinic.

There is also a Nepali clinic situated at the Namdru Tang, but I never saw or heard of anybody in it. Usually when people needed biomedical treatment they had to walk down to clinics in the larger villages in the lower valleys. In response to this situation, one of the first things that the present settlement officer did was to send a Tibetan girl to be trained as a nurse in Dharamsala. Now she runs a daily clinic at the Namdru Tang providing care for both the Nepalese and the Tibetans. This provides an alternative form of treatment, should people wish it, to Amchi Gege's clinic of traditional Tibetan medicine, which he has been running since he arrived in Dhorpatan in 1990.

Along with the 250 Tibetan refugees, from the spring to the end of the autumn, the valley is host to about 1000 Nepalese from six ethnic groups. Dhorpatan is situated in the western reaches of Baglung district. The 1991 census lists the Magar ethnic group as the numerically dominant group in the district, constituting 28.2% of the population (Gurung 1998:58). The largest group in Dhorpatan is the low caste Bishwakarma, then in roughly equal proportions there are the Magar and the Nauthar groups; there are also a few members of the Parbatiya, Chantel and Thakali groups.

The untouchable Bishwakarma group can be found throughout the valley. About thirty Bishwakarma live in a small settlement a short distance from the medical school. The Bishwakarma are a low caste group who are the odd-job men of the valley. When the possibility of some sort of work arises, such as building a wall, a new house, or collecting timber, it is usually the Bishwakarma who provide the labour. For instance, as I have mentioned, throughout the time that I was in Dhorpatan, many people were replacing the old wooden roofs of their houses with slate, and it was a group of Bishwakarma labourers that were doing the arduous quarry work to provide this slate.

After the Bishwakarma, it is difficult to say which of the Nauthar or the Magar is the next largest group in the valley; some people say one, some the other. Like the Bishwakarma, the Nauthar are not listed in the 1991 census, nor in the 1854 Muluki Ain Legal code. De Sales makes a passing comment to them (1993:92) in her article on the origins of the Chantel group. The Nauthar have their permanent homes in the cluster of villages of the Bowang and Adhikarichaur Village Development Committees in the valleys just south of Dhorpatan. The total population of the Nauthar is around 2500. 'Nauthar' means 'nine castes' and refers to the original number of subcastes that constituted the group. Two of these castes have now ceased to exist.

The Magar are found distributed throughout Nepal, but their highest concentration is in the western hills. Like many other Nepali caste and ethnic groups, in the changing political climate in Nepal over the last few decades the Magar are becoming increasingly self-conscious and politicised. In 1986 an association called Nepal Langhali Sangh was formed in Kathmandu. In 1993 it became the Nepal Magar association, which has the prime aim of representing the interests of the Magar as a united group. The Parbatiya, Chantel and Thakali groups are present in only small numbers in the valley.

Before coming to Dhorpatan I heard conflicting accounts about the safety of the place. On the 13 February 1996, the Communist Party of Nepal (Maoist), disillusioned by the failure of Parliamentary democracy to solve Nepal's social and economic problems, formally announced the beginning of the 'people's war' with the aim of overthrowing the state and replacing it with the 'new people's democracy' (*naulo janbad*). Rukum and Rolpo districts just to the west of Dhorpatan are the districts where the Maoist insurgents have their strongest presence. Certainly everyone living in the valley is aware of the close proximity of the Maoists, but up to now, with the exception of a few minor incidents, the conflict has not entered the valley in any substantial way<sup>5</sup>.

It is very easy to distinguish the Tibetan camps in the valley due to the abundance of coloured prayer flags that flutter around them. As one approaches the valley from the east, the first Tibetan camp one arrives at is called Gompa (see Plates 1, 2 and 3).

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<sup>5</sup> I have written about the Maoist insurgency and how the Nepalese in Dhorpatan view it, and the changes that have been wrought since democracy was established in 1990 (Millard in press).

The local Nepalese refer to it as *ek kutta* ('one-legged'), a name deriving from a one legged spirit that has sometimes been seen in the vicinity. As this is the location of the medical school and clinic, this is where I stayed. During the time I was there, the residents of the settlement included six monks, Nyima Samphel (the senior medical student), Geshe Tenzin Dhargye (the head lama), Amchi Gege (the Tibetan doctor and head of the medical school), two old men (one of them being Tsawo), and two families, all of whom were Bönpo.

Continuing westward for about fifteen minutes along the valley, one arrives at a mixture of stone and wooden houses dispersed randomly along the valley bottom; this is the Nepalese settlement of Chendung. Adjoining this is the Tibetan camp called Khangpa Gyepa, which means 'eight houses'. Although the Tibetan phrase literally means 'eight houses', the convention is for Tibetans to refer to it in English as 'eight camp.' (This convention also applies to the names of the other camps.) The names of the Tibetan camps derive from the number of houses that were originally established there, which bears no relation to the present day situation. There are fourteen families staying here, mostly originating from Tewa region of Tibet. Almost all of the people residing in this camp are Bönpo. Adjoining Khangpa Gyepa to the south is the Nepali settlement of Barde.

Continuing further west there is a large area of open fields running along the river with small pockets of woodland. After passing a small Nepali shrine one arrives at the Dhorpatan School and a cluster of blacksmith dwellings, which mark the beginning of the Nepalese settlement of Bagata. The homestead of one Tibetan family can be seen marked by a circle of prayer flags in the middle of this settlement, this is the only exception to the usual pattern of Nepalese and Tibetan houses being separate.

Ten to fifteen minutes beyond Bagata, a few straggling Nepalese houses lead on to the next Tibetan camp, referred to as Khangpa Shiwa, meaning 'four houses'. This camp comprises eight families, all of whom are Buddhist, mostly of the *Karma Kagyu* sect. The majority of the families residing here originate from the Kham region of east Tibet. A Tibetan *sakya*<sup>6</sup> temple, established by Taru Rinpoche is situated here, a little distance away from the settlement in a pine forest. Near the

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<sup>6</sup> The name of one of the four main sects of Tibetan Buddhism.

temple is a large wooden building in the style of a Swiss chalet; up until recently this was used as a carpet factory.

The next Tibetan camp is a little further along the path and is almost contiguous with Khangpa Shiwa, this is known as Khangpa Chugsum, 'thirteen houses'. Thirteen families live here, again mostly originating from Kham; four of these families are Bönpo, the rest are Buddhist. Shortly after this settlement one passes the buildings of the National Park Office and enters the large open plain at the western end of the valley. Ten minutes further on, nestled at the bottom of the steep sided valley is the last of the Tibetan settlements, called Namdru Tang, which means 'airport', this being the location of a now overgrown airstrip. It is a small settlement comprising only four families, one of which is Bönpo, the others Buddhist. The office and residence of the Tibetan settlement officer is situated here as well as a small clinic, three Tibetan lodges and two shops. When the valley was open to tourists, trekkers usually stayed here before heading north towards Dolpo or south towards Tansen.

In chapter one I begin by outlining the history of Tibetan Buddhist and Bönpo medical traditions, I then move on to make a brief discussion of contemporary Tibetan medical institutions. Following this I give information about the Tibetan medical school in Dhorpatan. I discuss the students, the course curriculum, the principal texts that are used, and the way that student progress is assessed. I also discuss the problem that the school faces in getting itself officially recognised by the Tibetan government in exile in Dharamsala.

Chapter two presents the model of learning that I have used to understand the learning process in the school. This serves as a foundation for later chapters where I give information on how the students learn medicine in the classroom and in pharmaceutical and clinical contexts.

Chapter three focuses on the role of memory in the school. I explain why memorisation is so highly valued, and I compare the techniques of memorisation used in the school with techniques used in Tibetan monastic education, Brahmanical schools in South India, Quranic education in Yemen and Morocco, and medieval and renaissance Europe. I conclude that the ideal is that far from being a passive form of

rote learning, memorisation paves the way to the development of performative memory.

In chapter four I discuss the writings of Goody and Horton on modes of thought. The attributes that Goody lists for non-literate societies, and which Horton lists for ‘cognitive traditionalism’ have many similarities with what I encountered in the Tibetan medical school; I have referred to this as the synthetic mode of knowledge. I compare this with the modern scientific form of knowledge, which developed during the period of the enlightenment in seventeenth and eighteenth century Europe. This is the form of knowledge, which underpins biomedicine; I have referred to this as the analytic mode of knowledge. I conclude that although there are important differences between the two modes of knowledge, in practice the boundary between them is not so clear-cut.

Chapters five and six cover specifically the way that the students learn medicine. Chapter five focuses on learning in the classroom. I discuss how the students learn Tibetan medical theory related to anatomy, physiology, pathology, diagnosis, and therapeutic methods. In this chapter I also summarise Amchi Gege’s teachings on the section of the third volume of the main medical text, which deals with *tren* (tumours). Chapter six focuses on how the students are inducted into medical practice in pharmaceutical and clinical contexts. I give examples of clinical interactions involving the students learning pulse and urine diagnose, therapeutic methods, and as a complement to the *tren* section of chapter five I give examples of the students interacting with patients who were diagnosed as suffering from this disorder.

Chapters seven and eight cover related themes. In chapter seven I give a general overview of the Tibetan medical world that the students are being inducted into. The word ‘medicine’ in a Tibetan cultural context has a wider semantic scope than it does in a biomedical context. There is a large degree of overlap between Tibetan religion and Tibetan medicine. A key feature of Tibetan medicine is the notion of harmony; health is a product of the harmonious relationship of the three humours within the microcosm of the human body, and between the human being and the macrocosmic environment. In Dhorpatan much ritual attention was devoted to maintaining a beneficial relationship between the human community and the various classes of

local deities and spirits; this relationship is considered essential to human health and the general prosperity of the community. When this relationship breaks down, misfortune may arise, and this usually takes the form of disease. This type of sickness requires a ritual response and this is dealt with in detail in Chapter eight, where I give examples of the kind of healing rituals that were performed in Dhorpatan.

The purpose of chapter six and eight is to give examples of the way that the students develop performative memory through clinical practice: chapter six focuses on clinical interactions involving disorders with endogenous causative factors, chapter eight, disorders with exogenous causative factors.

### **A Note on Tibetan Spelling**

Most of the Tibetan words that appear in the text have been written phonetically and put in italics. The sound of 'ng' in the phonetic spelling is formed at the back of the mouth as in the English 'going'. The Tibetan spelling of the word, using the Wylie (1959) method of transliteration, can be found in the glossary at the end of the thesis. On a few occasions it has been necessary to give the transliterated form in the text.

# Chapter 1 Tibetan Medicine: Origins, Institutions, and the School in Dhorpatan

Before I move on to consider in detail different aspects of Tibetan medical knowledge and the processes that are involved in learning medicine, in this chapter I will present relevant background information about Tibetan medicine and the school in Dhorpatan. I will begin by outlining the history of Tibetan medicine from both the Bönpo and the Tibetan Buddhist perspectives, and then I will make a brief discussion of contemporary Tibetan medical institutions. Following this I will turn to the medical school in Dhorpatan, I will discuss the teacher, the students, the course syllabus, principal texts used in the school, and forms of assessment.

## 1.1 Contending Medical Histories

Both the Bön and the Tibetan Buddhist religions have their own principal medical text: for the Bön tradition it is the *Bumshi*; and for the Buddhist tradition it is the *Gyushi*. One of the reasons why I chose the medical school in Dhorpatan was because I knew that Amchi Gege was using the *Bumshi* as the main text in the school and I wanted to know how this differed from the *Gyushi*. When I arrived in Dhorpatan I found that the medical knowledge, which Amchi Gege was imparting to his students, was no different from that which I had witnessed in Tibetan Buddhist medical contexts, and in time I came to realise that the *Bumshi*, which he was indeed using, is virtually identical to the *Gyushi*. Amchi Gege had no problem explaining this. In his opinion Tibetan medicine was first taught by the founder of the Bön religion, Tönpa Shenrab, and the *Gyushi* is a Buddhist reworking of the *Bumshi*; for this reason he is quite happy to use both texts in his medical school. In order fully to contextualise Amchi Gege's opinion, in what follows I will briefly outline the history of Tibetan medicine,<sup>1</sup> and discuss the various accounts of the origin of these texts.<sup>2</sup>

Both the Bönpo and the Tibetan Buddhist historical traditions claim that their medical traditions were established prior to the reign of the Tibetan King, Songtsen

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<sup>1</sup> Tibetan medicine is known in Tibetan as *Sowa Rigpa*, 'The Art of Healing'.

<sup>2</sup> For further information on the history of Tibetan Medicine, see Meyer (1995, 1988), Parfionovitch, Dorje & Meyer (1992), Rechung (1973), and Karmay (1989).

Gampo, in the seventh century, but there is no evidence to substantiate these claims. The earliest Tibetan manuscripts date from the late ninth century to early tenth century. These were sealed in a chamber of a cave at Dunhuang in north west China, around 1035AD, and discovered at the beginning of the twentieth century (Bacot et al: 1940, Thomas 1935-63, Lalou 1939-61). From what is written in these manuscripts it appears that in this early period medicine was very much bound up with religious notions; disease was related to the activity of spirits and required a ritual response.

Tibetan historical sources speak of a great efflorescence of medical learning during the period of the Royal Dynasty from the seventh to the ninth centuries. At this time Tibet was a powerful imperial force in the region, and as such was open to the influence of the neighbouring regions of Iran, China, Nepal, and India. Cultural influence also came from the Central Asian oasis towns along the Silk Route where Tibet had a strong military presence. Physicians from different medical traditions were invited to Tibet, and the medical works of their traditions were translated into Tibetan. This pattern was initiated by King Songtsen Gampo who invited three doctors to Tibet: Galenos from Throm (the Greek Byzantine Empire), Hen-weng Hang-de from China, and Vajradhvaja from India (Stein 1972:61).<sup>3</sup> Of these three, Galenos went on to become the king's physician. At the same time the medical text *Great Medical Practice (Menché chenmo)*, which had been brought to Tibet by Wengcheng, the Chinese wife of King Songtsen Gampo, was translated into Tibetan.

The predominance of the Galenic tradition in Tibet appears to have persisted for at least the first century of the Royal Dynasty. During the reign of King Me'agsom (704-54), we are told that the physician Bi-chi-tsha-ba-shi-la-ha, who had been invited to Tibet from Throm, was appointed the king's physician. Later, during the reign of King Trisong Detsen (755-797), doctors were invited from India, Kashmir, Nepal, Iran, and China, and texts were translated from their traditions into Tibetan; but again the Galenic tradition appears to have been dominant as it was the three students of his 'Greek' physician who served as the king's physicians, before Yuthog Yontan Gampo

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<sup>3</sup> As Meyer (1995) has pointed out, the names of these physicians denote not the historical figures but the respective medical traditions, which they represent.

the elder was appointed to the position. Beckwith (1979) relates the predominance of Galenic medicine and Chinese medicine in Tibet during this period, to the pervasive influence of the Islamic Caliphate and the Chinese Tang Empire; all the early court physicians came from either Throm or Tazig (the Arab Persian Caliphate). Tibetan historical sources give the titles of many medical Texts, which are said to have existed during the Royal Dynasty;<sup>4</sup> very few of these texts are extant.<sup>5</sup>

It was during the reign of King Trisong Detsen that the main medical text of the Tibetan Buddhist tradition, the *Gyushi*, was brought to Tibet. It is said to have been transmitted to Vairocana by the Kashmir pandit Candranandana. Vairocana translated the text into Tibetan and passed it on to Padmasambhava, who, thinking that the people of Tibet were not ready for it, hid it in a pillar in Samye Monastery. Another important figure in the history of Tibetan medicine around this time is Yuthog Yontan Gampo the elder. His biography has been translated by Rechung (1973) and is a typical account of an accomplished Tantric practitioner (*siddha*). As I have mentioned, he served as the personal physician for King Trisong Detsen. Like Vairocana he also visited India and studied with Candranandana.<sup>6</sup> He is said to have been competent in Chinese medicine, which in the opinion of Emmerick (1977) makes him a possible source for the Chinese medical material found in the *Gyushi*.

The period of the later propagation of Buddhism in Tibet also marked a new wave of activity in the medical domain; now the focus was on the connection with Indian teachers and the translation of Sanskrit medical texts. In the eleventh century numerous Ayurvedic texts were translated and included in the Tibetan Buddhist Tanjur<sup>7</sup> (Cordier 1903, Dash 1975, Fenner 1996).<sup>8</sup> Amongst these texts are the

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<sup>4</sup> Rechung (1973) gives a long list of these medical texts.

<sup>5</sup> Amongst the Dunhuang manuscripts there are three short medical texts, a medical drawing showing moxibustion points, and six texts dealing with diseases of horses that can be dated to the period of the Royal Dynasty (Meyer 1995:112, Lalou 1941, Blondeau 1972).

<sup>6</sup> Emmerick (1977) notes that this could be the Candranandana who wrote the *Padarthacandrika*, a commentary to Vagbhata's *Astangahrdayasamhita*; both of these texts were translated by Rinchen Zangpo and were included in the *Chöpa Tanjur*. For Emmerick this indicates that the *Astangahrdayasamhita* could have been a major source for the *Gyushi*.

<sup>7</sup> Both the Tibetan Buddhist and the Bönpo canons are divided in two large collections of texts: the *Kanjur*, which contains the words (*ka*) of the Buddha, and a large selection of commentaries know as the *Tanjur*.

<sup>8</sup> Dash gives the names of 21 Ayurvedic texts.

translations made by Rinchen Zangpo of the famous *Collection of the Essence of the Eight Branches* (Astangahrdayasamhita) by Vagbhata, his own commentary to it, and the commentaries of Candranandana. Medicine was also influenced in this period by the new influx of Tantric cosmological notions; the Kalachakra Tantra, the text that has had the greatest influence on Tibetan medicine and astrology, was translated in 1027. Also at this time translations were made by *Orgyenpa Rinchenpal* (1230-1309) of Indian medical texts dealing with mercury based medical compounds.

In 1098 the *Gyushi* was taken from Samye monastery by the *Terton*<sup>9</sup> *Drapa Ngön Shé*,<sup>10</sup> who transmitted it to his disciple *Ü-pa Dardrag*. Eventually the text was passed on to Yuthog Yontan Gonpo the younger who lived in the twelfth century; he was the thirteenth generation descendant of Yuthog Yontan Gampo the elder. Yuthog Yontan Gampo the younger visited India several times in search of medical knowledge. As well as revising the *Gyushi*, he wrote numerous medical works, the best known of which is the *Practice in Eighteen Chapters* (*Chalag Chogyé*). The earliest textual account which connects Vairocana with the *Gyushi* is the *Namthar kagyachen*, of *Sumtön Teshezung*, a disciple of Yuthog Yontan Gampo the younger. In this account the *Gyushi* was first taught by an emanation of the Medicine Buddha, *Rigpé Yeshe* in Oddiyana, it was eventually written in Sanskrit and passed on to Candranandana. No mention is made in this text of Yuthog Yontan Gampo the elder; Karmay concludes from this that it is possible that he is a transposition of the Yuthog Yontan Gampo who definitely lived in the twelfth century.<sup>11</sup>

In the Tibetan literary genre known as *khogbub* that developed from the thirteenth century, which deals specifically with the history of Tibetan medicine, the view of the *Gyushi* as a canonical text (*Gyuzhi karu drub pa*, or in short the *kadrub* literature), eventually became the standard opinion. But in the early period, there was another Tibetan historical tradition, which took a different stance; namely that the *Gyushi* was not a translation of a Sanskrit original, but was composed by Yuthog Yontan Gampo

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<sup>9</sup> *Terton* ('treasure discoverer') is the title given to individuals who discover *termas* (hidden objects, usually books).

<sup>10</sup> This date is based on information given in the *Rinchen Terdzö* text (Kvaerne 1975).

<sup>11</sup> On the confusion in the Tibetan historical tradition on the two Yuthogs. see Meyer (1990:209-11).

the Younger. This tradition, which was started by another one of Yuthog's close disciples (Karmay 1989:21), produced a large volume of writings known as *tsod yig*; unfortunately very few of these texts have survived, and the tradition is mainly known about from arguments made against it in the *kadrub* literature. Karmay (1989:25) lists sixteen arguments from one *tsod yig* text, which aim to prove that the *Gyushi* is a Tibetan work. Many of these arguments point to specifically Tibetan customs found in the *Gyushi* that could not have been part of a Sanskrit original, such as the line in the *Gyushi* which reads 'the best diet is *tsampa* made of old barley' (1889:25). Since the *Gyushi* was first made known to the west by Csoma de Koros who presented an outline of its contents in 1835, western scholars have also been divided into those who have followed the mainstream Tibetan tradition that it is a translation of a lost Sanskrit original, and those who have tried to disprove this claim. Meyer (1988:90) concludes from his reading of the *Gyushi* that as it contains Indian, Chinese and Tibetan elements, which are seamlessly integrated into the coherent structure of the text, it could not have been a translation of a Sanskrit original.

The Bönpo have a different account of the origin of the *Gyushi*. For them it is based on the Bönpo medical text the *Bumshi*, which was first taught by Tönpa Shenrab to his son Tribu Trishi. Amchi Gege explained to me that from Tribu Trishi the text was passed on through the medical lineage in Tazig and Zhang Zhung, eventually to be translated into Tibetan by *Tongyung Thuchen*, *Gyimtsha Machung*, *Chetsha Khorwa*, and *Shari U-chen*, at the time of the second king of Tibet *Mutri Tsenpo*. Later, when the Bön religion was persecuted, the *Bumshi*, along with many other Bönpo texts was hidden. There are three different accounts of the way the text was discovered. One account states that the text was found by the Bönpo *Terton*, *Khutsa da-ö*<sup>12</sup> in Bhutan. A second account<sup>12</sup> holds that it was one of the texts that were rediscovered at Samye monastery in 913 AD by three Nepalese monks; the *Terton* is named as A-tsa-ra. The third account is given in *Shardza Tashi Gyaltzen's* history of the Bön religion (Karmay 1972:170). He writes that in 1037 AD, *Butsho Sipai Gyalpo*, found several medical texts in western Tibet, amongst which was the

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<sup>12</sup> *Khutsa da-ö* is identified by the Bönpo with Yuthog Yontan Gonpo the younger.

*Bumshi*. In Nyima Tenzin's catalogue (*karchag*) of Bönpo texts, nine medical texts are listed in the Bönpo *Kanjur* (Kvaerne 1974:101); these he states were all discovered by Butsho Sipai Gyalpo. The first of these texts is the *Bumshi*. Nyima Tenzin adds to his entry that the four parts of the *Bumshi* were 'transformed' (*gyurpa*) by Vairocana into the four parts of the *Gyushi*. He gives as evidence of this that the mantras in the text have been left in the language of Zhang Zhung, and the Bönpo word for a fully ordained monk, *drangsong*<sup>13</sup> has also been left unchanged. Other Bönpo accounts claim that it was Yuthog Yontan Gonpo the younger who transformed the *Bumshi* into the *Gyushi*.

Though the *kadrub* thesis that the *Gyushi* is a canonical text was generally accepted, because it is a *terma*,<sup>14</sup> it was not included in the *Chöpa Kanjur* or *Tanjur* collections. The Bönpo on the other hand, as nearly all of their *Kanjur* consists of *termas*, had no qualms about including the *Bumshi*. With the dominance of the Buddhist *kadrub* tradition, and particularly with the ascendancy of the Gelugpa administration from the seventeenth century, we hear very little about the Bönpo medical tradition until relatively recently. Amchi Gege told me that when he was studying medicine in Tibet, he knew about the *Bumshi*, but he had never seen a copy of it; he carried out his training using the *Gyushi*. Lopon Tenzin Namdak informed me that while he was the head teacher in Menri monastery in Tibet, before the Chinese invasion in 1959, there was a copy of the *Bumshi* in the monastery library.

The next major event in the history of the Buddhist medical tradition was the founding in the fifteenth century of two medical lineages: one based on the teachings of *Changpa Namgyal Dragzang* (1395-1475), known as the *Chang-pa* tradition; and one based on the teachings of *Zurkharwa Nyamnyi Dorje* (1439-1475), known as the *zur-lug* tradition. After the political reunification of Tibet in 1642 under the fifth Dalai Lama, Tibetan Medicine again underwent major developments. These developments received their initial impetus from the fifth Dalai Lama, who attempted to establish medical institutions and produce a new xylographic edition of the *Gyushi*. When the

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<sup>13</sup> The corresponding Tibetan Buddhist term is *gelong*.

<sup>14</sup> The Tibetan word means 'treasure'. It denotes hidden objects, usually texts which have been rediscovered.

fifth Dalai Lama died, the work that he had initiated was continued by his Regent, *Sangye Gyamtso* (1653-1705). In 1696 Sangye Gyamtso established Tibet's first medical college known as *Chagpori* ('iron hill'), after the name of the hill it was situated on near the Potala Palace in Lhasa. Some of the doctors who had trained here went on to establish other medical institutions, such as Labrang in 1784, Kumbum in 1757 and Yonghegong in Beijing in 1750 (Meyer 1995:118). Also in the same period, in the Kham region of eastern Tibet, *Situ Choki Jungne* established a medical school at Palpung monastery.

With the aim of clearly establishing the principles of Tibetan medicine, Sangye Gyamtso, after studying many medical texts and consulting practitioners, revised the *Gyushi*, composed his famous commentary to it, the *Blue Beryl (Vaidurya Ngönpo)*, and had seventy-nine paintings (*thangka*) made to illustrate its contents (Parfionovitch, Dorje & Meyer 1992). Meyer (1988:92) draws attention to the colophon of the Lhasa edition of the *Gyushi*, where it is written that Sangye Gyamtso revised the *Gyushi* after first consulting a wide range of sources: tantras, sutras, translations of Zhang Zhung and Chinese medical works, and ancient Tibetan texts. The edition of the *Gyushi* he produced appears to have involved a complete rewriting of the text; this would account for the high degree of concordance between his edition of the *Gyushi* and his commentary to it, as he is the author of both texts.

Since the founding of the Chagpori medical school in 1696, Tibetan medicine has been increasingly taught in schools of medicine. Up until relatively recently these schools have all been based on the Tibetan Buddhist medical tradition. However, medical knowledge continued to be passed on in family lineages or by doctors taking on private students, by this means, aspects of Bönpo medical knowledge have survived to the present day. From the many conversations I had with Amchi Gege, it was clear that even though his early medical studies were based on the *Gyushi*, he identified this text with the *Bumshi* and viewed Tibetan Buddhist medicine to derive ultimately from the teachings of the founder of the Bön religion, Tönpa Shenrab.

By the turn of the twentieth century Tibetan medicine was again in need of revitalisation. The thirteenth Dalai Lama responded to this by establishing a new medical institution in Lhasa in 1915, and placing it under the authority of his personal

physician Khyrenrab Norbu (1883-1962); this institution was known as the building of medicine and astrology (*Mentsikhang*).

## 1.2 Contemporary Tibetan Medical Institutions

Following the Chinese invasion of Tibet in 1959, the fourteenth Dalai Lama fled the country eventually to set up residence in Dharamsala in India. As part of his efforts to preserve Tibetan culture in exile, the Dalai Lama established a dispensary and medical school in Dharamsala in 1961,<sup>15</sup> also known as the Mentsikhang; it is referred to in English as The Tibetan Medical and Astrological Institute (TMAI). At the outset there was only one doctor and one astrologer. The first group of three medical students graduated in 1966, to be followed in 1968 by the first group of three astrological students. By 1970 there were seven doctors and six astrologers working at the institute. In 1980 a research and development department was added and its employees had expanded to twenty-three doctors, seven astrologers and twenty-three support staff. By 1997, one-hundred-and-fifty-five students had graduated in medicine, and twenty-eight in astrology. Currently, the institute has thirty-five branches in various locations in India and Nepal, mostly located in Tibetan refugee settlements.

In 1997, Dr Thokmey Paljor of the institute told me that the tenth batch of students was about to begin the medical curriculum. Each batch of students consists of between twenty and twenty five students. To be accepted on the course the students must have sat the twelfth class of the Indian school curriculum, and they must also take an entrance exam. This exam has sections in Tibetan and English. The twelfth class requirement is not applicable to applicants from outside India, or to monks and nuns. Four places are reserved in each batch of new students for new arrivals from Tibet, monks and nuns, and students from the Himalayan region. The course in the school lasts for five years, after this the students must study for a further year in one of the branch clinics. As well as studying Tibetan medicine, the students also take

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<sup>15</sup> The following information about the Tibetan Medical and Astrological Institute in Dharamsala comes from interviews I carried out with one of the teachers in the institute, Dr Thokmey Paljor, and the Information Guide, published by the Institute in 1997 (Men-Tsee-Khang 1997).

classes in Tibetan grammar, poetry, and western science (this includes lessons in biology, human anatomy and physiology, infectious and parasitic diseases, disease prevention, nutritional diseases, and the immune system). Dr Thokmey Paljor told me that the students are encouraged to memorise all of the *Gyushi*, but they are only required, for the course, to memorise important sections of the text. Periodically they have written and oral examinations. On graduating, the students have the choice as to whether they would prefer to work in a clinic, in the research department, or in the pharmacy; most students choose the clinical option.

Recently, two new Tibetan medical schools have been established in India. The first was established in 1992 in Darjeeling by Trogawa Rinpoche. When I visited the school in 1996, two groups of students were studying there. The course consists of five years of study in the school, followed by two years of study in a clinic. Trogawa Rinpoche taught in the TMAI in Dharamsala from 1964 to 1967. As one of the few remaining lineage holders of the Chagpori system, he established the school, which is also named Chagpori, to preserve this lineage. In addition to their lessons in medicine, the students are also taught the spiritual practices related to this lineage. The school is associated with the TMAI in Dharamsala; the two teachers at the school are both graduates from the TMAI, and the final exam for the Chagpori students is organised by it. The second school is part of the Central Institute of Higher Tibetan Studies in Sarnath. The medical department was established in 1993. The teacher, Lobsang Tenzin Rinpoche, studied medicine privately in Lhasa. The course again involves five years in the school and a further two years of clinical training. As the Sarnath Institute is an Indian University, at the end of their course the students will receive a medical degree.

In Tibet itself, shortly after the Chinese invasion in 1959, the Mentsikhang in Lhasa was temporarily closed and the future of Tibetan medicine, as for Tibetan culture in general, became extremely uncertain. In the political climate that ensued, Tibetan medicine was lumped together with Tibetan religion and derided as little more than superstition by the Chinese authorities. During the Cultural Revolution nearly all of Tibet's medical institutions were destroyed along with most of its monasteries. This situation changed after the Third National Assembly, when the Chinese authorities,

realising that Tibetan Medicine could provide cheap and effective remedies, began to support it (Tsenam 1995). The Menstsikhang was enlarged to include a hospital with 150 beds and a medicine factory. Like the schools in India, the medical course at the Institute in Lhasa involves five years of theoretical training followed by two years of clinical practice. There are now numerous Tibetan Medical Institutes in towns in Tibet and China. Amchi Gege explained to me that there is also a large Bönpo medical school situated near Mount Kailash, based at the monastery of the famous Bönpo scholar Khyuntrul Jigmé Dorje (b 1897).<sup>16</sup>

### 1.3 Tashi Gyegay Thartenling Bonpo Medical School

The medical school in Dhorpatan is known as *Tashi Gyegay Thartenling* Bönpo Medical School. It was established in 1990 by Tsultrim Sangye, a Bönpo monk and Tibetan medical doctor (*menpa*) from the Khyungpo area of the Kham region of east Tibet, who is commonly referred to as Amchi<sup>17</sup> Gege. It is situated in the Gompa camp, the first of the five Tibetan camps as one approaches the valley from the east. Although very few Tibetans reside at the Gompa camp, it is important as it houses the only functioning Tibetan temple in the settlement, and the monks and lamas who minister to the community's religious needs.

The school is part of a medical complex, which includes a pharmacy and a clinic. When I first arrived in September 1996 these three areas of medical activity took place in and around Amchi Gege's living quarters. His small room served as both the classroom and clinic (see Plate 17). Leading off from his main room is a small anteroom, which was used variously as a kitchen, waiting room and pharmacy workshop. His room was only just big enough to accommodate his ten students. The space provided a conducive atmosphere for learning about medicine, as arranged around the room there was an abundance of medicinal compounds and raw ingredients. When patients arrived, they would either be seen in this room or in the

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<sup>16</sup> His monastery, founded in 1936, is called *Gur gyam do ngé drag gyé ling*. Khyuntrul Jigmé Dorje is the author of several important Bönpo medical texts, one of which, as will be discussed shortly, is one of the most important commentaries used in the medical school in Dhorpatan.

<sup>17</sup> 'Amchi' is the Mongolian title for a doctor, also commonly used in Tibet.



**Plate 5** - The Medicine Store, which is located next to Amchi Gege's room, was also where Nyima and Yungdrung stayed.

enclosed grassy area in front of it. Patients most often came early in the morning, either before the first lesson of the day or during it. These two activities taking place in the same location resulted in an amorphous boundary between the clinic and the classroom; a formal classroom teaching context could quickly be transformed into a direct clinical experience. Next door to Amchi Gege's room was another room, which served at the same time as a medicine store, pharmaceutical workshop, and bedroom for two of the students (see Plate 5).

All the activities of the clinic and school are sponsored by the French charity, *aide à l'enfance Tibétaine* through the Swiss Snowlion Foundation in Kathmandu. The sponsorship pays for the clinic and the education of the students. Financial support had also been given to construct a new medical building. When I arrived in September 1996, work on this new building was well underway. It was finally completed and inaugurated according to Tibetan custom in September 1997. As a consequence of the building activity much of the normal routine of the school was disrupted during the time I was in Dhorpatan. The new building is situated close to Amchi Gege's room. It has been constructed in a traditional Tibetan style with a large walled garden at the front where a wide selection of medicinal plants is grown. The building has two storeys. The ground floor includes a pharmaceutical workshop, a dispensary, schoolroom and two rooms for in-patients. The upper floor contains two rooms: Amchi Gege's *chö khang*, this is the room he uses for ritual and religious activity, he has also now moved his collection of medical books here; next to this is a large room, which is used as a medicine store and for drying freshly harvested medicinal plants. When I left Dhorpatan in November 1997 most medical activities still occurred in and around Amchi Gege's room.

The medical school is ideally located. The area of Dhorpatan is very rich in medicinal flora; about 150 plants that are used in the Tibetan pharmacopoeia can be found in easy walking distance from the medical building. More types of medicine can be found if one goes further afield, as the students do during the summer and early autumn months. However, some important common medicinal ingredients must be bought in Kathmandu. This is sometimes a costly affair, for instance one *dola* (a Nepalese measurement equivalent to about eight grams) of musk currently costs

around four thousand rupees (£40) in Kathmandu. As very little is charged for the treatment provided at the clinic, it relies on the sponsorship of the French organisation to fund its activities.

#### 1.4 The Teacher and the Head Lama

Every evening between seven and eight I ate *thugpa*<sup>18</sup> in Amchi Gege's room with the other students and monks staying in the Gompa camp. This was always served shortly after the evening prayers, which took about an hour to complete. Before the prayers, Amchi Gege would commence spinning his large hand-held prayer wheel and continue until the prayers were finished and food was served. After eating he would either continue to spin the prayer wheel and chat with the others, or he would become engrossed in some religious or medical text. Quite often, when the mood took him, Amchi Gege would question me about life in Britain.

On one such evening, we were all sat around amidst the shadows cast by the kerosene lamp and I was responding to a question about the British royal family. Afterwards there was a period of silence. This was broken by Amchi Gege saying that his king was born from an egg. This story refers to Khyungpo, the area of Kham in east Tibet, where Amchi Gege comes from. *Khyung* is the Tibetan word that corresponds to the Indian mythological eagle known as the *Garuda*. The *Khyung* eagle is featured in both Tibetan Buddhist and Bön Tantric texts, but it is especially important in the Bön religion. I was told that in Tibet there are two lineages connected with the *Khyung*, one white and one red. The red *khyung* lineage is connected with kingship in the Khyungpo region.<sup>19</sup>

In Khyungpo there is a high concentration of Bönpo communities. Before taking monastic vows Amchi Gege lived in Tibet as a Bön *ngagpa* practitioner, that is a class of non-celibate Tantric practitioners. When he took monastic vows he received the

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<sup>18</sup> A traditional Tibetan stew.

<sup>19</sup> On the origin of the *Khyung* lineage, see Jackson (1984:137-8).

name Tsultrim Sangye. His mother always called him 'Gege' which he told me means 'virtue'; this is the name that everyone still uses. He was born in 1938. He comes from a family medical lineage (*gyu pa*). His father was more interested in business than medicine so he studied under his grandfather and other *Amchis* in Tibet. When he was young he wanted to study at Drepung medical college, but the Chinese would not allow Tibetans from Kham or Amdo to do this. He became a practising Tibetan doctor after six years of study, but since then he has continued to increase his knowledge and refine his practice. He has a very high reputation amongst Tibetans for his medical knowledge. Before coming to India he was imprisoned by the Chinese for nine years for activities opposing their political regime in Tibet. In prison he found himself amongst a number of other prominent Tibetan doctors, including Khenpo Troru Tsenam, the present head of the Lhasa medical school.

He has a reputation amongst Tibetans in Dhorpatan for being truculent and quick tempered. Quite often I saw him in heated arguments with Tibetans over various issues relating to the community. On the first day that I met him, the Tibetan girl who escorted me to the school told me that she would have liked to have studied Tibetan medicine but she was afraid of Amchi Gege. There was a tinge of humour in her voice, but her comments were not entirely without foundation; Amchi Gege maintains a very strict hand of discipline in the school. During one conversation I had with Nyima, the senior medical student, he told me that Amchi Gege believes that men should have their hair either completely shaved off, or very long. This reflects Amchi Gege's origins in the Kham region of Tibet where it is the custom for laymen to grow their hair long and wrap it around their head with coloured string attached to it. Khampa men generally have a reputation for being stern and wild to the point of belligerence, and Amchi Gege is no exception to this.

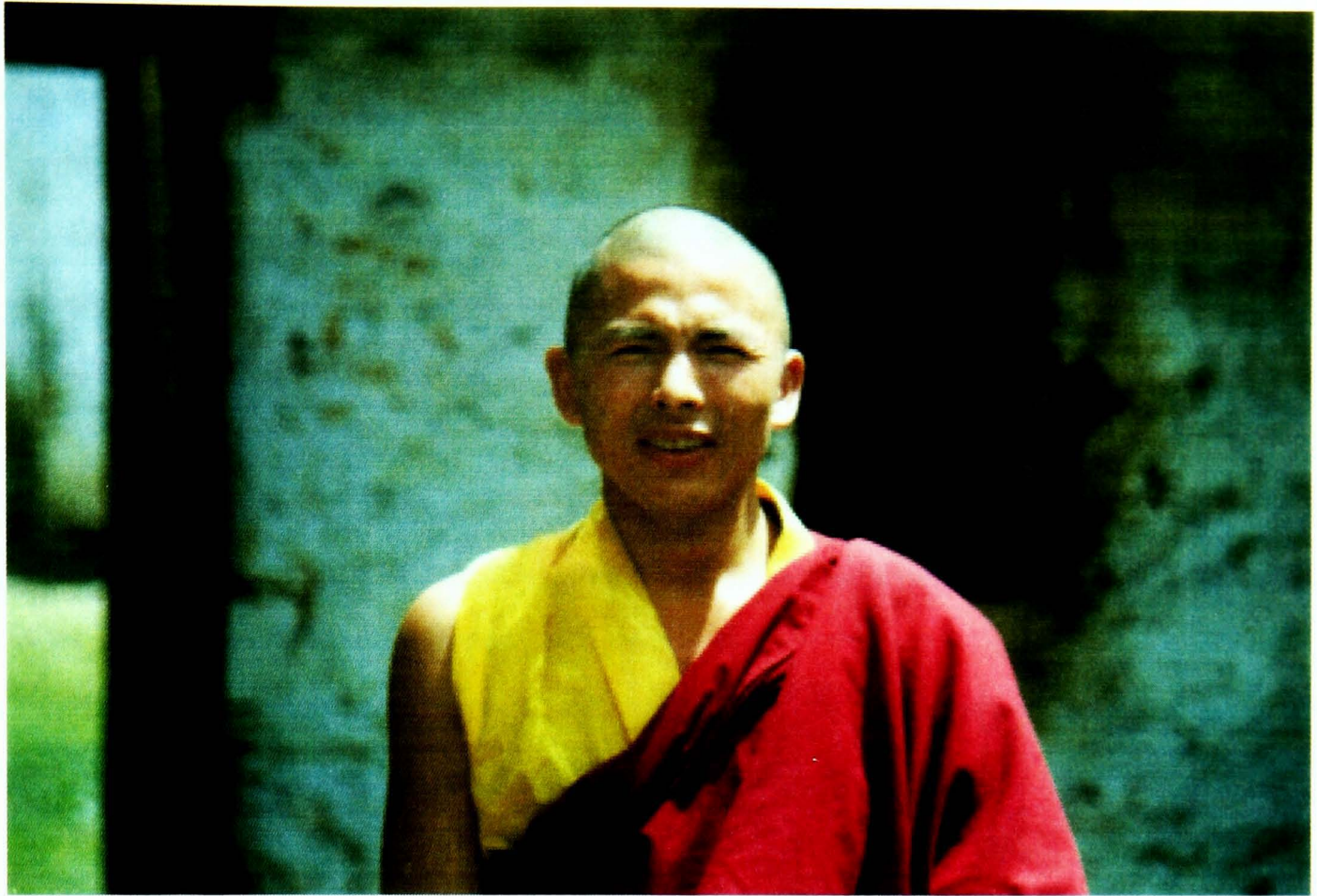
On the other hand, Amchi Gege, as well as being a Tibetan medical doctor is a devout monk, and as such his head is always closely shaven. Whenever he had a spare moment he would usually take the opportunity to read religious texts, and there was hardly ever an occasion when he missed his evening prayers. He has a strong belief in the Bön religion, and he is a staunch upholder of Tibetan values and customs. He has a great generosity, and if it is within his power he would often help people out



**Plate 6** - Amchi Gege and Geshe Tenzin Dargye.



**Plate 7** - Amchi Gege drying out medicinal plants.



**Plate 8** Geshe Tenzin Dargye.



**Plate 9** - Geshe Tenzin Dargye, Nyima and Tsering Lhamo, drying medicines.

with their problems, both Tibetans and Nepalese. He also proved on many occasions to be a great raconteur, usually after the evening meal, holding those present captive with stories about lamas in Tibet or anecdotes from his experiences in Kham.

Of almost equal importance to Amchi Gege in the area of health care was the young head lama of Dhorpatan, Geshe Tenzin Dargye (see Plates 6, 8 and 9). He had studied in the dialectics school at Menri Bönpo monastery at Dolanji, and after passing his final examination and achieving the title of *Geshe*, he had been sent to serve as the lama in Dhorpatan by the abbot of Menri, Sangye Tenzin. Tenzin Dargye is the name he acquired when he passed his *Geshe* examination, before that his name was Tamdrin, a name which many people still use.

His mother and father met as refugees in the Jomsom area of lower Mustang, where Geshe Tenzin Dhargye was born and spent the first years of his life, mostly looking after his family's goats. At the age of nine he was sent to Dolanji and ordained as a monk. His mother was born in west Tibet, and his father in the Amdo region of northeast Tibet; Geshe Tenzin Dhargye always identified himself with Amdo.

In 1998 he was thirty-one years old. The position of head lama in Dhorpatan is not an easy task and requires a person who combines a considerable knowledge of Tibetan religion and ritual with a certain capacity for diplomacy. From my experience of him not only did he have these qualities, but he also had a dynamic and strong willed nature and infectious sense of humour. Although Amchi Gege was considerably senior to Geshe Tenzin Dargye in terms of age, he always deferred to his superiority in terms of the monastic scale, but not always without some tension.

As Tibetan medicine to a large extent overlaps with Tibetan religion, Geshe Tenzin Dargye played an important role in clinical contexts, sometimes overshadowing that of Amchi Gege. Amchi Gege, as a senior Bönpo monk, was thoroughly conversant with Tibetan rituals that are used in healing contexts, but he usually passed on all these kind of activities to Geshe Tenzin Dargye who was assisted in this task by Amchi Gege's monk students. Chapters seven and eight are devoted to the use of ritual in healing that I observed in Dhorpatan and the way that the students were involved in these rituals.



**Plate 10** - Nyima



**Plate 11** - Chunsom preparing medicinal compounds.



**Plate 12** - Amchi Gege's three monk students pounding medicinal ingredients, Tundup (left), Yungdrung (centre), and Sonam (right).



**Plate 13** - Amchi Gege's students reciting the ritual texts of the annual Jamma ritual. Behind the monk holding the text on the left, from left to right are Nyima, Sonam, and Yundrung. Tundup is holding the text on the right, behind him is Phuntsok.

## 1.5 The Students

For most of the time that I was in Dhorpatan there were ten medical students, four girls and six boys (see Plates 10, 11, 12 and 13). The reason they entered the school seems partly because of their own interest and partly the prompting of their parents. The high representation of female students derives from the stipulation of the school's sponsor. Amchi Gege told me that traditionally in Tibet there were female Amchis, but very few. Initially three of the boys were monks, but after about a year of my stay at the school they gave it up. They had become monks after they had entered the medical school. Although there is no rule that students at the school should be monks, there is no doubt that this is Amchi Gege's preference, this is because of the large area of overlap between the Tibetan medical and religious domains. When they decided to give up their robes, for a period of time it was uncertain whether Amchi Gege would allow them to continue with their studies. He agreed, but only after the earnest intervention of their parents. The eldest male student in the school comes from a *ngagpa*<sup>20</sup> lineage in Mustang and as such he is well versed in Tibetan religion and ritual techniques. The two other male students, though not ordained as monks, were expected to don the monk's habit at times of important rituals. Through serving as assistants in the ceremonies in the temple they had also acquired a good practical knowledge of Tibetan ritual.

When I asked the students why they had taken up medicine, the usual reply was that they wanted to be able to help people. Some of them also answered that they were doing it to support the Bön religion. None of them had any idea about what the future might hold for them as medical practitioners. Nobody had entered the school with a solid idea about making a living from practising medicine after they had finished their studies. They were all of the opinion that whatever might unfold in the future, in terms of a medical vocation, would be determined by Amchi Gege, when the occasion arose.

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<sup>20</sup> For a detailed discussion of a *ngagpa* lineage in the village of Lubra in lower Mustang, see Ramble (1985).

All the students, with exception of the eldest student, Nyima, were born and brought up in Dhorpatan. The six male students were as follows. Thundup Gyaltzen, aged twenty-two,<sup>21</sup> who in 1998 had been studying for eight years. The families of all the male students are Bönpo with the exception of Thundup; his family are Buddhist but they were quite content that he had become a Bönpo monk. He is the tallest of the students and I was always taken aback by his great appetite for the simple Dhorpatan food. He also seemed to have a great capacity for memorisation, and a disposition towards laughter and joking at slightest possible opportunity.

Yundrung Lhazon, aged nineteen, who had been studying for five years. He told me that his maternal grandfather had been an Amchi, but as he himself pointed out, this does not mean he is from a medical lineage (*gyu pa*) because for this to be the case, the lineage should be on the father's side. Although Yungdrung had not studied as long as some of the other students, from conversations I had with him it seemed he had acquired a good grasp of the principles of Tibetan medicine. He was definitely keen to learn Tibetan medicine but at the same time he was also the student who was most openly critical of the teaching method in the school. Yungdrung had also taken up monk's robes when he entered the school.

The third of Amchi Gege's monk students was Sonam Tenzin, aged twenty-three, who had been studying for eight years. He was of a more sober disposition than Yungdrung or Tundup and less given to joking around. Yungdrung and Sonam were particularly prone to telling me stories about supernatural phenomenon they had encountered or heard about in the valley. I will recount some of these stories in chapter seven. Amchi Gege's two youngest male students were Tsultrim Tenzin, aged seventeen, and Phuntsok, aged sixteen, both of whom had been studying for three years.

The senior medical student in the school in terms of age and experience in medicine was Nyima Samphel, aged twenty-eight. He had been studying in Dhorpatan for five years. Nyima is different from the other students in that his family come from the village of Jharkot in Mustang. He belongs to both a Bönpo *ngagpa* and a medical

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<sup>21</sup> The Tibetan convention is to include in the age the time the child was in the womb, therefore when I asked him his age, he said twenty-three.

lineage and had been taught medicine by his father before he was sent for education at the Bönpo settlement at Dolanji near Simla in North India, where he studied to eighth class at school. During his stay at Dolanji he also studied medicine with Sangye Tenzin, the thirty-third abbot of the famous Menri Bönpo monastery, which has been re-established here. He had been sent to Dhorpatan to complete his medical training with Amchi Gege. He had a very good knowledge of medicine and proved immensely useful to me in my attempts to understand the learning processes in the school.

The following were the four female students. Tsering Lhamo and Lhasom, both of whom were aged eighteen, had been studying for seven years, and came from Buddhist families. Tsering Lhamo whose name was generally contracted to Tsela was one of the most outspoken of the girls. She was also generally thought of as being one of the most attractive Tibetan girls in the settlement, and had many admirers. The other two girls were Monlam, aged twenty-two, who had been studying for eight years and Chunsom, aged seventeen, who had been studying seven years. Monlam's family is Bönpo; Chunsom's father is Buddhist and her mother, who had died some years before, was Bönpo. Nyima, Tsultrim and Phuntsok all dressed in western style clothing, the girls all wore traditional Tibetan style clothing.

Both Tsela and Chunsom had quite outgoing natures, Monlam and Lhazom by contrast were quite shy, at least when they were near older Tibetans and me. When all the girls were together and Amchi Gege was away the scene could verge on the riotous. Whenever the opportunity arose they would seize it to tease the male students. I remember one afternoon hearing some commotion outside. Looking through my window I saw one of the local goats wearing Sonam's underpants that he had washed and left hanging to dry outside his room. The girls were some distance away having a good laugh at his expense.

The primary school in Dhorpatan can only cater up to fifth class. Prior to entering the medical school this was the only formal education most of the students had undergone. Chunsom and Lhazom had only completed second class at the school in Dhorpatan. The subjects they had studied at school were Nepalese, English, Tibetan, Science and Maths. Only Nyima, who had studied in India, had some reasonable ability in English. All the students were totally fluent in Nepalese.

## 1.6 Principal texts used in the school

### *The Bumshi and the Gyushi*

By far the most important medical text in the school is the *so rig bum shi*, ‘the four fold treatise on the hundred thousand healing arts’; it is usually referred to in short as the *Bumshi*. The Tibetan word *bum*, ‘one hundred thousand’, in this context, serves as an idiom to express great quantity. According to the Bön tradition the subject matter of the text was taught by the founder of the Bön religion, Tönpa Shenrab to one of his eight sons, Tribu Trishi, who then wrote it down in the language of Tazig. As such the *Bumshi* is a canonical text and is included in the Bönpo *Kanjur*. The *Bumshi* corresponds to the principal Tibetan Buddhist medical text, the *Gyushi*, ‘the fourfold tantra’. As we have seen, the Bönpo and the Tibetan Buddhists both claim their text to be authentic and the text of the other tradition to be plagiarised.

With the exception of a few minor differences in detail, the two texts are essentially the same. Where they diverge substantially is in the material that deals with the history of the medical teachings and the medical lineage. The *Bumshi* originates in Olmolungring where Tönpa Shenrab first taught it to his son Tribu Trishi. The whole of the text is structured as a dialogue between them; each section begins with Tribu Trishi requesting the teachings from his father. The *Gyushi*, on the other hand, was taught by the Medicine Buddha, *Bhaisajyaguru*, ‘the master of remedies’, in his palace, in the city of Tanaduk (‘beautiful to behold’). Here, from his body he magically emanates two sages. *Yilé Kye* as the embodiment of his speech requests the teachings, which are given by the emanation of his mind, the sage *Rigpé Yeshe*. The *Gyushi* is structured as a dialogue between these two sages.

Both texts consist of four volumes, which deal with different aspects of the medical lore. The *Bumshi* has one hundred and sixty-six chapters, and the *Gyushi* has one hundred and fifty-six<sup>22</sup>. This disparity arises from the few occasions when material that is covered in one chapter in the *Gyushi* is divided into separate chapters in the *Bumshi*. As the sequence of the course is related to the structure of the text, I will

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<sup>22</sup> See Appendix B for an outline of the contents of the *Gyushi*.

first outline the contents of each volume before moving on to discuss the sequence of the teachings.

### **Bumshi Volume 1**

Volume one of the *Bumshi* is called *Tsawa Thug Bum Kha Ngön*, ‘The Root One-hundred-thousand Essence of the Blue Sky’. It has seven chapters. The text begins by explaining the origin of the teachings in Olmolungring, it describes the different locations of Olmolungring and relates them to qualities of medicines. It then goes on to summarise the whole of the medicine teachings through the metaphor of a tree with three roots: the condition of the body, diagnosis and treatment.

### **Gyushi Volume 1**

Volume one of the *Gyushi* is called *Tsa Gyu* ‘The Root Tantra’. This consists of six chapters. The subject matter is the same as volume one of the *Bumshi* with the exception of the preliminary chapter, which describes the teaching of the *Gyushi* by the Medicine Buddha in city of Tanaduk.

### **Bumshi Volume 2**

The name of the second volume of the *Bumshi* is *Che Bum Trawo* ‘The One-hundred-thousand Multi-coloured Examinations’. This consists of thirty-one chapters. It covers anatomy and pharmacopoeia.

### **Gyushi Volume 2**

The second volume of the *Gyushi* is called *Shé Gyu*, ‘The Explanatory Tantra’. This consists of thirty-one chapters. The subject matter is the same as volume two of the *Bumshi*.

### **Bumshi Volume 3**

The name of the third volume of the *Bumshi* is *So Ché Né Bum Nagpo* ‘The Black One-hundred-thousand Remedies for Disease’. It has ninety-six chapters and deals

entirely with Tibetan disease categories, how they come about, and how they should be diagnosed and treated.

### **Gyushi Volume 3**

The third volume of the *Gyushi* is the *Men Nag Gyu* ‘The Instruction Tantra’. This consists of ninety-two chapters. The subject matter is the same as the third volume of the *Bumshi*.

### **Bumshi Volume 4**

The fourth volume of the *Bumshi* is *Namgyal Men Bum Karpo* ‘The White One-hundred-thousand Victorious Medicines’. It comprises of twenty-seven chapters, which give instructions on diagnosis and the different forms of therapeutic techniques.

### **Gyushi Volume 4**

The fourth volume of the *Gyushi* is called *Chi Ma Gyu* ‘The Final Tantra’. This consists of twenty-seven chapters. The subject matter is the same as *Bumshi* volume four.

As the texts are virtually identical it makes little difference whether the students study the *Bumshi* or the *Gyushi*, and indeed both texts are studied at the school; some students use one of the texts and some the other. Amchi Gege himself originally studied and memorised the *Gyushi*. The copies of the *Bumshi* that are used in the school are photocopies of a text written in the Tibetan *U-me* script, brought from Tibet by Lopon Tenzin Namdak in 1989. He told me that although most copies of the *Bumshi* had been lost or destroyed, a few copies did remain sequestered in various locations. As have I mentioned in the previous section, he informed me that there had been a copy in the Library of Menri monastery in Tibet.

Outside the Bönpo community, very few people have seen the text. When I asked about the text to Dr Thokmey Paljor, who teaches Tibetan medicine at the Tibetan Medical Institute at Dharamsala, he told me that he had heard of it but had never seen a copy. In 1999 the *Bumshi* was printed for the first time in western style book form

in the U-Chen Tibetan script. As Amchi Gege is a devout follower of the Bön religion, the main medical text used in the school is the *Bumshi*, when the *Gyushi* is used it is done with an awareness that it is an almost exact copy of the *Bumshi*.

### **Khyungtrul Men Pe**

The second most important medicine text used in the school is the commentary to the *Bumshi* written by the famous Bönpo lama and scholar Khyungtrul Rinpoche. Khyungtrul Rinpoche, whose full name is Khyungtrul Jigme Namkhai Dorje, was born in the Ngari region of West Tibet in 1897. He passed away in 1956. Khyungtrul Rinpoche was a renowned scholar and wrote many texts, his medical work is generally referred to as *Khyungtrul Men Pe*.<sup>23</sup> It consists of four volumes, the first three are commentaries to the various sections of the *Bumshi*, and the fourth discusses the manufacture of medicine.

These are the main texts that are used in the school by the students. The students have access to other medical texts such as commentaries and pharmacopoeias, but the main body of their studies is based on the *Bumshi*, the *Gyushi*, or Khyungtrul Rinpoche's commentary. Amchi Gege has a large selection of texts dealing with all aspects of Tibetan medical practice. Whenever he is teaching from the *Bumshi*, he always has several commentaries at hand to bring lucidity to the terse passages of the main text. He often uses Sangye Gyamtso's famous commentary to the *Gyushi*, *The Blue Beryl*. On several occasions I observed the head lama in Dhorpatan and Amchi Gege totally bemused at the way that what they considered to be Bönpo medical knowledge had been incorporated into this primarily Tibetan Buddhist medical text. As we saw in the previous chapter, this could be due to the wide range of sources that Sangye Gyamtso consulted before he made his edition of the *Gyushi*.

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<sup>23</sup> Most of his texts appeared as lithographic editions printed in Delhi between 1945 and 1956. His four medical works were published by the Tibetan Bönpo Monastic Centre at Dolanji in 1972.

## 1.7 The Course Syllabus

As can be seen from Table 1.1 the course syllabus at the medical school lasts for nine years. However, in an information leaflet about the college that Amchi Gege made, it is explained that the duration of the course is related to the student's capacity to learn. The student with the highest capacity would take five years, for a medium capacity student it would take seven years, and for someone of the lowest capacity it would take nine years. This is a typical Tibetan cultural idiom. The time sequence of the programme is not kept to so rigidly; if other work arises then the students must

Year	<i>Bum Shi Text</i>	Chapters	Length of Study	Subject
1 <sup>st</sup>	<i>Tsawa Thug Bum Kha Ngön</i>	1-7	6 months	Condensed summary of medical teachings
	<i>Namgyal Men Bum Karpo</i>	1 and 2	4 months	Urine and Pulse diagnosis
2 <sup>nd</sup>	<i>Namgyal Men Bum Karpo</i>	3, 4 and 5	6 months	Medicine composition
	<i>So Ché Né Bum Nagpo</i>	1-10	4 months	Specific diseases
3 <sup>rd</sup>	<i>So Ché Né Bum Nagpo</i>	11-23	10 months	Specific diseases
4 <sup>th</sup>	<i>So Ché Né Bum Nagpo</i>	24-48	10 months	Specific diseases
5 <sup>th</sup>	<i>So Ché Né Bum Nagpo</i>	49-73	10 months	Specific diseases
6 <sup>th</sup>	<i>So Ché Né Bum Nagpo</i>	74-90	10 months	Specific diseases
7 <sup>th</sup>	<i>So Ché Né Bum Nagpo</i>	91 and 92	10 months	Specific diseases
	<i>Namgyal Men Bum Karpo</i>	6-19		Medicine composition
8 <sup>th</sup>	<i>Namgyal Men Bum Karpo</i>	20-27	10 months	External treatments and conclusion
	<i>Che Bum Trawo</i>	1-21		Various
9 <sup>th</sup>	<i>Che Bum Trawo</i>	22-31	10 months	Various

**Table 1.1 The Course Syllabus**

assist with this. In practice what this amounts to is all the students taking nine years or more to finish their studies.

A major source of disruption, which prevailed throughout most of the time I was in Dhorpatan, was work on the new medical building. Other tasks entailed carrying out

odd jobs within the school and clinic, and helping out with the various rituals that had to be done for the community or for patients. As we will see in chapter seven, in the spring and in the summer, certain annual rituals must be performed to ensure the health and prosperity of the community. Amchi Gege, in his capacity as a senior monk, together with his monk students, must help with these rituals. As well as the annual rituals, there are other rituals that need to be performed in the community as need arises, and these also usually require the services of Amchi Gege and his monk medical students. For instance, during the two-year period that I was in Dhorpatan, five Tibetans died, and lengthy rituals had to be performed on each occasion. Another major disruption to the students' lessons came from the demands of the clinic. Patients usually came early in the morning, but they also turned up at all times during the day. A further time-consuming activity was the gathering of medicinal plants and the manufacturing of medicines; these activities happened periodically throughout the year. The powdering of raw medicinal material can be a long, arduous process.

All this extracurricular activity meant that the normal routine of the school often went by the wayside. This largely explains the disparity between the years the students had been studying and the stage they had arrived at in the official course syllabus. When I left Dhorpatan in August 1998, three of the students had been in the school for eight years; this however does not mean that they had completed eight years of study. Sometimes days, even weeks went by when hardly any teaching occurred in the classroom. This was extremely frustrating for the students.

The approach of the medical school straddles that of the modern, Western-style school method, and that of the traditional Tibetan approach. In keeping with Tibetan tradition, in return for receiving teachings from Amchi Gege the students must help out with any work he needs doing. The sequence of the teachings was also broken by Amchi Gege deciding at a certain point to teach about specific diseases in the morning lesson and the chapters on medicines and external treatments found in the fourth volume in the afternoon lesson. Every year there are ten months of lessons; the school is closed for two months during the winter.

## 1.8 The Daily Routine

Most days at the school follow the same pattern. The school is open from Monday to Saturday; Sunday is holiday. Each week one of the students served as cook. The day began at five o'clock in the morning when the students staying at the school (the three monk students and the eldest student Nyima) awoke and began to memorise their texts. The students who lived with their families were also supposed to do this. At 7 a.m. the students staying at the school gathered in Amchi Gege's room and recited various prayers with him: the Bönpo lineage prayers, prostration prayers, *bodhicitta* prayers, guru yoga prayers, the twelve requests of Tönpa Shenrab, the Medicine Buddha prayers, and prayers for the religious protectors. At about 7.30 a.m. breakfast was served.

After breakfast the students had free time until 9 a.m. when the first lesson of the day commenced. The other students would arrive shortly before it. After the lesson at ten o'clock, for fifteen minutes the students got together in pairs, and revised what they had learnt in the lesson. It was supposed to be a process of verification through discussion, but usually entailed one of the students going through what had been taught in the lesson while the other listened and made the occasional comment. The Tibetan name for this is *go dur*. After this they had a fifteen minute break, and then from 10.30-12.00 they had to memorise the text. Beginning around noon they had a two hour lunch break.

The next lesson began at 2 p.m., which was followed at 3 p.m., like the morning lesson with fifteen minutes discussion. From 3.15-5 p.m. the students again had to memorise their texts. At 5 p.m. the students who stayed with their families went home; the students who stayed at the school congregated in Amchi Gege's room and had tea and *tsampa*. They returned to his room at 6 p.m. to recite various prayers for about an hour. Between 7 and 7.30 p.m., the evening meal was served. After this the students were expected to return to their rooms and again set about the task of memorising their texts. The students who were staying with their families were also expected to do this in the evenings.

At 10 a.m. every day I also had a one-hour lesson with Amchi Gege, which the students often attended by way of revision. When I first arrived in Dhorpatan the students were also being taught Tibetan astrology in the mornings by the head Lama of the Bönpo community, Geshe Tenzin Dhargye, but Amchi Gege stopped this after some time, as he thought it was detracting from their medical studies. The same fate befell the English lessons that I was giving to the students at the beginning of my stay. The above routine was the standard pattern of events, though as I have said, this was often disrupted by various types of work that required to be done.

## **1.9 Exams and Course Assessment**

Student progress is assessed in three different ways: their theoretical knowledge is assessed formally through written examinations, and informally during the classes; their memorisation is assessed formally by frequent examinations; and their ability to apply what they have learned is assessed informally in clinical contexts. Amchi Gege teaches his students in a way that he considers faithful to Tibetan tradition. He explained to me that he teaches in the same manner as he himself was taught. Having said this, he admits that there are a number of differences between the traditional Tibetan approach that he experienced and what occurs in the school. Amchi Gege was not part of a cohort of students and there was no set routine to the way he was taught and assessed. In the school much of the teaching and assessment occurs according to a routine, at least this is the ideal. The normal procedure is for there to be two written exams every year: one in the summer and one towards the end of the teaching year. If the students fail the exam they are given a chance to do it again; in principle they must pass the exam before they can continue with the course material. During my stay in Dhorpatan the regularity of all exams was disrupted by the students having to help with the building of the new school and clinic.

The students understanding of the medical knowledge and their ability to apply this knowledge practically were constantly being assessed in various informal ways. Whilst Amchi Gege was teaching he would spontaneously ask students questions, sometimes only remotely connected with the subject matter he was teaching at that time. Whenever patients came, after Amchi Gege had first made a diagnosis, he would often

ask one or two of the students to attempt to verify his findings. Sometimes all the students would be brought together to give their opinion about something of particular interest, such as a symptom, or a certain type of urine.

### **1.9.1 Memorisation Assessments**

The students were frequently tested on the level they had reached in memorisation, and their retention of previously memorised sections. Usually at the end of each week Amchi Gege tested the students on the level of their memorising. There is a big memorising exam every six months where the students must recite a large section of the text in front of Amchi Gege. What follows are my observations of one such exam.

On the morning of the exam all the students were sat in the grass courtyard outside Amchi Gege's room, memorising their texts with an uncommon fervour. The exam was not to begin until later in the afternoon and so the students were taking any chance they could to bring their memorising up to standard. During the morning there was a tangible nervous tension in the air. At three o'clock I was called to Amchi Gege's room. He had given consent to my request to be able to sit in on the exam. The first student arrived and sat cross-legged adjacent to him. The student explained which section he was going to recite, and after a short pause he began. He was reciting a section of the third volume of the *Gyushi*. He had his head slightly down all the time, and he recited the memorised section very quickly. Occasionally he had lapses in his memory. To overcome this he would start his recital from an earlier section, each time he did this he managed to overcome the problem. As the student carried out the recitation, Amchi Gege followed the section in the text looking for any deviation from the original, occasionally he made a quick comment, but most of the time he remained in attentive silence.

The second student recited a section from the fourth volume of the *Bumshi*. He made more mistakes than the first student, but by adopting the same technique of retracing his steps, and continuing, he managed to complete the section. The third student was the youngest student in the school. He had memorised a section from the third volume of the *Gyushi*. He started well, but after some time he began to lose his concentration. A few lapses of memory were overcome by the method of retracing his

steps, but eventually he hit a complete block and could not continue. He began to laugh nervously; this was soon brought to an end by Amchi Gege's stern look.

The recitation of each student lasted between five to ten minutes. In order to complete the full recitation it was essential that the student remained fully concentrated. This was made all the more difficult with the awareness that they were being meticulously scrutinised, and on top of this there was the constant repetitive chorus of the other students outside rehearsing their sections. The recitations were conducted at great speed; the student could only have been vaguely aware of the meaning of what they were saying. The recitation appeared to occur on a level at some remove from the conscious mind. Whenever the conscious mind intervened, whenever there was a shift, however fleeting, back to the level of consciousness, this was accompanied by a disruption in the flow. When each student finished, Amchi Gege left a piece of paper in the text, as an official marker of the stage where each had reached.

### **1.10 Legitimation**

A major problem that the school faces is how it can legitimise its newly graduated medical practitioners according to some commonly accepted criteria. Broadly speaking, there are two requirements that must be fulfilled: it must be recognised as a genuine medical school with the power to confer a medical qualification by the Tibetan authorities; and the qualification must be recognised in the country where the newly graduated students wish to practise. For the Tibetan medical school at the Institute of Higher Tibetan Studies at Sarnath, as it is an Indian educational institute, the qualifications it confers are fully recognised by the Indian Department of Education. The qualifications given at the TMAI at Dharamsala are not officially recognised by the Indian Department of Education; however, recognition by the Tibetan Government in Exile is enough sanction for the new doctors to practise in one of the Institute's thirty-five branch clinics. Through its association with the TMAI, the same also applies to the students who graduate from the Chagpori medical school.

According to the traditional Tibetan approach, medical students who were trained through family lineages, or through apprenticeship with a doctor, were examined by

recognised doctors at the end of their studies. This examination sometimes took place in front of the local community, as it still does today in Ladakh.<sup>24</sup> On passing this exam, the newly graduated doctor did not receive a formal qualification or certificate, but the sanction to practise through the recognition of established doctors and the local community. Amchi Gege had come through such a system. Although he is widely acknowledged for the depth of his medical knowledge and clinical experience, he has no formal qualification in medicine. It would be possible for his students to practice within Tibetan communities, but if they want to widen their career options, they need to have recognised qualifications.

According to Carr-Saunders and Wilson's (1933) classic study, professions are occupation groups whose practitioners are bonded together through formal associations. Through the professional association, institutional structures are established with the aim of: improving technical knowledge; educating novices; regulating standards of practice; excluding the unqualified; and improving the standards of qualified practitioners (Leslie 1972:40). According to this definition, up to the present, Tibetan doctors have never formed a professional group, though it could be argued that the new emphasis on acquiring qualifications and the dominance of medical institutions such as the Medical Institute in Lhasa and the TMAI in Dharamsala are indications that Tibetan medicine is presently undergoing a process of professionalisation.<sup>25</sup> Whereas before it was not necessary to acquire formal recognised qualifications to practise medicine, now it is becoming increasingly the standard pattern.

The medical students at TMAI, Chagpori, and Sarnath, have an occupational structure lying ahead of them. The Sarnath students, because they will have an officially recognised Indian qualification in Tibetan medicine, will be able to find employment in Tibetan medical clinics or in Indian clinics. The students from Chagpori and TMAI, could either work in one of the branch clinics or in

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<sup>24</sup> For a study of Amchi practice in Ladakh see Millard (1992).

<sup>25</sup> The classic study of medicine as a profession is Freidson's *Profession of Medicine* (1970). On the process of professionalisation amongst Ayurvedic and Unani practitioners in India, see Leslie (1972); for similar processes in Africa, see Last and Chavunduka (1986).

pharmaceutical or research contexts. For the school in Dhorpatan the picture is different and the legitimation process is not going to be simple. When I asked Amchi Gege about this, he replied that Sangye Tenzin, (the present abbot of Menri monastery at Dolanji, and the spiritual head of the Bönpo community), or Lopon Tenzin Namdak (the head teacher of the Bönpo), both whom are highly respected and widely recognised authorities on the Bön religion and Tibetan culture in general, will prepare and assess the final exam. But he realises that this in itself will not solve the problem of legitimation. By 1998 no students had graduated from the school and the issue remained to be solved.

One obvious solution to the legitimation problem facing the medical school in Dhorpatan would be to get it fully recognised by TMAI and the Tibetan Government in Exile. The present settlement officer had already enquired about this possibility. It appears that if the school is to be recognised by TMAI, it would have to have some say in the assessment of the students, as it does with the Chagpori school. But this would be difficult because, unlike the students at Dhorpatan, the students at TMAI have mostly studied to the twelfth class at school, and in their medical exams they are assessed on their understanding of Tibetan grammar and English. In addition to this, given the history of the predominantly Buddhist Tibetan administration's attitude towards the Bön religion, there is likely to be some reluctance to officially recognise a Bönpo medical school.

My aim in this chapter has been to give relevant background information about the medical school in Dhorpatan, before I move on to consider different aspects of the medical knowledge that is taught in the school and the manner in which it is transmitted. I have introduced the teacher, the head lama and the students and the arena of learning: the pharmacy, clinic and classroom. I have outlined briefly the contents of the main medical text and when its different sections are taught in the course syllabus. I have also briefly introduced the daily routine in the school.

We have seen that Tibetan historiography presents three views on the origin of the principle medical text of Tibetan medicine: the first view holds that it originally existed in Sanskrit and was translated into Tibetan by Vairocana in the eighth century;

the second view contends that the *Gyushi* is of Tibetan origin and was composed by Yuthog Yontan Gontan Gompo the Younger in the twelfth century; the third view is that the *Gyushi* is a 'transformation' of an original Bönpo medical text known as the *Bumshi*. This third perspective is that held by Amchi Gege and consequently as the *Bumshi* and the *Gyushi* are virtually identical he uses both texts in his school.

We have also seen that like other contemporary Tibetan medical schools Amchi Gege has made some concessions to modernise the teaching of Tibetan medicine, such as having a set curriculum, timetable and formal assessments. But as we will see he still strongly values the way that he was taught in Tibet, for instance unlike the other contemporary Tibetan medical school that I have discussed, the students in Dhorpatan have to memorise all of the main medical text. We also saw that there is no strong demarcation between Tibetan religion and medicine in the school. In certain medical contexts the role of the head lama of Dhorpatan, Geshe Tenzin Dargye, supersedes that of Amchi Gege.

## Chapter 2 Learning Processes – Theoretical Orientations

‘Now, what I want is, Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else, and root out everything else. You can only form the minds of reasoning animals upon Facts; nothing else will ever be of any service to them. This is the principle on which I bring up my own children, and this is the principle on which I bring up these children. Stick to the Facts, sir!’

The scene was a plain bare, monotonous vault of a schoolroom, and the speaker’s square forefinger emphasized his observations by underscoring every sentence with a line on the schoolmaster’s sleeve. The emphasis was helped by the speaker’s square wall of a forehead, which had its eyes for its base, while his eyes found commodious cellarage in two dark caves, overshadowed by the wall. The emphasis was helped by the speaker’s mouth, which was wide, thin and hard set. The emphasis was helped by the speaker’s voice, which was inflexible, dry and dictatorial. The emphasis was helped by the speaker’s hair, which bristled on the skirts of his bald head, a plantation of firs to keep the wind from its shining surface, all covered with knobs, like the crust of a plum pie, as if the head had scarcely warehouse-room for the hard facts stored inside. The speaker’s obstinate carriage, square coat, square legs, square shoulders – nay, his very neckcloth, trained to take him by the throat with an unaccommodating grasp, like a stubborn fact, as it was – all helped the emphasis.

‘In this life, we want nothing but Facts, sir; nothing but Facts!’

The speaker, and the schoolmaster, and the third grown person present, all backed a little, and swept with their eyes the inclined plane of little vessels then and there arranged in order, ready to have imperial gallons of facts poured into them until they were full to the brim (Dickens [1854] 1966:1).

This thesis is about learning processes in a Tibetan medical school. In the following chapters I will consider the various elements of medical education and the manner in which the students are gradually inducted into medical practice. In this chapter I will outline the model of learning that I have used to understand this process. The process of acquiring competency as a Tibetan medical practitioner is a process of acquiring new ways of perceiving and knowing. The Tibetan medical system has its own rules of pathology, nosology, diagnosis and therapeutics, which accord to a specific cultural cosmological scheme. The students pass through the various stages of a journey into a new world of meaning. They are introduced to modes of perceiving, knowing, and practice, that are initially strange and unfamiliar; as they go deeper into this journey, the aim is that the students will gradually come to inhabit this new world of meaning. What was initially strange and unfamiliar becomes taken for granted, an unquestioned mode of being in the world.

As a worldview Tibetan medicine is consistent with wider Tibetan cosmological notions; within this cultural framework, there exists a very clear idea of what is considered to be valid knowledge and how it is acquired and should be passed on. This is not something exclusive to the Tibetan tradition, it is often the case that forms of knowledge and methods of how that knowledge should be reproduced are deeply interrelated. Lave (1991, 1988, 1990) has pointed out the error of studying education

in a decontextualised manner. Education must be considered in its social, cultural, historical and political context. In the medical school there are three main areas of activity where learning takes place: the classroom, the pharmacy, and in clinical contexts. By pharmacy I mean the range of activities involved in finding and preparing medicines. My observations of the learning process in the classroom will be dealt with at length in chapter five. Clinical contexts include interaction with patients at the school and within the community. A discussion of the ways in which the students learn through clinical practice will be made in chapter six and eight.

The model of learning that I have developed to interpret the progression of the students is holistic; rather than adopting a view of learning as a cognitive process happening in the heads of the students, I will look at how mind, body, action and social world, are simultaneously involved in the generation of meaning. What I discuss in connection with education in the medical school has wider general application as a theory of social reproduction.

In the passage quoted at beginning of this chapter, Dickens is aiming his critical comments at the approach to education in the Victorian age, and particularly to the then prevalent utilitarian philosophy, which provided it with a theoretical basis. Utilitarian writers such as Jeremy Bentham, John Stuart Mill, and James Mill combine a self-seeking understanding of the individual based on the economic ideas of Adam Smith, with the Lockean view that the human mind is born as an empty slate. The passage spells out many of the features of what Jean Lave has referred to as the 'cultural of acquisition' (1990:310). This understanding of human nature and knowledge has been in the ascendancy since the nineteenth century and is still widely influential. It is a view founded in a number of firmly entrenched dichotomies: that of knowledge as fundamentally propositional, immutable and transposable, in contrast to the position that knowledge is changeable and has multiple forms; that of subject and object; and that of mind and body. Another component of this perspective is an extremely restricted view of subjective agency. These are the basic elements of the standard modernist version of human nature, knowledge, and the process of learning. The perspective on learning that will be presented in this chapter attempts to transcend these dichotomies by understanding learning as a process involving all levels

of human experience. Individuals, far from being the passive vessels of pre-existing social forms, will be shown to be the active 'orchestrators' or 'authors' of meanings generated in the learning context (Cohen 1994). The learning process whereby novices become experts, involves far more than the mere acquisition of knowledge; expertise comes about not through accumulation, but through appropriation.

With regard to the medical education in the school in Dhorpatan, the first point to make is that what the students are undergoing is a form of apprenticeship, that is to say a large part of what is learned comes about through engaging in medical practice. Apprenticeship has assumed many different cultural forms (Lave 1990). Common to all these forms is the situated nature of the learning process; the novice learns by participating in varying degrees in the practices of the master. Recent studies on apprenticeship have tended to move away from previous unilinear models of internalisation through imitation and repetition (Engeström 1987; Goody 1982; Jordan 1989; Lave and Rogoff 1984; Lave and Wenger 1991; Benner 1984). The new concern is with the dynamic interrelationships between the individual, social action and the social world.

Any theory of learning or social reproduction must be founded in specific understandings of the nature of knowledge and human understanding. There are broadly two opposing views on this, and the debate on them runs through the full length of the Western philosophical tradition. On the one hand there is the tradition of nativism or as it is sometimes called, rationalism. According to this tradition the individual is born with some form of innate knowledge. Our understanding of the world is made possible by this pre-existing knowledge. Key thinkers on this side of the argument are Plato, Descartes, Leibniz, and more recently Chomsky and Fodor (Cowie 1999). The opposing view is that of empiricism, which holds that all knowledge derives from experience through the senses. Some of the most celebrated exponents of this position are Hobbes, Hume, and the nineteenth century utilitarians such as John Stuart Mill, who, as we have seen, were so much the focus of Dickens' satirical contempt. Perhaps the most famous and influential protagonist of the empiricist tradition is Locke, who represented the human mind as a *tabula rasa*. By this he means:

Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store, which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer in one word, from experience: in that all our knowledge is founded, and from that it ultimately derives itself (Book II chap i sec 2).

Kant's philosophy attempts to bridge these two opposing views by showing that although knowledge starts with experience, it is through the mind's innate categories of understanding and perception that the world is constructed. These opposing streams of thought are also represented in anthropological and sociological theory. Structuralist perspectives such as functionalism and Marxism follow the empirical tradition. The structuralism of Levi-Strauss accords with the tradition of nativism, as do the phenomenological and ethnomethodological perspectives with their emphasis on the role of the individual in constructing the 'life-world'.

It follows from this that any understanding of learning must first address the question of the locus and nature of knowledge, and the role of the mind. Bloch succinctly expresses our problem:

If culture is the whole or a part of what people must know in a particular social environment in order to operate efficiently, it follows first that people must have acquired this knowledge, either through the development of innate potentials, or from external sources, or from a combination of both, and secondly that this acquired knowledge is being continually stored in a manner that makes it relatively accessible when necessary (Bloch 1990:184).

The view that will be proposed here is that culture is a combination of both; the individual is always actively present in the generation of meaning as the 'knowing subject'.

## 2.1 The Culture of Acquisition: Knowledge as Proposition

Every morning the day at the schools starts with memorisation of the main medical text. At 9 a.m. the students have their first lesson of the day with Amchi Gege. When he is ready to begin the lesson, the students assemble in his room and sit on mats behind small Tibetan tables (*chotsé*) situated around the periphery of the floor. They begin by reciting the prayer to the medical lineage, after which they open their copies of the *Bumshi* or the *Gyushi* at the section that they had arrived at in the previous lesson. First Amchi Gege reads a section of the text and then using various commentaries he has open in front of him he elaborates on what is said in the main text in great detail. The students listen attentively, making occasional notes in their copies of the text or in exercise books. They seldom ask questions, but occasionally Amchi Gege asks them questions about what he is teaching. This is the basic pattern that occurs in every lesson in the classroom.

The 'culture of acquisition' is best typified by the functionalist approach to education. The functionalist approach holds that the individual is the passive

receptacle of structures of pre-existing knowledge present in the external social world. Children are born as empty passive vessels and through the process of socialisation are filled with the shared norms and values of society - in this way social stability is maintained. According to Durkheim, within each person there exist two beings: the individual being and the social being. The individual being is made up of various personal mental states; the social being comprises of 'systems of ideas, sentiments and practices which express in us, not our personality, but the group or different groups of which we are a part' (Durkheim 1938: 71). For Durkheim the purpose of education is to constitute the social being. Innate qualities are written off as 'vague and indefinite tendencies' and we are told that, 'society finds itself, with each new generation, faced with a tabula rasa, very nearly, on which it must build anew' (Durkheim 1938:72).

The functionalist understanding of knowledge and education has been highly influential in the disciplines of cognitive psychology and anthropology. Culture is viewed as an accumulation of knowledge, which is stored in the heads of individuals. Memory is likened variously to a warehouse, a digital computer, or an encyclopaedia of accumulated information, and culture is reduced to factual mental contents. Culture consists of various 'knowledge domains', each constituted by an abundance of 'chunks' of knowledge (Simon 1980). According to the theory of 'learning transfer' (Thorndike 1903), knowledge acquired in one situation can be easily transferred across domains, regardless of the change in context.

There are a number of problems with this view of education: culture is considered to be a body of facts that are internalised and stored in the heads of individuals in an unproblematic way; in the process of transmission the body of knowledge is considered to remain constant; and culture is viewed as immutable and existing outside of social contexts. Social reality does not bear testimony to any of these issues. The general criticisms of the functionalist perspective, which derive from the passive role it allots to the individual, are also applicable to this understanding of education: it does not account for social change, and there is no explanation for the historical origin of culture or 'social facts'. In addition, as 'we have no justification for supposing that our mind bears within it at birth, completely formed, the prototype of

this elementary framework of classification' (Durkeim and Mauss 1963:8), there is the problem of the logical origin of cultural categories. Another shortcoming of the functionalist perspective is the entirely positive role it attributes to education. More critical perspectives view education in an entirely different light: it is an act of 'symbolic violence' (Bourdieu and Passeron 1977), which justifies and thereby perpetuates existing relations of power and social inequality. For Chomsky (1989, 1988) the institution of education works alongside other institutions in creating 'necessary illusions' which lead to a 'manufactured consent'; this serves the interest of global corporations.

Recent theories of education have tried to overcome the inadequacies of the functionalist perspective by broadening the scope of the learning experience. The new view perceives it as a result of processes occurring at the interactive interface between the mind, body, agency and social context; this is the approach I have taken to the learning process in the medical school. It is an approach that hits head on to what has been, up until recently, the firmly entrenched divide between the disciplines of psychology on the one hand, and sociology and anthropology on the other. Before proceeding to discuss this holistic view of education, I shall first consider this disciplinary divide.

## **2.2 The 'Social Being' and the 'Individual Being'**

We have seen how Durkheim understood each person to be a composite of two beings: the 'social being' and the 'individual being'. Durkheim played down the role of the 'individual being' in society. For him, the subject of sociology is the social being and the collective representations to which it owes its nature.

Collective representations, emotions, and tendencies are caused not by certain states of the consciousness of individuals but by the conditions in which the social group in its totality is placed. Such actions can, of course, materialise only if the individual natures are merely the indeterminate material that the social factor moulds and transforms (Durkheim 1938:106).

This perspective is at the root of the long-standing rift between, the domain of psychology, which is concerned with the individual, and the domain of anthropology and sociology, which focus on culture and society. It is not that there have never been attempts to bridge this divide. From the 1970s there has been the sub-discipline of psychological anthropology (Hsu 1972), which grew out of the culture and

personality school rooted in the ideas of Edward Sapir. Also, even in the heyday of functionalist perspectives, culture was occasionally explained in terms of psychological conditions; a case in point is Malinowski (1954). Within psychology, a parallel process occurred with the development of social psychology. Yet the divide has never been successfully bridged.

As Lave points out (1988), from the 1960s cognitive anthropologists began to take a critical view of the psychological validity of their cognitive analyses (Burling 1964, Romney & D'Andrade 1964). In cognitive psychology a parallel development occurred as questions were raised about the ecological and social validity of theories that were often tried and tested only in laboratory settings (Barker 1968, Neisser 1976). The same division has been brought into question by Obeyesekere (1981, 1990), who criticises the anti-psychological stance of anthropology and the anti-institutional stance of psychology. He cites Leach (1958) as an example of the classic anthropological position on public and private symbols.

He clearly recognises the importance of individual psychology; but he adopts the classic social anthropological position that individual psychology cannot have cultural significance or that publicly shared symbols cannot have individual psychological meaning (Obeyesekere 1981:14).

For Leach, private symbols have emotional meaning and are amenable to psychological analysis, but public symbols operate in an arena of an entirely different order. Obeyesekere attempts to bridge the divide by showing how symbols have motivational significance at the level of the personality and culture simultaneously. An illustration of this from medical anthropology is Dunn's idea that disease occurs simultaneously in three realms of meaning (1976:143). A disease involves, in varying degrees, biophysical, psychological and socio-cultural components. Take the case of smallpox in India for instance. On a biophysical level it is an extremely infectious disease, on a socio-cultural level it is the action of a goddess, and on a psychological level it is the experience of the afflicted individual. Any fully adapted response to the disease must be related to these three realms of meaning.

### **2.3 Situated Learning**

A 28-year-old Tibetan woman came to the clinic complaining of a sharp pain in the left side of her chest. Whilst Amchi Gege was diagnosing her condition two of his students, Yungdrung

and Nyima were present. Amchi Gege took her pulse and without saying anything about what he understood from it, he asked both Nyima and Yungdrung to attempt to diagnose the disorder. After taking the pulse, which they said was strong and fast, they concluded that the patient was suffering from a form of fever. Amchi Gege said that the woman's husband had died a month before, and her distressed emotional condition had upset the humours of wind and bile. He said that the pulse did not denote a fever condition but a disturbance in the bile humour, and it was this that was causing the pain in her chest.

From what has been said so far it is clear that a comprehensive theory of learning and social reproduction must bridge a number of traditional dichotomies: that of the body and the mind; that of individual psychology and the external socio-cultural environment; and that of knowledge as fixed, immutable and transposable, and knowledge as generated in interactional contexts. Lave goes along these lines when she says that the everyday practice of cognition 'is distributed – stretched over – not divided among mind, body, activity and culturally organised setting' (Lave 1988:1). Traditionally, learning has been construed as fundamentally cerebral in nature and unaffected by agency and context. Knowledge is understood as so many propositions that the learner must internalise. The nature of the individual and the process of transmission are left as unproblematic. I don't mean to imply that a propositional view of learning is completely invalid; it is just one element within a wide-ranging process. Learning is not something purely cerebral in nature; it is a process involving the reciprocal interaction between the whole person and the social environment. As the above example shows expertise is developed as propositional knowledge is increasingly situated in practice. In chapter six I give a further twenty examples of clinical interactions involving the students attempting to situate the knowledge that they had learned in the classroom into medical practice.

I have mentioned that there are three main arenas of learning within the medical school: the classroom, the pharmacy and clinical interaction. Every day the students have two hours of formal classroom education with the doctor: one hour in the morning and one in the afternoon. In the classroom, knowledge is presented as a series of propositions. In order for these propositions to become fully relevant they must be realised in medical practice. Knowledge becomes a reflexive part of the student's sphere of competency through an act of appropriation carried out whilst the student is engaged in medical activity. For this reason a large part of my research focuses on how the students come to inhabit the medical world by engaging in

practice. My approach draws on a body of recent literature on learning that moves away from the acquisition of propositional knowledge and focuses on the situated nature of learning (Lave and Rogoff 1984, Lave 1988, Lave and Chaiklin 1993, Lave 1990, Lave and Wenger 1991, Jordan 1989).

The chief exponent of this approach is Jean Lave. At the basis of her view is Ortner's (1985) contention that recent anthropological theory no longer accepts a simple internalisation view of social reproduction; the new emphasis is on socialisation occurring in everyday practice. For Lave, learning is not confined to the acquisition of a body of self-contained facts that can be transferred across contexts; rather it is situated in moments of social co-participation. The central mechanism of situated learning is what she refers to as 'legitimate peripheral participation' (Lave and Wenger 1991). The idea is that the individual is gradually inducted into the practice of the master by being allowed to participate in that practice in varying degrees and with varying responsibilities. In her words 'apprentices learn to think, argue, act, and interact in increasingly knowledgeable ways, with people who do something well, by doing it with them as legitimate peripheral participants' (Lave 1990:311). As we shall see in chapters six and eight, this is very much how learning occurs in the medical school as the students progressively move towards full participation in the community of medical practice.

Situated learning shifts the emphasis away from the acquisition of a fixed body of propositional knowledge to meaning generated through negotiation in social interaction. Emphasis is placed on the various transformations that are brought about through the learning interaction; transformations that affect the student, the master, and the body of knowledge transmitted. Zimmerman (1978) draws attention to this issue when he says that research which focuses exclusively on the classical Ayurvedic texts gives a distorted picture of the tradition as static and unchanging, whereas actual Ayurvedic practice draws on certain elements within the texts and neglects others. Eickelman mentions a similar point (1978) in his discussion of Islamic education, which stresses the importance of memorising Islamic religious texts. It has often been thought that this leads to an unchanging and inflexible body of knowledge, whereas

Eickelman claims that there has been considerable flexibility over what has to be learnt at different times and in different places.

Some forms of apprentice learning are entirely oral, others, such as Tibetan medical education make extensive use of texts. But it is important to note that wherever there is a fixed codified body of knowledge that the student must learn, it is not through this that the community of practitioners reproduces itself; it is through the preservation of the prescribed pattern of the student-master relationship, in other words it is the framework of participation (Lave and Wenger 1991). This is clearly demonstrated by the relationship between the doctor and the students in the medical school, and the general importance of lineage in Tibetan culture.

## **2.4 Innate Knowledge: The 'Knowing Subject'**

To return to Bloch's remark that the ability to perform competently within a given cultural sphere requires that the individual has either developed an innate potential, or received the relevant knowledge exclusively from external sources, or a mixture of both. Learning cannot be confined exclusively to acquisition, nor is it centred exclusively in social negotiations. Learning occurs at the interface between the active individual as what the idealist tradition refers to as the 'knowing subject' (Bourdieu 1977:2) and the social and natural environment. I agree with Lave's contention, 'that there is no such thing as "learning" sui generis', not because, as she claims, that there is 'only changing participation in the culturally designed settings of everyday life' (Lave 1993: vii), but because there is always the 'knowing subject'. Having said this, Lave's view of situated learning as a process of negotiation, spread over mind, body, activity and cultural setting, does by necessity involve the 'knowing subject'; negotiation can only occur if there is a person doing it.

There is now a large body of theory about learning and social reproduction that attempts to bridge the divide between the individual and structures existing externally in the social world. The aim has been to develop a theory of social practice (Bourdieu 1977) or what Giddens refers to as 'structuration' (1976, 1984). Situated learning is intimately related to these theories. I have said that a comprehensive theory of learning and social reproduction must transcend various entrenched dualities. As the

aim of Bourdieu's theory is to transcend the divide between objectivism and subjectivism which has bedevilled the social sciences, and as E P Thompson has spoken of him as an antidote to the errors of Marxist structuralism, and to theorists who view, 'history as a process without a subject and concur in the eviction from history of human agency' (Thompson 1978:366), this would seem like a good place to begin.

At the centre of Bourdieu's understanding of learning and social reproduction is the habitus:

The structures constitutive of a particular type of environment...produce *habitus*, systems of durable, transposable, *dispositions*, structured structures predisposed to function as structuring structures, that is as the principles of the generation and structuring of practice, which can be objectively 'regulated' and 'regular' without in any way being the product of the obedience to rules...(Bourdieu 1977:72).

In the same way that from a Marxist perspective certain material conditions produce specific class conditions, the same relationship holds between the habitus and what Bourdieu calls a 'field'. The field is network of relations (Bourdieu and Wacquant 1992: 97) in which the individual circulates. For the students in Dhorpatan, the field is the institution of Tibetan medicine as a body of knowledge and prescribed social relationships. The Tibetan medical habitus is what the students need to be competent practitioners in the 'field' of Tibetan medicine. Chapters three, five, six, and eight all present different ways in which the students acquire the habitus of Tibetan medical practice.

Bourdieu's quest is to establish 'an experimental science of the dialectic of the internalisation of externality and the externalisation of internality, or more simply of incorporation and objectification' (Bourdieu 1977:72). By shifting the focus from fixed representations of social structure and agency – the *opus operatum* – to social practice as the unfolding of a continuous process – the *modus operandi* – he aims to break away from subjectivist and objectivist perspectives which he views as 'opposed to practical knowledge' (Bourdieu 1977:3). But in the end this is never achieved. Bourdieu for all his subtle circumlocution never manages to leave the objectivist camp (Jenkins 1992:175). We are back at the functionalist *tabula rasa* and social reproduction as the internalisation of pre-existing social structures. The habitus is 'history turned into nature' (Bourdieu 1977:78). Human agency exists in the form of

strategies, but ultimately the objective structures, which have been internalised as dispositions, tend to reproduce themselves. Thus many of the criticisms that were raised earlier against functionalism are equally applicable here. The logical and historical origin of social forms, and social change remain problematic.

However, the habitus does serve as an important tool in understanding learning. The whole question he raises of shifting the emphasis from fixed representations to the process of social practice is important. The habitus is also useful for an understanding of the situated nature of learning, particularly the way dispositions become embodied and ‘the second natures of the habitus’ (Bourdieu 1977:79). The ‘internalisation of externality’ side of his formula is insightful, yet the picture is incomplete. The individual is elided and the role of the mind remains vague (Jenkins 1992:93), if not almost completely absent, except as an empty vessel. Dispositions are at times referred to as ‘cognitive and motivating structures’ (Bourdieu 1977:76), but these owe their existence entirely to the social environment.

At this point I would like to look closer at the other side of Bourdieu’s formula: the externalisation of internality. The question is, what does the individual bring to the learning process and what is the role of the mind? Bourdieu accuses the anthropologist who searches for objective meanings as the ‘knowing subject’. Thus we have what he describes as the ‘pernicious’ problem of the model being taken for reality. ‘The “knowing subject”, as the idealist tradition rightly calls him’, performs interpretations, and in so doing ‘constitutes practical activity as an *object of observation and analysis, a representation*’ (Bourdieu 1977:2). But this is equally true of any person engaged in social practice. There can be no doubt that there is a symbiotic relationship between the internal and the external, but it is the individual who carries out the act of interpretation. Ultimately, knowledge is constituted not by the social environment but by the ‘knowing subject’.

This all relates to the question of the role of the mind in social reproduction: is it plastic and malleable, as Durkheim would have us believe - an empty slate to be written on? Or does it play a much more active role in the learning process and the construction of culture? What exactly is the nature of the ‘cognitive and motivating structures’? In his introduction to Durkheim and Mauss’s book *Primitive*

*Classification* ((1903) 1963), Rodney Needham likens the experience of ethnographic fieldwork to the first visual sensations of a congenitally blind person, who through surgery is given the power to see. Initially, everything is a chaos of swirling colours and shapes until the newly sighted person makes the immense effort to give them ordered form. Needham's reflections are based on von Senden's accounts of numerous cases where this operation was actually performed. Ironically there is enough evidence within von Senden's book to refute Durkheim and Mauss's basic position, that the human mind has no innate capacity to classify. Von Senden's assessment of the cases he uncovered is highly suggestive.

In the initial stage of pure sensation, vision is confined to the purely physiological process of the reception and conveyance of stimuli to the visual centres. For the individual, it remains a quite passive influx of visual impressions, which do nothing, as yet, to induce him to emerge from his passive state and to try, for his own part, to take up some sort of mental attitude towards the colours presented to him (von Senden 1960:129).

What is important here is the stage of 'pure sensation' remains until the newly sighted person assumes a mental attitude towards the chaos; again we return to the 'knowing subject'.

Numerous theorists claim that the ability to classify and give meaning to external sensations is already present in the mind from birth. In anthropology the main inspiration for approaches that adopt this position has been linguistics. For Lévi-Strauss, culture, like language, derives from structuring processes inherent in the human brain. Lévi-Strauss, solves the functionalist problem of the logical origin of cultural classifications by ascribing them to the human mind's inherent capacity to classify.

Like Lévi-Strauss, Chomsky focuses on innate linguistic capacities, but he adopts quite a different approach. In his attempts to understand language, he draws on Plato's notion of innate ideas. Plato's poses the problem of how people can come to understand so much if they are born devoid of all knowledge. Plato's solution to this problem is to claim that people are born with pre-existing ideas from past lives, and learning entails a process of recollecting (anamnesis) this knowledge. Chomsky's theory of language is a modified version of Plato's position. For Chomsky, acquisition of language can only be explained if children are born with what he calls the 'universal grammar'. What we know must be in some sense innate as 'people lack evidence for

even simple aspects of what they know' (Chomsky 1996:27). Children are not born with the capacity to speak only one language; they have the innate potential to speak any. For Chomsky, 'the ability to acquire language is basically a fixed uniform species property' (Chomsky 1996:27). What is remembered from previous existences becomes in a modern version of Plato, our 'genetic endowment'; Lyons refers to this process as 'genetic anamnesis' (1991:165).

## **2.5 Non-discursive Knowledge**

There is evidence that knowledge should not be confined to linguistic and propositional forms. Research done on neonatal and infant consciousness points to the presence of forms of knowledge, even conceptual knowledge (Brown 1973), before the acquisition of language. Furthermore, studies have shown that babies in the first years have a very well developed innate ability to give meaning to their perceptions, and information from the social environment (Bower 1977).

Attempts to understand learning, or culture for that matter, using linguistic models, or to be essentially propositional in nature, miss the mark (Bloch 1990). As Bourdieu points out a large part of what we learn is, 'something which communicates, so to speak, from body to body, i.e. on the hither side of words or concepts' (Bourdieu 1977:2). 'Schemes', as he calls them, can be passed from practice to practice at a tacit level, without ever entering discursive or propositional forms. This does not mean that all learning is a matter of imitation and trial and error. Every culture has its own way of transmitting knowledge in a structured, propositional way, but this forms only a part of the learning process. In forms of situated learning, such as apprenticeship, much that is learned occurs outside the conscious awareness of the student and the master. Even in cases where there is a highly structured, institutionalised form of knowledge transmission, tacit knowledge is still fundamentally at work.

From what has been said so far, it is evident that learning involves the acquisition of two types of knowledge: explicit knowledge and tacit knowledge. Explicit knowledge has a discursive nature and as such it can be stored and transferred in propositional forms, involving a variety of impersonal media such as books, tapes and computers, and so on. In contrast tacit knowledge has a non-discursive nature and

therefore cannot be stored in a propositional form; it is transferred by personal means through interaction in learning contexts (Mackenzie 1995). In chapter six I have given twenty examples of students learning through clinical interaction. In most of these interactions the students have acquired the explicit propositional knowledge relevant to the patient's condition but they have some difficulty situating this knowledge in clinical practice. However in a number of the interactions the students demonstrate considerable practical proficiency, and appear to have developed the non-discursive knowledge that underpins expertise.

The learning process involves constant moves between these two modes of knowledge. In the process of apprenticeship, the propositions of the master are transformed into the non-discursive, taken for granted assumptions of the student; this is how the students themselves become masters. The implicit knowledge of forms of practical mastery can be rendered into discourse, but in so doing the knowledge is transformed from one mode into another of a radically different order. Dreyfus and Dreyfus (1986) refer to the discursive knowledge, the rules and facts of a body of practice as a 'knowing-that'; this is to be distinguished from practical mastery which they refer to as a 'knowing-how', which cannot be put into words. Whilst an individual is engaged in practice ('knowing-how'), thinking about the practice ('knowing-that'), can in certain instances diminish the quality of the performance.

A celebrated proponent of the distinction between discursive and non-discursive thought is Susanne Langer. After discussing the importance of the 'laws of discursive thought', she points to 'the unexplored possibility of genuine semantic beyond the limits of discursive language' (1957:86). The ability to impose meaning on sensory experience is for Langer inherent in the organs of perception, and this ability is primarily non-discursive. Propositional thought, by its nature, must be strung out in a linear temporal zone. This is not true of sensory experience, which involves giving unified meaning to a mass of sensations simultaneously, in order that what is experienced takes the form of a coherent unified sensation. For Langer, this process can only be achieved by the application of non-discursive forms of awareness.

Numerous authors have stressed the role of tacit knowledge in the learning process (Polanyi 1958, 1967; Bourdieu 1977; Collins 1985, 1975, Ferguson 1977; Mackenzie

1995, Lave 1988; Bloch 1990). One of the examples Polanyi gives of tacit knowledge is an experiment, which involved presenting a series of nonsense syllables to a person (1967). Each time a certain syllable recurred, the person was given an electric shock. In time the person showed signs of anticipating the shock when the syllable was heard, but on being asked afterwards could not identify it (1967:7). Less drastic examples of the operations of tacit knowledge are the acquisition of motor skills. A person can be told in intricate detail how to ride a bicycle, drive a car, to ski, how to feel a pulse, or mix medicine; but the actual skill is developed non-discursively through practice. It is only when a person can drive a car reflexively, without 'thinking about it', that expertise can be said to have been truly achieved (Bloch 1990:187).

In fact, in sharp contrast to traditional views of education that have emphasised the importance of propositional knowledge, evidence seems to suggest that this must take second place to tacit knowledge. Even if all the propositional knowledge of a body of practice has been codified in some form or other, if the social co-participation network through which this knowledge is passed on is broken, re-establishing the practice solely from the propositional knowledge is no simple matter. Propositional knowledge is embodied in the community of practice; therefore if codified versions of it are lost, it is of no great matter. On the other hand if tacit knowledge is lost, this has severe implications for the continuity of the community of practice. On this issue Mackenzie suggests that if a long period of time passed during which nuclear weapons were not made, important tacit knowledge could be lost. It would be still possible to make nuclear weapons, but this would amount more to a re-invention than reproduction (Mackenzie 1990).

R D Laing's depiction of the internalisation of tacit knowledge within the family has important implications for any situation of group learning. Interaction within the family involves a process of 'reciprocal interiorisation', whereby the attributes of relationships within the family are internalised by each family member. For Laing, '(T)o be in the same family is to feel the same family inside' (1971:13). Laing's concern is with the dysfunctional nature of families: how reciprocal interiorisation within the family can lead to pathological psychological conditions. Be that as it may,

what is of interest here is the mechanism of reciprocal interiorisation. It is common knowledge that when people spend a long time together, the process of reciprocal interiorisation occurs; unconsciously, character traits of others are picked up. Through reciprocal interiorisation knowledge is internalised without any conscious intention or awareness. Apprenticeship has often been characterised as learning through imitation, but in the light of what has been said this idea needs to be clarified. Imitation is certainly important, but knowledge acquired through imitation often occurs without any conscious aim to imitate, or to teach. The mechanism of reciprocal interiorisation shows that learning is not something that occurs only as an outcome of the student and master relationship, it is a process occurring continuously within the learning group.

## **2.6 Embodied Meanings**

As I said earlier, a comprehensive theory of learning and social reproduction must override a number of traditional dichotomies. So far I have focused mainly on the relationship between individual psychology and the socio-cultural environment. Now I want to turn to the division between the body and the mind. Traditional understandings of learning have ignored the body, and focused on cognitive processes occurring in the heads of individuals. Already what has been said about the acquisition of motor skills shows this position to be fundamentally flawed. Meaning that is generated in situated activity becomes inscribed simultaneously in the mind and the body. What Bourdieu says of honour in Kabyle illustrates the pervasive nature of this process.

...Honour is a permanent disposition, embedded in the agents' very bodies in the form of mental dispositions, schemes of perception and thought, extremely general in their application, such as those which divide up the world in accordance with the oppositions between the male and the female, east and west, future and past, top and bottom, right and left, etc., and also, at a deeper level, in the form of bodily postures and stances, ways of standing, sitting, looking, speaking, or walking (Bourdieu 1977:15).

This is not a new idea. In an article originally written in 1936 (1972), Mauss gives numerous examples of how social forces are reflected in the body. After noticing how French women were beginning to walk like American women, he sets himself the task of understanding the social basis of how the body is used. One of the many examples

he gives of this is the social origin of gendered behaviour as reflected in the different ways in which women and men throw stones. As he perceives it, the female throw is generally weak and in a horizontal plane; this contrasts with the male throw, which is strong and in a vertical plane. Young, writing on the same issue from a feminist angle, points out that this has nothing to do with innate female characteristics, but ‘the particular situation of women as conditioned by their sexist oppression in contemporary society’ (Young 1990:153). Timidity as a mental and bodily trait is something that a girl learns.

There is a specific positive style of feminine body comportment and movement, which is learned as the girl comes to understand that she is a girl. The young girl acquires many subtle habits of feminine body comportment – walking like a girl, tilting her head like a girl, standing and sitting like a girl, gesturing like a girl, and so on. The girl learns actively to hamper her movements. She is told that she must be careful not to get hurt, not to get dirty, not to tear her clothes, that the things she desires to do are dangerous for her. Thus she develops a bodily timidity that increases with age (Young 1990:154).

Mauss refers to the process whereby society becomes inscribed in bodily forms, postures and use, as ‘techniques of the body’. Interestingly, in this article, Mauss anticipates many of the foregoing arguments by stressing that education must consider all of the three elements of ‘total man’: the sociological, the physiological and the psychological, which we are told are ‘indissolubly mixed together’ (Mauss 1972:74). Mauss presents the body as, ‘man’s first and most natural instrument’ (Mauss 1972:75). This view of the body highlights one of the important components of how students are inducted into a body of practice; through the learning process, students learn the specific ‘techniques of the body’ that they need to be competent practitioners. In the medical school these techniques include: learning to feel the pulse; learning to observe the patient’s tongue, complexion, urine, and eyes; learning to diagnose pathological conditions through feeling the patient’s body; learning how to carry out various forms of external treatment; learning how to compound medicines, learning to identify medicinal qualities of substances through taste; and so on.

Having acknowledged that meanings generated in social interaction become inscribed in the body, we should not make the objectivist error of considering these inscriptions to be of an entirely social origin. Embodiment is a dual process involving both the psychological reactions of the individual and determinants within the social

environment. Embodiment, where the emphasis is on the point where society meets the individual can be called social inscriptions; embodiment where the main effective focus is the point where the individual meets society can be called psychological inscriptions. Psychological inscriptions are forms of embodiment that arise from an individual's psychological temperament. Inner states such as anger, timidity, seriousness, apathy, dejection, can all be reflected in bodily comportment, as can deeper pathological psychological conflicts (Freud 1987; Laing 1971; Sacks 1985).

## 2.7 Knowledge as a Mode of Being: 'Knowing How'

So far we have seen that the learning process involves four modes of knowledge. This is summarised in Table 2.1.

<b>Mode of knowledge</b>	<b>Form of knowledge</b>	<b>Learning Activity</b>
Propositional Knowledge	Discursive Explicit	Acquisition
Non-discursive Knowledge	Tacit Emotional Intuitive	Acquisition
Innate Knowledge	The Knowing Subject The Authorial Self	Developing Innate Potentials
Knowledge as a Mode of Being	Reflexive, taken for granted practical knowledge of the master	Appropriation

**Table 2.1 Four Modes of Knowledge in the Learning Process**

I have discussed the first three of these modes of knowledge. Now I will elaborate on what I mean by knowledge as a mode of being. It goes without saying that the ability to carry out with expertise common everyday social activities, or more specialised roles such as a surgeon, tennis player, aeroplane pilot, lawyer, plumber, needs to be learnt. Dreyfus and Dreyfus (1986) through studying the process of skill acquisition amongst aeroplane pilots, chess players, car drivers, and adult learners of a second language, identify a process, which involves five stages of development from novice to expert. At the outset knowledge is primarily propositional and de-contextual. As

the novice acquires more experience, knowledge becomes increasingly non-discursive and situational. At the stage of full mastery, practice 'flows'; it is 'intuitive' and reflexive, and on the whole done without conscious deliberation (1986:30). Knowledge at this level is embodied second nature knowledge. It is no longer a proposition or representation, but a way of being in the world. What was acquired has been appropriated into the modus operandi of social practice through the crucible of experience. In the following discussion of the learning process in the medical school in Dhorpatan, I will use the Dreyfus and Dreyfus model to help identify the various stages that the students have arrived at on the journey from novice to expert. In each of the clinical interactions, which I have discussed in chapter six, I have assessed the students level of ability according to this five-fold scale.

The five stages Dreyfus and Dreyfus identify are: novice, advanced beginner, competence, proficiency, and expert. At the stage of novice, the student acquires context free objective facts and rules of behaviour. The advanced beginner, alongside acquiring more context-free elements, begins to situate knowledge by engaging in practice. Competence is achieved as more and more context-free elements are situated in practice; at this stage there is still a need to work through situations rationally, by devising plans and analysing possible modes of action. The two higher stages in the learning process are quite similar. Whereas the earlier stages involve the following of rules, and conscious deliberations over various possible options, proficiency and expertise involve behaviour that is fluid and intuitive. 'Intuition' here is not to be understood in its usual cognitive sense:

Intuition or know-how, as we understand it, is neither wild guessing nor supernatural inspiration, but the sort of ability we all use all the time as we go about our everyday tasks (Dreyfus & Dreyfus 1986:29).

What distinguishes the stage of proficiency from that of the expert is that the proficient performer has lapses from the intuitive level to moments of uncertainty and conscious deliberation. The expert on the other hand generally does not make conscious deliberations over performances. The expertise of a great actress, a ballerina, a violin virtuoso, or the expertise of everyday activities such as walking, talking and social etiquette, is not the product of conscious analytical thought. Benner, who used the Dreyfus model of skill acquisition in her study of clinical

nursing, found that expert nurses often spoke of their perception, using terms like 'gut feeling', a 'sense of uneasiness' or a 'feeling that things are not quite right' (1984:xviii). This is not to say that the expert never deliberates over issues, but when it does occur it is more an adjunct to intuition than a form of analytic problem solving. The fivefold learning process illustrated by the Dreyfus model demonstrates that intelligence should not be confined to deductive reasoning. Experts act not by constant recourse to a set of rules or by calculative assessment, but because they have an intuitive feel for their area of expertise. As this feel is neither rational nor irrational Dreyfus and Dreyfus refer to it as 'arational'. Of the three higher levels on the learning scale they say, 'Competent performance is rational; proficiency is transitional; experts act arationally' (1986:36).

I have already made frequent references to two types of knowledge: discursive or propositional knowledge, and tacit or non-discursive knowledge. Knowledge as a mode of being occurs when these two forms of knowledge, through an act of appropriation, become a part of a person's sphere of practical expertise; this is what I have referred to as 'knowledge as a mode of being'. Dreyfus and Dreyfus refer to this mode of knowledge as 'knowing how.' Everyone has the know how to perform certain activities such as constructing sentences, walking or dining in a socially acceptable manner, but being able to articulate this know how is another matter. Knowledge that can be articulated in propositional form they refer to as 'knowing that'. For Dreyfus and Dreyfus the learning process involves the transformation of the discursive knowledge of 'knowing that', into the non-discursive 'knowing how' of expertise.

Gilbert Ryle (1949) also makes the same distinction between 'knowing how' and 'knowing that'. He rejects the long established view that the prime activity of the mind is cognition through intellectual processes. For Ryle, the view that intelligent behaviour is the result solely of intellectual mental processes is mistaken; this would be to confuse the practical knowledge of 'knowing how' with the discursive form of 'knowing that'. In his view, if we want to understand how people become experts, we should shift the emphasis from what people say about learning and practice to how people perform these activities. For Ryle, human activity can be coherent and

intelligent without being the result of intellectual activity or some conscious aim to follow rules. Ryle's opinion on the relationship between rules and social behaviour accords with the Dreyfus Model of Learning; rules are useful for the beginner, but the expert performs without conscious recourse to guidelines.

The practical knowledge of 'knowing how' should not be confused with habit. Expertise is not the automatic unreflective repetition of tasks that have been carried out many times before. The expert performer is fully focused and aware of what is happening, alert to variations, and ready to respond; responses are not made out of habit; as circumstances arise the expert is able to innovate. Another important quality of expertise is the ability to be able to make judgements. Dreyfus and Dreyfus view judgement as a quality of the higher levels of expertise. According to their fivefold scale, at the stage of competence, judgements are made through conscious deliberation; at the higher levels of proficiency and expertise, judgements are made from experience, without rational calculation.

Some of the students were capable of making judgements in this way. As I discuss in chapter six, occasionally patients came to the clinic when Amchi Gege was not there, in which case it was left to one of his students to make a diagnosis and choose the appropriate medicine. Nyima, the senior medical student, who was very close to being a fully trained medical practitioner, was often able to make informed judgments on medical matters, without the help of Amchi Gege.

Ryle's example of the activity of an intelligent reasoner, gives a good portrayal of the mood that is present in skillful performance.

The rules that he observes have become his way of thinking, when he is taking care: they are not external rubrics with which he has to square his thoughts. In a word, he conducts his operation efficiently, and to operate efficiently is not to perform two operations. It is to perform one operation in a certain manner or with a certain style or procedure, and the description of this *modus operandi* has to be in terms of such semi-dispositional, semi-episodic epithets as 'alert', 'careful', 'critical', 'ingenious' 'logical', etc., (1949:48).

The position that expertise involves innovation and inventiveness, lends further weight to the argument against the view that traditions where knowledge is located in specific sacred texts, such as Tibetan Medicine, Ayurvedic medicine, or Islamic education, are static and inflexible.

I have said that the skill of knowing how to do something well, what I have referred to as knowledge as a mode of being, should not be considered the product of

deductive reasoning. Nor is it the outcome of the mind directing bodily activity like some Cartesian invisible rider on a horse. Knowledge as a mode of being overcomes what has been variously called ‘Descartes’ myth’ (Ryle 1949) or ‘Descartes’ Error’ (Damasio 1994), which presents the mind and the body as two different orders of existence. For Ryle the Cartesian duality is based on a category mistake: the difference is not quantitative but qualitative, it is one of degree, not kind. Mind should not be opposed to matter, it does not exist outside of space and time; the location of mind is in what people do.

## **2.8 Knowledge as a Mode of Being: Dispositions and Explanatory Models.**

Ryle highlights the difference between habitual behaviour and intelligent behaviour by relating both to different forms of dispositional concepts. As he explains, ‘to possess a dispositional property is not to be in a particular state, or to undergo a particular change; it is to be bound or liable to be in a particular state, or undergo a particular change’ (1949:43). Dispositions can be simple and unilinear, like to be ‘brittle’ is to be disposed to break; or they can be complex, disposing towards any number of possible outcomes. ‘Knowing how’ is a complex dispositional state, producing results that are ‘indefinitely heterogeneous’ (1949:44); habit is a simple unilinear state. Geertz also adopts this dispositional view of the nature of mind. For him, “mind” is a term denoting a class of skills, propensities, capacities, tendencies, habits...and as such, it is neither an action nor a thing, but an organised system of dispositions, which finds its manifestation in some actions and things’ (1993: 58).

All that has just been said on the dispositional nature of ‘knowing how’, resonates very much with Bourdieu’s notion of habitus. The habitus, we are told, is made up of dispositions that are, ‘embedded in the agents very bodies in the form of mental dispositions, schemes of perception and thought’ (Bourdieu 1977:15). These dispositions are ‘cultivated’ and ‘inscribed’; their existence derives from ‘objective structures’. How people conceive and behave is due to dispositions providing ‘cognitive and motivating structures’ (1977:83). In the sense that Bourdieu uses it, the word ‘disposition’ has a broad range of meanings: it is a result of ‘an organising

action', it approximates to 'structure', it is also 'a way of being', a 'predisposition', 'tendency' or 'propensity' (1977:214).

One of the criticisms that has been made of the habitus, is the lack of a causal mechanism; it is not clear how the habitus generates practices (Elster 1983). Jenkins makes this point when he says, 'we still do not know what the habitus is or how it works to generate practices' (1992:93). In order to fully assess this claim we need to look more closely at the nature of dispositions. From the array of meanings Bourdieu attributes to the word, it can be seen that they have two distinct aspects: as 'cognitive and motivating structures' they have both representational and operational valencies. In this sense they are similar to what Geertz calls 'culture patterns' which are 'systems or complexes of symbols' (1993:93). Like dispositions 'culture patterns' have both operational and representational aspects, they can function as models of 'reality' or models for 'reality'. In other words, 'dispositions' or 'culture patterns' generate social practice in that they are simultaneously models of and for social behaviour. Jenkins (1981) himself provides the same causal mechanism in a paper where he attempts to develop a model of 'cognitive practice'. But I would contend that this is already present in the habitus as the principle that generates practice.

There is a strong relationship between much of what I have said about medical practice as knowledge as a mode of being, and Kleinman's theoretical framework of explanatory models. Kleinman (1980) along with Good (1977, 1994) are the two key figures of what is referred to as the 'meaning centred' approach in medical anthropology. This approach focuses on the ways the medical world is constituted through meanings and interpretive practices. According to this perspective illness and disease are not considered to be natural entities but cultural constructions anchored in specific social realities. Kleinman adopts an 'ethnomedical approach' which 'studies medicine as an inherently semantic subject, inseparable from the conceptualisations of it held by patients, communities and practitioners (Kleinman 1980:84). For Kleinman disease and illness are not entities but explanatory models.

I will say more about the nature and various sources of medical explanatory models later. What is of interest here is how the medical reality is constructed through the employment of practitioner explanatory models. For Kleinman explanatory models

provide the theoretical framework for understanding ‘the cognitive and communicative features of health care’ (Kleinman 1980:83). Explanatory models are the dispositions, which provide the ‘cognitive and motivating structures’ of the habitus of medical practice. As dispositions they are not confined to representation of illness; they are both models of and for ‘reality’ (Kleinman 1980:26). ). Like the habitus, explanatory models are part conscious and part tacit. Drawing on Polanyi and Prosch’s (1975) ideas about tacit knowledge, Kleinman says, ‘as part of our cognitive orientations, beliefs about illness and care are deeply embedded in our tacit systems of “personal knowledge”, to which we are strongly committed (1980:99).

In the process of medical practice explanatory models address five main questions: etiology; time and mode of onset of symptoms; pathophysiology; course of sickness; and treatment. As we shall see, the students in Dhorpatan encounter all of these elements in the medical school and during medical practice. Medical knowledge and behaviour develops out of explanatory models and the explanatory model sets up the conditions for its own reproduction or revision (Young 1980). In other words there is dialectical relationship, or feedback loop between the explanatory model and given instances of medical practice. The same dialectical relationship pertains to the habitus, but the usual outcome of the feedback loop is the same social reality reproducing itself. As Bourdieu puts it, ‘the virtuoso finds in the opus operatum new triggers and new supports for the modus operandi from which they arise, so that his discourse continuously feeds of itself like a train bringing along its own rails’ (1977:79). According to Kleinman the same is true of explanatory models in medical practice; popular explanatory models used by non-specialists are flexible enough to be adapted to experience, practitioner explanatory models can be tenaciously maintained even when contrary evidence is present (1980:110).

## **2.9 Knowledge as a Mode of Being: The Past in the Present**

Memory plays a fundamental role in the learning process in the school. As we will see in the next chapter the students have to memorise all of the main medical text. Ideally this should not be a form of rote learning. In Amchi Gege’s opinion, memorising the text relates directly to expertise in medical practice. Before I move on

to discuss the role of memorisation in the school, in what follows I will consider the relationship between memory and learning.

In *Matter and Memory* Bergson makes the claim that, ‘the whole of our past psychological life conditions our present state’ (1911:191). Much of what I have said about the various levels of the learning process involve different types of memory; some that can be recalled and articulated and some that remain at a non-discursive tacit level. It is evident from what has been said in the previous section that memory has a central role in the workings of the habitus and explanatory models. In this section I would like to take a closer look at the ways in which memory relates to the learning process and social practice. If what Bergson says is true, then the question to be answered is: in precisely what way does the past condition the present? Bourdieu goes deeper than the individual life, for him the habitus is ‘history turned into nature’ (1977:78). He cites Durkheim on the same theme, ‘...in each of us in varying proportions is part of yesterday’s man’ (Durkheim 1938:16 cited in 1977:78). He could have quoted Marx with equal poetic effect, ‘the legacy of the dead generations weighs like an alp upon the brains of the living (Marx 1926:23). Though the poetry might be equal, the sentiment is not. For Durkheim, social memory carried on through the generations is the collective representations, which contain the norms and values that are necessary for social cohesion and stability. For Marx the legacy of the dead generations is the legacy of the class struggle. My concern here is not with the role of power in determining what is to be remembered (Asad 1993:35, Bloch 1989), but the role of memory in determining social life.

The first point to make is that memory is not univocal; several authors have pointed to the wide array of phenomena that is conveyed by the word. Casey (1987: 49-64) identifies fifteen distinct forms of memory, which include: ‘remembering how’, ‘remember that’, ‘place memory’, ‘commemoration’ and ‘body memory’. Tulving (1983:6) also stresses the wide range of meanings embraced by memory, from past experiences having a direct bearing on ones present state, such as language learning, acquiring preferences, skills and habits, to subjective experiences derived from recollections of past events. A recent edited volume on forms of memory in Buddhism bears equal testimony to the spectrum of meanings both in Buddhism and Western

thought (Gyatso 1992). In her introduction, Gyatso follows Kapstein in the same volume and adopts the adjective ‘mnemic’<sup>1</sup> to represent phenomena falling within this wide semantic range.

Although the word ‘memory’ is popularly thought of as the recollection of past events, of equal importance are the various types of memory that are non-recollective. This relates to the distinction I made earlier between tacit, non-discursive knowledge, and propositional knowledge. In the process of learning and acquiring skills, whether they are the skills needed in everyday life, or the specialised skills of a specific type of practice, all forms of memory work together. The question that needs to be understood is exactly how memory sustains practice. In order to shed some light on this I will present some of the typologies of recollective and non-recollective forms of memory that have been identified by several influential authors, and discuss how these types of memory relate to social practice. The only one of the four modes of knowledge in my model of learning that does not have a mnemic counterpart in the following discussion on memory is innate knowledge; but I have already accounted for this in mnemic terms by identifying it with what Chomsky calls ‘genetic amnesia’.

I shall begin with Bergson’s (1911) typology of memory as it is of direct relevance to an understanding of the way recollective and non-recollective forms of memory work in social practice. For him the past survives in two distinct forms: independent recollections and motor mechanisms. He gives the example of a person who is learning a poem by heart. The person memorises the poem by repeating it many times until it is fixed in the memory until it can be recited with ease. At the same time as being able to recite the poem from memory, the person also has recollections of each occasion when they tried to memorise the poem. Bergson gives this example to demonstrate the existence of two distinct forms of memory. When the person remembers learning the poem, what appears in the mind is a representation of a past event. Memory here is like a store that collects all our past experiences in the form of ‘memory images’ (1911:92). The type of memory that is used to recite the poem is of quite a different order; for Bergson it has all the characteristics of habit. Although

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<sup>1</sup> First coined by Semon (1921).

learnt in the past, it is not represented as a past event, it is lived in the present. This form of memory is present in all our habitual patterns of behaviour, such as walking, bodily composure, riding a bicycle or writing. Bergson refers to these two forms of memory as 'representative memory', which he considers to be 'true memory' as it 'truly moves in the past' (1911:195), and 'habit memory', which is present orientated. Though Bergson does not consider habit memory to be 'true memory', there is a remarkable similarity with what he has to say about how it functions and what Bourdieu tells us about the habitus:

...the one, fixed in the organism, is nothing else but the complete set of intelligently constructed mechanisms which ensure the appropriate reply to various possible demands. This memory enables us to adapt ourselves to the present situation; through it the actions to which we are subject prolong themselves into reactions that are sometimes accomplished, sometimes merely nascent, but always more or less appropriate. Habit rather than memory, it acts our past experience but does not call up its image (Bergson 1911:195).

For Bergson the two forms of memory exist side by side and give each other mutual support. This relates to what I said earlier about the interrelationship of different forms of knowledge in the learning process. Another connection with what I have said earlier about the learning process is the parallel between Bergson's two types of memories and Ryle's distinction between 'knowing that' and 'knowing how'. Ryle (1949:40) presents a very good illustration of how these two types of knowledge are related, which resonates strongly with what Bergson has to say on memory. Ryle gives the example of a boy learning to play chess. The boy begins by learning the rules and strategies that are necessary to play the game. In the initial period the boy will play by mentally referring to this body of rules. As expertise develops the rules become second nature and it is no longer necessary to make conscious recourse to them. Indeed, as the rules become more and more internalised, the boy may lose the capacity to formulate them discursively. Bergson's comments on the example he gives of a person memorising a poem, strike the same chord. He says that if the person could not remember the various attempts that were made to memorise the poem, he or she might believe it to be innate. This is so because once acquired, habit memory exists independently of the lessons that were used to achieve it.

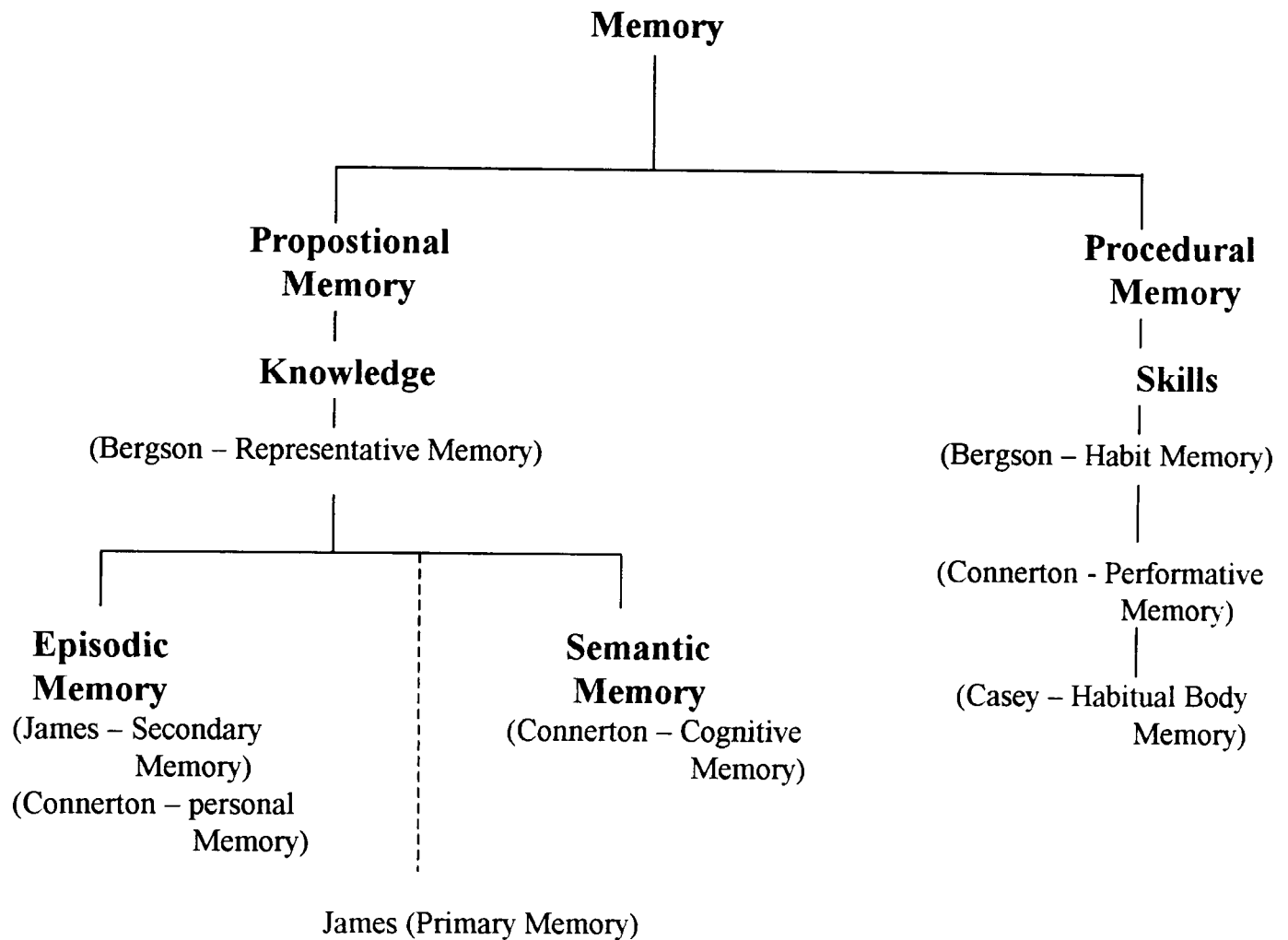
There is considerable overlap between what different authors have said on memory. In Figure 2.1, I have attempted to bring together a number of different classifications in one schematic diagram. The basic structure of the diagram derives

from Tulving's classifications, which appear in bold type. What Bergson refers to as representative memory has an exact counterpart in what James identified as secondary memory. Secondary memory is the experience of a past event or state that has been stored in memory and has returned to consciousness; this is to be distinguished from primary memory which is the retention of an impression of an event that is retained for a short period of time before it gradually leaves consciousness (James 1890, see also Husserl 1962). A classification that has been widely adopted by psychologists is the distinction between long-term memory, which is the reservoir of all our past experiences, and short-term or working memory that is essential to how we use memory in everyday activities (Atkinson and Shiffrin 1968, 1971).

From an anthropological point of view, the obvious issue that needs to be attended to is the relationship between memory and culture. For Bloch (1996: 361), what anthropologists have referred to as culture can be equated with the shared knowledge that is stored in the long-term memories of people belonging to a given society. I would argue that culture should not be equated entirely with propositional memory; culture is not only something that is thought and said: it is also something that is done. Take football for instance, a game played all over the world, but one could argue that each country has its own style. Another example would be the way Indian women sit on motorbikes in India, and the way that women do it in Britain. Theories of representation abound, but as Bourdieu quite rightly observes, what is required is a theory of practice.

There seems to be a general consensus amongst writers on the validity of the two types of memory identified by Bergson, though more recent authors have refined the classification. Tulving (1983) renders them as 'propositional memory' and 'procedural memory'; for Connerton (1989) the same distinction is referred to as 'cognitive memory' and 'performative memory'. Tulving's category of propositional memory derives its name from his contention that all knowledge contained here can be represented in a propositional form. Propositional memory can be sub-divided into what Tulving calls episodic memory and semantic memory. Episodic memory we are told is 'concerned with unique, concrete, personal experiences dated in the rememberer's past (1983:v); semantic memory is 'a person's abstract, timeless

knowledge of the world that is shared with others' (1983:v)... 'it is about rules, formulas, and algorithms for the manipulation of symbols, concepts, and relations' (1983: 21). Episodic memory relates to a specific time in the past; semantic memory, such as our knowledge of maths, grammar and logic, is not contextualised in time in such a way.



**Fig 2.1 Diagram of Classifications of Memory**

Tulving (1983:35) lists a wide range of differences between semantic and episodic memory. Information in episodic memory comprises of units of events or episodes, which are organised temporally and are personal; information in semantic memory is divided up into units of facts, ideas or concepts, which are organised conceptually and are universal.

The other broad type of memory that Tulving identifies is procedural or operational memory. This is acquired in a way that differs markedly from semantic and episodic memory; whereas they may be acquired quickly, procedural memory

often requires a lengthy period of training. Like Bergson's habit memory, procedural memory is the type of memory, which is present in our habits and skills. Other authors also speak about this type of memory. Casey (1987) calls it 'habitual body memory', which he says is 'pre-reflective and presupposed in human experience' (1987:149). For Casey, habitual body memory is constantly at work sustaining human activity:

As presupposed, habitual body memories serve as our *familiaris* in dealing with our surroundings – as a constant guide and companion of which we are typically only subliminally aware. They are always in operation in our ongoing lives (1987:149).

Connerton, as we have seen, refers to this same form of memory as 'performative memory' (1989), which he says relates to our ability to reproduce performances.

A number of points I have raised in this discussion of memory are in conflict with what I have said earlier about the nature of non-discursive knowledge and expert performance. For Tulving, what semantic and episodic memory have in common is that they can both be rendered into discursive form, in contrast to procedural memory which can not, it can only be demonstrated by performing the action it relates to. Yet what I have said earlier about the boy acquiring expertise in chess shows that what starts off as propositional knowledge, as explicit rules and guidelines, can become the tacit knowledge of expertise. For this reason the generic label 'propositional' is something of a misnomer. Another problem is the association of the word 'habit' with the type of memory that is involved in performance. It may well be that this form of memory finds expression in habitual behaviour, but as Ryle is at pains to point out, expertise and habit are two different types of activity. It is self evident that anybody who needs a medical examination would prefer the doctor to do the examination skilfully rather than habitually. To overcome this elision of human creativity, perhaps the best term that has been coined so far is Connerton's 'performative memory'; certainly it is far more appropriate than 'habit memory', and for this reason I have adopted this phrase to denote the type of memory which relates to expertise.

On a final note I would like to say something about one particular mechanism that has been suggested to account for how memory is able to affect what we feel and experience, and how we behave. This mechanism must be sufficiently flexible to explain the type of phenomena spoken about in the above quotations of Bergson on the functioning of habit memory and Casey on the functioning of habitual body

memory. It must also be able to accommodate for the way that different forms of memory work together to produce the *modus operandi* of social practice. What Bourdieu says about the relationship of the habitus to social practice clearly illustrates the question that needs to be addressed. On one side we have memory (my term, not Bourdieu's) as the 'socially constituted system of cognitive and motivating structures' (1977:76), which are 'embedded in the agents' very bodies' (1977:15); and on the other side we have 'the socially structured situation' (1977:76). In between these there is the habitus, which Bourdieu tells us, 'accomplishes practically the relating of these two systems' (1977:78). The question which naturally arises from this is, how the habitus, whatever it might be, accomplishes this.

Psychologists have developed a number of theories that give some idea of the type of mechanism that may be involved. One such mechanism that has been influential in cognitive anthropology is schema theory. Although the term was used by Kant (1781), its first modern usage is usually ascribed to the Cambridge psychologist Bartlett (1932). Bartlett's book *Remembering* documents a series of experiments he carried out using Cambridge undergraduate students as subjects. The experiments involved giving the subjects a story (usually a North American Indian folk tale), or a drawing, and then observing the transformations that occurred as the subject attempted to remember the information on different occasions at increasing time intervals. Bartlett found that the subjects' pre-existing cultural knowledge influenced what they remembered. The mechanism of schemas that he proposes is an attempt to account for such experimental results. 'Schema', he says, 'refers to an active organisation of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted response' (1932:201). Because schemas are in a state of flux, he finds the word 'schema' to be too rigid. He suggests the phrase 'organised setting' as more appropriate, which is interestingly reminiscent of what Bourdieu says about 'dispositions'; though, after sounding his reservations about the appropriateness of the term, he finds it good enough for his purposes. For Bartlett, schemas are not static; being adapted to experience they are continuously being revised as an outcome of it. The capacity for change and adaptation is fundamental to the psychological process. As Bartlett expresses it, '(a)n organism has somehow to

acquire the capacity to turn round upon its own “schemata”, and to construct them afresh’ (1932:206)

D’Andrade (1995:122), in a recent overview of the growth of schema theory points to the increasing interest from the mid 1970s in linguistics, anthropology, psychology and artificial intelligence in the role of structures in human cognition. After some initial uncertainty about the term, eventually the consensus veered towards ‘schema’. D’Andrade cites Schneider’s (1968) influential work on American kinship as an example of the application of schema theory in an anthropological context. Schneider’s aim is to understand the cultural patterns that lie behind American notions of kinship. These patterns include ideas about ‘blood’, ‘marriage’, ‘love’, ‘the family’, and so on. Although Schneider uses the word ‘symbol’ rather than ‘schema’, the cultural patterns he identifies perform the same function.

Since the 1970s there has been an increasing tendency towards understanding memory and cognition in terms of computer metaphors. This is clear in the explanation of schema theory given by Cohen (1993:26). Incoming ‘data’ from the external world (Bourdieu’s ‘socially structured situation’), is referred to as ‘bottom-up processing’. When we receive this ‘data’, information already stored in the memory (Bourdieu’s ‘cognitive and motivating structures’) comes into play, and through it the ‘current input’ acquires meaning; this is referred to as ‘top-down processing’. Thus schemas are the ‘top-down’ information that give meaning to experiences. Cohen explains that although for a long time Bartlett’s ideas about schemas were criticised for being too vague, they now have wide currency amongst psychologists. Recent versions of schema theory have incorporated Bartlett’s notion that schemas are not fixed but are amenable to change according to the nature of what is experienced.

To return to the question of how the habitus ‘accomplishes practically the relating of these two systems’. From the foregoing discussion it is clear what these two systems are in psychological terms, but it remains obscure exactly how the habitus, in itself, can accomplish anything. If we are to understand the habitus as Bourdieu defines it:

The structures constitutive of a particular type of environment... produce *habitus*, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures...(Bourdieu 1977:72).

This rendition of the habitus involves only ‘top-down processing’, and sits very comfortably with what has just been said about schemas. What accomplishes the relationship between the ‘two systems’ is not the habitus but subjective agency, so again we arrive back at the authorial self, the knowing subject. Just as I said earlier, that learning as a process involving negotiation can only occur if there is a negotiator, so too must there be a subject who remembers.

By way of summary, my general argument has been that the learning process involves four modes of knowledge: propositional knowledge, non-discursive knowledge, innate knowledge, and knowledge as a mode of being. I have related these modes of knowledge to different forms of memory. Following the Dreyfus and Dreyfus model, in the early stages of the learning trajectory the emphasis is on acquiring propositional knowledge, which takes the form of context free objective facts and rules that govern behaviour. Expertise develops as this knowledge is increasingly situated in practical contexts, and propositional memory is transformed into the performative memory of expertise. In the following chapters I will discuss the nature of Tibetan medical knowledge, the forms of learning in the medical school, and I will apply the model of learning, which I have presented in this chapter to interpret of how the students learn medicine.

## Chapter 3 The Role of Memory in the Medical School

Memorisation has played a key role in the education of doctors in many different medical traditions; this is true not only of medical systems such as Tibetan medicine, Ayurvedic medicine, Yunani medicine and Chinese medicine, but it is also true of biomedical education. Unlike the traditional form of education in Asian medical systems, the student of biomedicine does not have to memorise whole medical texts; but in the same manner as the student of Asian medical systems, they must memorise vast lists of diseases, symptoms and medicines, many of which they will never encounter in clinical practice. In this chapter I will assess why memorisation is so highly valued, and discuss the role that memory has in the learning process in the medical school in Dhorpatan.

As a major part of their study the students are expected to memorise all the principal text. There is hardly a day goes by when the sounds of the students repeating passages cannot be heard. It is a hypnotic repetitive sound. They repeat the phrases in a rhythmical manner, causing the tone to rise slightly before dropping it on the last syllable. The aim is that the combined effect of the rhythm, repetition, and melody, will forge the phrase indelibly into the student's memory.

In what follows I will assess why memorisation is so highly valued in the school and present Amchi Gege's and the students own feelings about it. I will begin by presenting the method of memorisation in the school, and then I will compare this with the techniques used in Tibetan monastic education, Islamic education in Yemen and Morocco, Brahmanical education in South India, and medieval and Renaissance Europe. Through considering the role of memory in these various settings, I conclude that far from being a passive form of rote-learning, memorisation plays a fundamental role in the development of performative memory.

### 3.1 The Method of Memorisation in the Medical School

There appears to be no doubt in Amchi Gege's mind about the importance of memorising the principal medical text. As he told me, this is the way he was taught in Tibet and this is the way he is teaching his students. From conversations I had with the students, they seemed certain that he knows at least all of the *Gyushi* by heart. On several occasions during the lessons, I witnessed him recite from memory the

relevant section of the text when students were unable to answer his questions. When I was just beginning to familiarise myself with the procedures in the school, I asked him whether the students had to memorise all of the main medical text, to which he replied with unwavering conviction, 'yes, this is not like Western medicine'.

In principle, every day the students should have one hour of teaching in the morning and one hour in the afternoon. During the lessons Amchi Gege would explain sections of the text, drawing on his own experience and the explanations found in various commentaries. Meanwhile the students would follow what he was saying with their medical text open at the relevant location in front of them. As most of the students don't have the habit of taking notes (an issue I will return to in chapter five), if they are to understand at all, they must immediately consign to memory Amchi Gege's explanations.

As can be seen from the daily timetable, there are certain times of the day that are specifically allocated for memorising: early in the morning, between lessons, and after the evening meal. At these times the students either sit around the Gompa compound, or in Amchi Gege's room, or in their own rooms, and set about the task of repeating over and over again the part of the text they are memorising. The fact that the recital must be done aloud, allows Amchi Gege to keep a check on whether any student is shirking their duties. One evening I was in my room helping a student with his English, when a torchlight flashed outside my window. When we looked to see who was there, the light vanished only to reappear again a few minutes later. We became anxious as we thought that perhaps a thief was trying to break into the building, as had happened on two separate occasions the year before. In the end it turned out to be Amchi Gege, angrily searching for the student who should have been memorising in his room.

A memorising session can last up to two hours. Whether there is a group of students memorising together or a student sat alone, the sound is always the same hypnotic rhythmical pattern of repeating nine-syllable phrases, with the first and last syllables stressed. As all the students are at different stages in memorising the text, they never repeat the same phrase together, nor do they ever appear to be synchronised in their rhythms. Nevertheless, a group of students memorising together can produce quite a melodious sound. The fact that the recitation is done

aloud allows Amchi Gege to survey which students are engaged in memorising and who is not; but this is only strictly true when he and the students are within the Gompa compound at the same time. When he is away on an errand, the students tend to take the opportunity for a moment's respite. Between six and seven in the evening, when their duties at the medical school have been completed, the three female students and two of the male students return to their homes. In principle, they are supposed to continue memorising in the evening, but in practice Amchi Gege has very little control over what they actually do.

For the three monk students and the eldest student, Nyima, who stay in the Gompa compound, it is another matter; the same rigorous discipline that Amchi Gege executes during the day in the school is carried over into the night. The students, if they have not been assigned another task, must memorise, and Amchi Gege can hear whether they are memorising or are not.

The order in which the texts have to be memorised follows the order in which the texts are studied in the course syllabus. Unlike in other schools where students have to memorise only important sections of the *Gyushi*, in Dhorpatan the students have to memorise all of the main text. Some of the students are memorising the *Bumshi*, the others the *Gyushi*; as the texts are virtually identical it makes little difference. In place of the third volume of the *Bumshi*, some of the students have to memorise the *Men Jor Dong Tsa*, Khyungtreng Rinpoche's commentary on it. The text of the *Gyushi* and the *Bumshi* is structured in verse according to the classical style of units of nine syllables lines (*tshig kang*). Each day the students are supposed to memorise fifteen such lines from the text; this would be equivalent to about seven lines on this page. The normal procedure is to copy the fifteen lines they have to memorise into an exercise book and they repeat them over and over again, until the section is fixed in their memory. Once they have accomplished this, the next fifteen lines are copied and memorised. There is no specific technique used for memorising the text other than perseverance and repetition. The nine-syllable verse form of the text, and the abundant use of lists, which I will say more about later, serve the purpose of facilitating memorisation. Material that has been previously memorised must be occasionally gone over to prevent it lapsing from memory.

The standard routine in the school is that at the end of the week the students are examined by Amchi Gege on how much they have memorised. By means of this exam he is able to keep a check on how well the students are progressing. For most of the time whilst I was there, due to the large amount of work that had to be done on building the new medical school and clinic, this routine was virtually non-existent. Memorising exams did occur, but in a very intermittent fashion. I received contradictory information from the students about whether they could still remember what they had memorised a long time before. One student told me that he never forgot what he had previously remembered, another student told me that due to the amount of time he had spent doing other things, such as helping with the building work on the new medical school, he had forgotten large sections of what he had previously memorised.

One of the key issues that kept arising during my time at the school was the distinction between memory and knowledge. The students themselves kept complaining that they spent too much time memorising and not enough time receiving explanations. Due to the disparity in the amount of years the students had been at the school, they were all at different stages in their memorisation of the text. The students who had been at the school for eight years had memorised almost all of the text, the others were part way through either the third or the fourth volume. With the exception of Nyima and Phuntsok, the stage the students had arrived at in their memorisation was beyond the stage that they had arrived at in Amchi Gege's explanations. The last time I was there in August 1998, in their lessons the students had arrived at the seventy-second chapter of the third volume of the medical text, the section dealing with children's diseases (*chi pi né so wa*).

The students could not have understood very much of what they had memorised before Amchi Gege's explanation. The medical text is replete in details but does not in itself provide a complete exposition of Tibetan medical knowledge; like all Tantric texts, it requires commentary. The constraint of the nine-syllable verse form means that passages are elided and detailed explanations are either absent or rendered in a terse manner. The text contains many details about disease symptoms, forms of diagnoses and medicines, but does not give all the information that is required to practise medicine. For example, in the section dealing with medicines, the text

contains the names of each medicinal ingredient, but not how much should be used, or which part of the plant is used, or how ingredients should be prepared and compounded. The structure of the text may well serve the purpose of memorisation, but it certainly does not facilitate ease of understanding. What should be borne in mind here is that the students are not memorising a detailed self-explanatory exposition of the medical system, but a framework which allows them to bring to mind any of the multifarious topics dealt with in the text, and associated expositions they have received on it. In a certain manner, what they are memorising is an elaborate mnemonic device.

### **3.2 The Method of Memorisation in Other Contemporary Settings**

Now we have seen the way that memorising is done in the school, to enable a deeper understanding of the processes that are involved I will present the methods of memorisation as they are found in three other contemporary educational contexts: Tibetan monastic education, Islamic education and Brahmanical education in South India.

Both the *Gelugpa* tradition of Tibetan Buddhism and the Bönpo tradition have schools of dialectics (*tshen nyi*) where the monks follow a long structured course of teaching leading to the title of *Geshe*. As the course progresses, the students come to an understanding of the teachings through logical argument in debate. The *Gelugpa* programme takes place in the three main *Gelugpa* monasteries, Ganden, Sera and Drepung, which have been re-established in South India. The course follows the five classes of Buddhist teaching: logic (*tshé ma*), the Prajnaparamita texts (*phar chin*), Madhyamika philosophy (*u-ma*) and Abhidharma (*ngön par dzö*) (Tucci 1980). The study involves three components: memorisation of the basic texts, teachings on the texts by a teacher of their choice (Strom 1997), and debate. It usually takes thirteen years to complete the programme, but can take up to twenty-five, after which the student may have to wait several years before the final exam.

Most of the information I shall present here will document the education as I observed it in the Bönpo dialectic school at Triten Norbutse monastery in Kathmandu. This is the monastery where Amchi Gege and his monk students come to stay during the winter months when the medical school is closed. During the

Bönpo dialectic programme, which is run at the monastery in Kathmandu and at Menri monastery at Dolanji in Himachel Pradesh, the students study three groups of texts: the sutras, the Tantras and meditation texts (*do ngag sem sum*). The programme thus differs from the curriculum in the *Gelugpa* tradition, which covers only the sutras (*do*). As with the *Gelugpa* schools, the method of study involves three components: the memorising of the basic text for each subject, explanations using commentaries on these texts, and dialectical debate. The course of study can be completed in eight years (Cech 1986), but in practice it can take a good deal more. Again like the *Gelugpa* tradition, on completing the full programme and passing the final exam, the student is awarded the title of *Geshe*.

From this discussion it can be seen that education in the medical school is consonant with the wider cultural pattern of Tibetan education, where a premium is placed on the memorisation of texts before they are explained. In the dialectic school, the monks have to memorise a great quantity of texts, far more than what the students have to memorise in the medical school. This involves an intense effort on the students' behalf. I asked the junior head teacher (*pönlob*<sup>1</sup>) Tenpa Yungdrung at Triten Norbutse monastery whether the monks use any special techniques to help them memorise the texts. He told me that some monks prefer to recite the text aloud and other monks prefer to do it in silence. He said that a popular device to aid the memory is to remember certain marks near a word or somewhere on the page. He explained that above all, the students must be fully concentrated. None of the students in the medical school mentioned anything to me about remembering sections of the text by recalling marks on the pages, but it seems in both the monastic setting and the medical school, the main method is the same; the constant repetition of the text over and over again.

Another example of a form of education that stresses the importance of memorisation is found in the work of Fuller (1984, 1993, 1996, 1997) on the education of Brahman Saivite temple priests in South India. The function of the priests is to conduct the rituals in the Minaksi temple in Madurai, Tamil Nadu, according to the prescriptions believed to have been given by Siva, found in the *agama* texts. Recently the priests have been subject to the reformist campaign of the

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<sup>1</sup> In the Bön religion the title for head teacher can either be *pönlob* or *lopon*.

Tamil Nadu government's Hindu Religious and Charitable Endowments Department. The reformist premise is that the priests would be better able to perform the rituals if they first receive a good education in the texts. The priests themselves are fully in accordance with this view, and as a consequence there has been a steady increase in priests educated in the texts.

Most of the priests receive their education in one of three schools. The full *agamic* education lasts for six years, though the Minaksi temple runs one-year refresher courses. Education in the schools follows the *gurukula* system, which involves the students (*sisya*) living in the guru's house and showing total respect and obedience towards him. This entails the students having to carry out various tasks for the guru, whether they are directly related to the school or not. Exactly the same type of relationship exists between Amchi Gege and his students in the medical school, although it would be wrong to imagine that they are always obedient.

Over the six years the main focus of the programme in the Minaksi temple schools is the memorisation of the Sanskrit texts. Memorisation of the texts is carried out by means of a twofold process. The first stage, referred to as *cantai*, involves the Guru reciting the section of the text and the students repeating it twice after him. This is done because the sound of the words is believed to contain a certain power; hence it is important that the students learn how to pronounce them correctly. The second stage, referred to as *tiruvai*, involves a process of the constant repetition of the text that they received in the *cantai*. The process of memorising in the Brahmanical schools has a number of features in common with memorisation in the medical school in Dhorpatan: the Brahmanical students do not use mnemonic devices to help them memorise the texts, the technique is constant repetition; and the Brahmanical students copy the section of the text they are to memorise in a notebook.

The reformists' view is that the education in the schools is a professional training. Fuller tells us that priests and gurus liken *agamic* education to the kind of training that a lawyer or medical doctor needs to undergo. But evidence suggests that what is actually happening is quite different. The students do receive explanations about the texts, but we are told that, 'all the gurus insist that memorisation is far more important than understanding' (Fuller 1997:13). Though some of the best

students are eventually able to explain the meaning of the texts, Fuller tells us, 'education in the religious schools is not primarily about acquiring the kind of formal, substantive knowledge that doctors or lawyers have to apply to a range of different cases' (Fuller 1997:17). The main aim of the schools is that the students memorise the texts to enable them to recite the relevant passages during the ritual; the acquisition of 'formal, substantive knowledge' about rituals is superfluous to that performative role. Fuller's later writings on the education consider it to have been a success, not in the sense that the temple priests now understand the content of the *agamia* texts, but they now know what to say during the ritual, and this sets them apart from the uneducated priests.

One further relevant comparison is with Quranic schools. Although the two sources I have used, Eickelman (1978) writing about Quranic schools in Morocco, and Messick (1993) on Quranic Schools in Yemen, provide historical accounts; the form of education they describe resonates with the previous examples. Eickelman tells us that in the Quranic schools in Morocco the teacher (*faqih*) would begin by writing verses from the Quran on the students' wooden slates (*luh*). The students would then spend the rest of the day memorising the text on their slate and sections of text that they had previously learnt. On the following day the students had to recite the text in front of the teacher; if this was done successfully, the teacher would rub the verse from the slate and write a new one to be memorised. Thus, as in the medical school in Dhorpatan, progress in memorising the text is achieved incrementally. The students did not use any mnemonic devices to help them memorise the texts, though they did remember sections of the text by recalling the shape of letters or events that occurred around the time of memorising specific sections. Eickelman tells us that in the Quranic schools in Morocco, the strong emphasis on memorising the Quran was accompanied by a, 'lack of explicit explanation of memorised material' (Eickelman 1978: 493). Messick (1993) describes exactly the same method of the teacher writing the text on the student's lesson board and replacing it with another once the student had memorised it, in his study of Quranic schools in Yemen.

### 3.3 Memorisation in Medieval and Renaissance Europe

The method of memorisation in the medical school and the method used in the other examples I have given share certain characteristic features: in each case the text that is memorised is considered to be sacred and is written entirely in verse; the method of memorisation involves the constant repetition of sections of the text; furthermore, in a few of the examples there is an apparent emphasis on memorisation over and above explanation. Taken together these features can be taken to be typical attributes of pre-modern forms of learning; in the following chapter I refer to this as the synthetic mode of knowledge. By now turning to the role of memory in medieval and renaissance Europe, I hope to be able to shed light on my original question of why memorisation has been so highly valued.

Carruthers (1990) begins her study of memory in medieval culture by contrasting a contemporary account of Einstein with a similar account of St. Thomas Aquinas. Although both accounts agree on the high intellectual stature of each person, they differ in the list of qualities that are deemed worthy of esteem. In the description of Einstein we hear of his ‘tremendous imagination’, ‘originality’, and his ‘intuition which leads to unexplored regions’ (Infeld 1980 cited in Carruthers 1990:2). The account of St. Thomas Aquinas takes a different approach: we are told that ‘(h)is memory was extremely rich and retentive: whatever he had once read and grasped he never forgot; it was as if knowledge were ever increasing in his soul as page added to page in the writing of a book’. Later in the passage the author eulogises his great powers of dictation, ‘he seemed simply to let his memory pour out its treasures...’ (Gui cited in Carruthers 1990:3).

At the first glance it seems that what we have here is a dichotomy between the modernist view of knowledge, which values originality and creativity, and a pre-modern view which values rote learning and the faithful reproduction of traditional knowledge. Eickelman tells us that the French historian Lévi Provençal (1922:11) made the following assessment of traditional Islamic education: ‘he claimed that it deadened the student’s sense of inquiry to the point that the knowledge and comportment of twentieth century men of learning could be assumed “without fear of anachronism” to be exact replicas of their predecessors of four centuries earlier’ (Eickelman 1978:490). In Carruthers’s view, an examination of the value ascribed to

memory, and the role it played in medieval culture, allows us an understanding of how scholars of the time viewed the nature of 'creative activity'. In her account she shows that the strong emphasis on memory is not at all incompatible with creativity and originality. Eickelman raises the same issue in his response to Provençal's comment, by pointing to the 'considerable flexibility' of traditional religious knowledge (1978:490).

We have presently three tasks at hand: first, to assess how memory was understood in medieval culture; second, to compare that understanding with the role of memory in the various educational contexts I have given; and finally, to compare the medieval understanding with the prevalent view of memory in contemporary Western culture. In Carruthers' view, 'medieval culture was fundamentally memorial, to the same profound degree that modern culture in the West is documentary' (Carruthers 1990:8). Implicit in the distinction that Carruthers makes here is that medieval culture relied on memory because of the rarity of texts. In fact this does not appear to have been the case. Written material became increasingly available from the eleventh century, but this does not seem in any way to have dislodged the culture of memory, which prevailed up to and beyond the period of the renaissance. During the renaissance the arts of memory reached their highest expression. Carruthers suggests the culture of memory prevailed, despite the increasing presence of documentary technology, because of the identification of memory with morality and virtue (Carruthers 1990:156). By embodying the text through memorisation, an individual embodies the values contained within it.

We can conclude from this that the medieval understanding of memory is not confined to the modern passive recollective usage of the word, which restricts its meaning to the exact reproduction of past experience. To the medieval frame of mind, memory, far from being a passive system of rote repetition or iteration is, as we shall shortly see, an active system of techniques used for retrieving and manipulating what has been previously set aside. This distinction is important, as it was precisely this partial view of memory as a passive mechanism, which stores and reproduces past events, which obfuscated Provençal's view of the subtleties present in Islamic education. As Carruthers puts it,

This is not at all what pre-modern writers meant by 'memory'. The distinction is clear in Albertus Magnus's commentary on Aristotle's *De memoria et reminiscencia*. Albertus says that

iteration, or rote repetition, of knowledge is not at all the task of *memorial* recollection or 'memoria'. He defines reminiscence or recollection as the 'tracking down' (*investigatio*) of what has been 'set aside' (*obliti*) through and by means of the memory; this process differs in nature from 'rote repetition' (*iterata scientia*) (1990:20).

'Memory' in the medieval sense has an active role and a character which is essentially compositional and hermeneutical, for this reason I will call it 'compositional memory' to distinguish it from passive recollective forms. I don't mean to say that in pre-modern western civilisation rote memory and iteration did not exist amongst scholars; it most certainly did, but this was not considered to be 'true memory' (Carruthers 1990:20).

Perhaps the easiest way to demonstrate the nature of medieval compositional memory is to consider some accounts of its activity that were made in the medieval period. One relevant account is Carruthers' discussion of St Augustine's reflections on a school friend who had memorised all of Virgil and most of Cicero. The point of interest for St Augustine is not the fact that his school friend had memorised so much, or that he could manipulate what he had memorised, but the great extent to which he could do it (Carruthers 1990:18). An ability to memorise large amounts of text was not something in itself particularly worthy of note, rather it was the command that a person had of memorised material that was accorded high respect.

Contemporary accounts of St Thomas Aquinas suggest that he composed his works mentally and then dictated them from memory. This certainly appears to have been true of his *Summa Theologica*, and of the compilation of patristic texts on the gospels, the *Catena Aurea* (Carruthers 1990:5). We are told by Bernardo Gui that the *Catena Aurea* was composed from diverse texts he had committed to memory while staying in various religious houses. Gui also refers to a number of firsthand testimonies, which describe St Thomas Aquinas dictating from memory to three or four secretaries 'on different subjects at the same time' (Gui cited in Carruthers 1990:3). This description demonstrates the active compositional role that memory played in medieval culture. A similar process of composition must have occurred in the construction of the early Vedic texts and amongst the early Buddhists who appear to have composed the Buddha's teachings mentally in a textual form in a manner suitable for oral transmission (Gombrich 1987:24).

### 3.4 The Technologies of Memory

Thomas Aquinas did not carry out such great feats of memory unaided. He was well versed in the classical arts of memory (mnemotechnics) as his discussion of them in the *Summa Theologica* shows (Yates 1966:73). Traditionally the origin of these arts is ascribed to the Greek poet Simonides (477 BC). The first written account of how Simonides invented the art of memory appears in the Roman politician Cicero's *De Oratore*. As a politician, Cicero is interested in memory as one of the five branches of rhetoric. For him the arts of memory are the techniques that enable an orator to make long accurate speeches. The full story is given by Yates (1966:1) and Rose (1993:63) but the main point is that in the story, Simonides is able to remember all the guests who were present at a banquet by bringing to mind their location at the table. It follows from this that the technique involves the orderly arrangement of what is to be remembered in a sequence, which is easy to recall. The classical technique is to place images of what is to be remembered in various locations of a familiar structure. The device most often used was an architectural structure. This technique was used throughout the middle ages and is found in the famous 'memory theatres' in the renaissance period (Yates 1966). Even in recent times the technique has been used to great effect. Perhaps the best example of this is Luria's (1968) *Mind of a Mnemonist*.

The students in the medical school do not consciously make use of such mnemotechnics. The only technique that they use is the constant repetition of the text. The same is true for the way memorising is conducted in the other examples I have given. This is not to say that mnemonic devices are absent from Tibetan culture. As we saw, one technique that is used by the monks is to recall marks on pages of the text; in medieval Europe this is one of the main reasons for the careful layout of illuminated manuscripts.

Though the students do not consciously make use of mnemotechnics, the text is itself a kind of elaborate mnemonic device. Two main mnemonic devices have been inbuilt into the fabric of the text to facilitate ease of memorisation. The first is the abundant use of lists. Various authors have pointed to the widespread occurrence of lists used as a mnemonic device in the oral traditions of Brahmanism, Buddhism and Jainism (Gethin 1992, Collins 1982, Gombrich 1987). The use of lists begins

immediately with the first volume of the medical text, which presents a summary of the medical knowledge using the metaphor of a tree with three roots, nine stems, forty-seven branches, two-hundred-and-twenty-four leaves, two flowers and three fruits. The tree metaphor is itself a mnemonic device, which contains all the fundamental knowledge of Tibetan medicine. Three of the seventy-nine pictures (*thangkha*) that the regent of the fifth Dalai Lama, Sangye Gyamtso had made to illustrate his famous *Blue Beryl* commentary, give precise pictorial representations of the various elements of the tree metaphor (see plates 14, 15 and 16). Reproductions of these pictures are still used in Tibetan medical schools, the school in Dhorpatan being no exception.

Although the tree metaphor is meant only to summarise the basic principles of the medical teaching, the metaphor of the tree is also well suited to the way that information is organised in the text. Time and time again we are given lists within lists, like the divisions of branches on a tree. Take for example the explanation given in the first chapter of the fourth volume on medicinal decoctions. First we are told that there are two broad types of decoctions: decoctions for hot illness and decoctions for cold illnesses. The text proceeds further to subdivide decoctions for hot diseases into a fourfold classifications according to: location of fever, types of fever, scattered fevers, and single ingredient decoctions. It then lists the seventeen decoctions for the first type, seven for the second, nine for the third and fifteen for the fourth. Needless to say the same kind of scheme is then given for the decoctions for cold sicknesses. The text abounds in such forms of presentation.

The second main mnemonic device that is made use of in the text is the use of verse. The *Gyushi* comprises of 156 chapters, which all in all contain 5900 verses. As I have said, the standard meter of the verse is the *tshig kang*, the nine-syllable line. Ayurvedic texts, though still in verse, differ somewhat in form from the Tibetan medical text. The texts Zimmerman (1978:101) worked with in South India are composed in the *karika* style of four octosyllabic quarters. As with lists, verse is a standard technique used in oral traditions to facilitate memory. Brahmanical, Buddhist and Jain literature has been composed in verse form with this purpose in mind. The same is true of Islamic tradition; Eickelman (1978:489) points to the

rhymed verse form in which Islamic treatises were purposefully composed with the aim of facilitating memory.

The idea of the text as a mnemonic device rather than a repository of knowledge seems to be very much the view that was taken in all of the examples of oral traditions that I have given. A closer look at Thomas Aquinas's text the *Catena Aurea* ('golden chain') is insightful in this respect. Carruthers (1990:5) tells us that the *Catena* ('chain') was a genre widely used by monks, which involves the linking together of various religious authorities around certain biblical phrases. There is an exact parallel to the medieval *Catena* genre in the Tibetan tradition in the *ten rim* ('stages of the doctrine') and the *lam rim* ('stages of the path') textual genres, which lay out the stages of the path of a Bodhisattva (Jackson 1996). One of the best known works in this class is Gampopa's *Jewel Ornament of Liberation* (Guenther 1971). As Guenther points out in his preface, the work is full of quotations from inside Tibetan collections of Buddhist sutras and sastras and from outside, all given by Gampopa directly from memory. Another example is Tsong kha pa's celebrated *Lam rim chen mo*.

Finally we should not overlook the act of writing itself as a technique of memory. We have seen how in Dhorpatan, the Quranic schools, and the Brahmanical schools in South India, the sections of the texts to be memorised were first written down. Writing here serves as an aid to memory, not a substitute for it; the same reasoning applies to written texts. In the medieval period, memory itself was likened to a book. Earlier we heard about Thomas Aquinas's knowledge, which was 'ever increasing in his soul like as page added to page in the writing of a book' (Gui cited in Carruthers 1990:3). By first writing out a section of the text, and then constantly repeating it, the idea is that the text will be indelibly imprinted in the memory of the student.

### **3.5 From Memorisation to Performative Memory**

During my time at the school I often questioned the students about their knowledge of the medical system, such as how they understood the various disease classes, or anatomy. On several occasions the students responded to my questions by saying that they had memorised the relevant section but it had not yet been explained

to them. It would be easy to conclude from this that the large amount of time and effort that the students put into memorising the text amounts to little more than rote learning. I mentioned this to Tempa Yungdrung, the junior *Lopon* at Triten Norbutse Bön Monastery in Katmandhu. He said that memorisation and understanding should go together, but often within the Tibetan tradition they do not. He added that in Tibet it was common for monks who could barely write to memorise large texts with little understanding of what they were memorising. Although it is less common today, the situation still persists, and this is so not only in Tibet but also amongst Tibetan refugees.

Time and time again whilst he was explaining to me about understanding the contents of Bönpo texts, Tempa Yungdrung stressed the need of ‘single minded concentration’. He used the English phrase, but the idea is congruent with the Buddhist and Bönpo notion of ‘mindfulness’ referred to in Tibetan as *dran-pa* (Sanskrit *smṛti*)<sup>2</sup>. He said that when reciting a text in a ritual, whether it is a mantra or a prayer, it is single-minded concentration that is needed. He said that monks who recite prayers and mantras without this presence of mind are likened to parrots. Contrary to what has been said about the importance of the sound of words in the Brahmanical tradition (Fuller 1997 Parry 1985), it seems in the Tibetan tradition that what takes precedence over this is the ‘mindfulness’ of the practitioner.

At the medical school, Amchi Gege takes great pains to inculcate in the students this presence of mind. If he notices that students are not fully concentrated in their lessons or when they are engaged in other medical activities, they will be admonished. The students know that they must respond to what he says or risk a beating. Every day before the evening meal, the monk students would sit with Amchi Gege in his room and recite prayers for about an hour. Even though it was the end of the day and everyone would normally be tired, the monk students still had to recite the prayers with a strong presence of mind. One of the students told me that a couple of years previously he had been so tired during the prayers that he had begun to fall asleep. This did not happen for very long as he was abruptly returned to wakefulness by Amchi Gege striking him on the head with a stick.

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<sup>2</sup> For a discussion of the relationship between this word and cognate forms, with different types of memory in Indian and Tibetan Buddhism, see Gyatso (1992).

A similar form of discipline has been documented in Quranic schools. Messick tells us that teachers in Quranic schools in Yemen were given a 'legally recognised capacity for discretionary discipline' (1993:77). This usually involved a thrashing with a rod or a 'pole-and-strap bastinado device' used to beat the soles of the student's feet. The aim of this discipline was to instil into the students the quality of *adab*, which we are told is, 'a complex of valued intellectual dispositions and appropriate behaviours' (1993:77).

Though initially memorisation is a process of rote learning, the aim is that in time this knowledge will be appropriated into the students' sphere of competency. Amchi Gege would not expect his students to be able to understand what they had memorised until it has been explained to them. But if they can't answer his questions, either during the lessons or during clinical practice, on subjects that have been explained to them, then he has cause for concern. What I said earlier about the role of memorising in medieval culture is equally applicable in the medical college. In memorising the text the students are inscribing its content not on a page but in the fabric of their mind. The aim is that gradually, through exegesis and practice, what they have memorised will be appropriated and made an inalienable part of their sphere of competency. The text is not viewed as something that should be picked up off a shelf and consulted; it is something that the student must become. In a sense the student becomes a practitioner of Tibetan medicine by gradually embodying the medical text. In the Tibetan medical tradition this process is not only about acquiring the knowledge that is contained in the text, it is also about embodying the vision and capacities of the Medicine Buddha who is considered to be the source of its contents.

On several occasions I questioned Amchi Gege about the origin of different facets of the medical system. His answer was always the same; all the teachings came from the enlightened vision (*ngön*) of the Buddha Tönpa Shenrab. By memorising the text, along with acquiring the knowledge necessary to practise medicine, they are setting up the conditions for acquiring the same vision within themselves.

For some time now I have been talking about the role of memory in Tibetan, Indian, Islamic, and Medieval culture. My main point has been that to understand the role of memory in these cultures, it is necessary to move away from the narrow view

of memory as the reproduction of past events. As we have seen in the previous discussion of memory in medieval culture, what was valued was the active role memory was seen to play in the generation of meaning. Memory was valued amongst the educated class, because in its active compositional and hermeneutic modes it was seen to be fundamental to scholarly creativity.

Although the general experience in western culture has been one of a progressive devaluation of human memory, as I have previously indicated, there has been an increasing interest amongst scholars in the manifold ways in which memory works. The passive reproduction of previous experience, what Tulving (1983) calls 'episodic memory', is only one of numerous forms of memory (see Figure 2.1). Memory is not simply a passive vessel of accumulated information; through the processes of memory, acquired knowledge is actively present in the generation of meaning in social action. Skilled performance in any sphere of activity involves the dynamic synthesis of propositional and procedural forms of memory. It is this synthesis, which underpins skilled performance and is at the basis of what I have called knowledge as a mode of being. For this reason I have chosen to call this active mode of syncretic memory, 'performative memory'. Connerton (1989) uses the phrase to apply specifically to procedural forms of memory, but my argument is that expert performance often involves both procedural and propositional forms of memory.

### **3.6 Performative Memory in Clinical Practice**

If the students are to become competent medical practitioners they must acquire some theoretical and practical mastery over the material that they have memorised. The same is true of education in Tibetan monasteries; it may be commonplace for Tibetan monks to memorise texts without any understanding of their meaning, but the ideal is that they should understand. Unlike in the Brahmanical schools described by Fuller, or the general pattern described by Eickelman, the students in Dhorpatan, like all medical students must acquire 'formal and substantive knowledge' of medicine and be able to bring that knowledge to medical practice.

The students are explicitly encouraged to engage with the material in the text in an active way. After each lesson they were given fifteen minutes to 'debate' in pairs what they had been taught. As we have seen, there is a long-standing tradition of

debate in Tibetan culture. Although the session was commonly referred to by the English word, 'debate', very little actual debating occurred. The session is more correctly referred to in Tibetan as *gotur*, 'a disussion'. This is much more befitting as what usually happened is one of the pair of students would attempt to summarise what had been said in the lesson while the other student would relax in the sun and listen, perhaps making the occasional comment.

In a conversation I had with Amchi Gege about the role of memorising, he related it directly to medical practice. He explained that memorising the text is essential as, during the process of examining a patient and prescribing a course of treatment, many different elements of medical knowledge must be brought together at the same time. The idea is that this can only be done if all this knowledge is already present in the memory of the practitioner. In an unusual moment of enthusiasm for the method of memorisation, one student confided in me his conviction of its worth. He said that it is especially important for volume three of the *Bumshi*, which gives abundant details concerning the various classes of disease. The practitioner of Tibetan medicine must have all this knowledge to hand when examining a patient, if a correct diagnosis and therapeutic assessment is to be made.

The ordered structure of the medical text with its reams of lists within lists, serves as a mnemonic device for medical practice; once memorised, it acts like a semantic web of layers of associated meanings. For this reason it would not be too much of an exaggeration to liken it to a textual 'memory palace' or 'theatre of memory' (Yates 1966). This interpretation of the generation of meaning through processes of associative memory was very much a part of techniques of memory in medieval culture. The idea is that if what is memorised is imprinted strongly in the mind, according to a clear pattern, no mistake can be made in remembering. If this is done, as Quintillian observes, 'however large the number of [things] we learn all are linked to one another like dancers hand in hand' (cited in Carruthers 1990:62). A further metaphor that is used is fishing, whereby associative material is 'hooked' like fish caught on a line. Carruthers suggests a further piece of evidence, which links the idea of texts with memory. The word *texta*, which literally means 'something woven', seems to be highly suggestive of medieval conceptions of memory (Carruthers 1990:62). The same Latin root is also present in the word 'textile'.

How this works in the medical school is that through memorising the text, the students set the elements of medical knowledge in their mind according to an ordered framework. Gradually through exegesis in the classroom and through engaging in clinical practice what they have memorised will be understood and appropriated into their sphere of competency. Once they have achieved this level of competency, the idea is that in clinical practice what a patient says, taken in combination with any observations made in the diagnosis, will set in motion a gathering of associated elements in the student's mind through which meaning will be generated in the clinical setting. In a sense, the process of carrying out the diagnosis and deciding on the appropriate treatment is an act of composition which creates a coherent order through the selection of associated elements of medical knowledge in the practitioner's mind which relate to the patient's condition. In the previous chapter I have described three theoretical mechanisms that have recently been developed to account for this process: schema theory, the habitus, and explanatory models.

The programme in the medical school is not incremental in the sense that the students start at the beginning of the medical text and gradually learn the material in the order that it is set down. One logical way to structure the course would be for the students to memorise a chapter of the text and then receive the explanation, and finally when they have gathered enough knowledge in this way they can attempt to put it to practice. This is not the way that it happens in the medical school. First as can be seen from the course syllabus (see Table 1.1) the programme does not follow the sequential order of the text. After studying the condensed version of the medical system, which is provided in the first volume of the medical text, the students go directly to the first and second chapters of the fourth volume on pulse and urine diagnosis; after this they continue with the following three chapters on medicinal decoctions, powders and pills. Once this foundation has been laid they then move on to study the descriptions of diseases listed in the third volume.

Memorising follows the sequence in which the subjects are taught, but most of the students were much further ahead in their memorising than the stage where they had arrived in their lessons. Furthermore, by acting as Amchi Gege's helpers, the students are actively involved in clinical practice almost from the beginning of the course. Having memorised and studied pulse and urine diagnosis at the beginning of

the course, all the students could attempt to do it in clinical practice. Usually what happened was when a patient arrived, first Amchi Gege would do the diagnosis and then after this he would ask the student who was helping him to try; occasionally he would let the student try first.

In order to understand why Amchi Gege and the student who I have just mentioned, should feel that memorising the text is essential to medical practice, in what follows I will present one episode of clinical practice in which the students were involved. This episode demonstrates the way that elements of medical knowledge, which the students had previously memorised and had explained to them, are brought together to generate meaning in the clinical setting. In the following chapters I will give further examples of the way that performative memory is developed in medical practice.

One morning a Nepalese woman arrived at the clinic. While she was consulting Amchi Gege about her sickness, two of his male students were present. She explained that she had been feeling generally unwell and had been suffering from bouts of fever. She complained specifically of pain in her knees, a pulsating pain in her back, and a general feeling of 'laziness'. She added that doing work exacerbated her condition. I was told that she had come to the clinic with exactly the same problem the year before, and at that time her condition had been diagnosed as 'old fever' (*nying tshé*). First Amchi Gege asked her a few questions and asked both of the students to take her pulse. From this they concluded that she was suffering from a condition known as 'hiding fever' (*gab tshé*). Following this, Amchi Gege took her pulse and corrected their diagnosis to 'old fever' (*nying tshé*), the same condition that had been diagnosed the previous year. She was given the medicinal powder Saffron twenty-five (*gapur nyernga*), which was measured out into individually packaged single dosages by one of the students.

This example clearly shows the way in which performative memory is developed as all the different elements of the learning process in the school are brought together in clinical practice. As I have said, pulse diagnosis is one of the first subjects that the students memorise and are taught by Amchi Gege. I will discuss the theory underlying pulse diagnosis and how the students learn about it in chapter five. Suffice it to say here, the students have to learn a large amount of different types of

pulse. The chapter on pulse diagnosis gives the qualities of the pulse for forty-six types of disorder, but the list doesn't stop there: characteristically, many of these classes are further subdivided into subclasses. For example the class of 'fever pulses' contains pulses for six different types of fever; the class of 'cold pulses' contains pulses for six different types of disease that are of a cold nature. On top of this there are separate sections dealing with types of 'death pulse', pulse indicating the action of malevolent spirits, and the 'life force pulse'.

From my own experience of trying to take the pulse, as a beginner it is difficult enough to find even the twelve basic pulses. As for discerning the subtle qualities of the pulse, this must come after some considerable experience. By the time I arrived at the medical school, all of the students had acquired some practical competency in pulse taking, indeed a few of them seemed to be exceptionally good at it. But a high level of competency in pulse taking is in itself insufficient. As the qualities of the pulse for some diseases are very similar, or even in some cases the same, it is not enough for the students to learn just the pulse, they must have a thorough working knowledge of the specific symptoms of each type of disease.

In the above example both the students found the pulse to be a little fast, slightly twisting, and not very prominent. From this they concluded that the patient was suffering from a condition known as 'hiding fever' (*gab tshé*). The condition of 'old fever' (*nying tshé*), which is characterised by a very similar kind of pulse was finally decided on by Amchi Gege, partly due to his greater abilities in discerning the qualities of the pulse, but also because of the way he related the pulse to the patient's symptoms.

The main source of information about symptoms is the third volume of the medical text. This consists of ninety-two chapters, which give extensive information about the various classes of disease. Information for each class of disease is given according to a fivefold scheme: primary cause (*gyu*), contributory factors (*kyen*), types (*rig*), symptoms (*né tag*), and treatment (*chö thab*). Expertise in pulse diagnosis requires that the practitioner has a knowledge of the techniques of pulse diagnosis along with a comprehensive understanding of the symptoms of different types of disease. Once the diagnosis has been made an appropriate treatment must be decided upon, and this knowledge, as well as being found under the relevant disease

classification in the third volume, is dealt with at some length in other locations in the medical text.

We can now see why Amchi Gege considers memorising the text to be essential to medical practice. For him, so much knowledge must be brought together at one moment. Memorising the text is a necessary stage on the way to clinical competency. The type of memory that is at work in expertise in clinical practice is what I have referred to as performative memory; at this level, knowledge that was first memorised and learnt is not merely recalled it is enacted. Through performative memory in clinical practice, meaning is generated by a process of the linking together of associated elements within the mind of the practitioner. To use the old metaphor, in clinical practice through associative memory, various elements of relevant medical knowledge arise 'like dancers hand in hand'.

In the previous discussion we have seen that the high value that is placed on memorisation in the medical school in Dhorpatan, as in the various other contexts that I have described, relates to the student developing the skills that are necessary to competent performance. Memorisation, though initially taking the form of rote learning, through explanation and increasing practical experience is gradually appropriated into the students' sphere of practical competency. We have seen that there are many similarities between the role of memory in Western medieval and Tibetan culture, but there is one big difference: the students in the school are not learning how to compose texts, they are learning how to practice medicine. From the vast store of knowledge that they memorise and learn, certain elements will remain passive and others will become part of the performative memory of clinical practice. Many of the diseases they learn about in the text they will perhaps never encounter in clinical practice, and consequently this knowledge will never become performative. Though the nature of medical knowledge in Tibetan medicine and biomedicine is different, both medical systems place great emphasis on memorisation as a fundamental precursor to clinical practice. If the learning process is successful, memorisation is not a passive form of rote learning; the student must develop the 'single minded concentration' or 'mindfulness' that is necessary to bring together

relevant medical knowledge in clinical practice. This is as true for the biomedical student as it is for the Tibetan medical student.

## Chapter 4 Synthetic and Analytic Modes of Knowledge and Learning

Lave has stressed the importance of fully contextualising patterns of learning. As she puts it, '[I]t is impossible to analyse education – in schooling, craft apprenticeship, or other form – without considering its relations with the world it prepares people' (Lave 1988:xiii). And again on the same theme, 'any given attempt to analyse a form of learning through legitimate peripheral participation must involve an analysis of the political and social organisation of that form, its historical development, and the effects of both of these on sustained possibilities for learning' (1991:64). We have seen that the learning process in the medical school in Dhorpatan has certain characteristic features: the sacred indisputable nature of medical knowledge; the importance of memorisation; and the emphasis on lineage, that is to say the teacher pupil relationship as a medium by which the knowledge and skill of past masters is perpetuated. This view of the nature of knowledge, and related notions about how it should be transmitted, is widely present in Tibetan culture. We have also seen that these features are not unique to traditional Tibetan education, but have broad currency in pre-modern forms of knowledge transmission, such as in Islamic education, Brahmanical education, and in medieval and renaissance Europe. In what follows I will consider more closely the relationship between modes of knowledge and learning and the contexts in which they are found.

The following discussion is founded on two premises: the first is that there exists a direct relationship between forms of knowledge and methods of transmission, and any study of a particular cultural form of education must take both into consideration; the second is that a full appreciation of modes of knowledge and related forms of learning can only be made by considering the social, political and cultural setting. I will begin by assessing the form of knowledge and the method of learning in the medical school in Dhorpatan in the light of the anthropological debate on modes of thought. In this chapter I will focus mainly on the nature of modes of knowledge, in the following chapters I will relate these modes of knowledge to notions about the body and disease.

## 4.1 Modes of Thought: a Series of Dichotomies

Like all medical systems, Tibetan medicine has its own notions of pathogenesis, diagnosis and therapy which accord to a specific cosmological scheme. This cosmological scheme defines not only what is considered to be valid knowledge, but also the proper method by which it should be transmitted. This method of transmission flows logically from the Tibetan mode of knowledge, which is based on Buddhist, and in the medical school in Dhorpatan, Bönpo cosmological notions. The knowledge contained in the main Tibetan medical text, whether it be the *Gyushi* or the *Bumshi*, is considered to derive from the enlightened vision (*ngön*) of the Medicine Buddha; it is thus sacrosanct and beyond dispute, and by attempting to understand and achieve practical mastery of this knowledge, the student is aspiring to acquire the qualities of the Medicine Buddha: the high value that is placed on memorising and lineage flow logically from this view.

In contrast, students of biomedicine learn a body of knowledge, which is derived, at least in principle, through scholarly ingenuity, and is amenable to change. Existing medical knowledge is extolled, but so too is the capacity to improve upon it. Memorisation, and to a certain extent lineage, are still important, but the approach taken is explicitly one of progress rather than preserving intact the revealed knowledge passed down through the medical lineage. In a manner of speaking, the ideal of Tibetan medical education is for the student to become the master, whereas the ideal of biomedical education is for the student to surpass the master's understanding. Depicted in this way, it appears that these two medical systems involve contrary modes of knowledge and learning. For reasons that will in due course become clear I will refer to these two idealised approaches as synthetic and analytic modes.

In my assessment of the method of learning medicine in the medical school in Dhorpatan, my aim is to identify three kinds of learning processes: processes that are universal; processes that are common to a variety of similar learning contexts; and processes that are specific to Tibetan culture and the medical school in Dhorpatan. Although I concur with Lave when she emphasises 'the diversity of historical forms, cultural traditions, and modes of production in which apprenticeship is found (in contrast with research that stresses the uniform effects of schooling regardless of

location)' (1991:63), I believe there is a need to consider the diversity of forms and also unifying features. As evidence for her claim, Lave refers to the work of several authors whose writings present different forms of apprenticeship in a variety of settings (Goody 1982, Coy 1989, Cooper 1980, Geer 1972, Jordan 1989, Medick 1976). Her remarks are directed specifically toward apprenticeship, but her comments are equally applicable to other forms of learning. By showing similarities between the mode of knowledge and learning in the medical school in Dhorpatan with that found in other cultural contexts, my aim is to shed light on the learning process in general.

The debate on modes of knowledge does not present a diversity of cultural forms but in a broad sweep all forms are conflated into one or other of two modes of thought. There have been various renditions of the formula all revolving around the modern/pre-modern, or modern/traditional layout. To mention a few of the most influential of these dichotomies, there is: logical/pre-logical (Lévy-Bruhl 1926), rational/irrational (Wilson 1970), logico-empirical thinking/mythopoeic thinking (Cassirer 1944), open/closed (Popper 1959), wild/domesticated and hot/cold (Levi-Strauss 1962). Here I will focus on the ideas of two authors in particular: Robin Horton and Jack Goody. The reason for doing this is that what Goody lists as the typical attributes of non-literate societies, and what Horton says of cognitive traditionalism, appears to strongly resonate with what I have said about the mode of knowledge and the method of learning in the medical school in Dhorpatan.

Horton's position began in an article in 1970 where he lays out what he considers to be the difference between African traditional thought and Western science. First he clears the ground by stating that the difference is not that Western science is rational and African traditional thought is not. His stance is a development of Evans-Pritchard's notion that the Azande, 'reason excellently in the idiom of their beliefs, but they cannot reason outside, or against their beliefs because they have no other idiom' (cited in Horton 1970:154). Horton combines this view with Popper's (1959) distinction between open and closed societies. The outcome is a view of traditional societies as closed, in that they lack scepticism and a developed awareness of alternative views to established doctrine; and a view of societies where modern

science is prevalent as open, in that scepticism, and the concomitant awareness of alternatives is highly developed.

<b>SYNTHETIC MODE OF KNOWLEDGE</b>	<b>ANALYTIC MODE OF KNOWLEDGE</b>
<b>GOODY</b>	
<b>NON-LITERATE CULTURES</b>	<b>LITERATE CULTURES</b>
Lack of Scrutiny	Increased scrutiny
Lack of critical activity	Increase critical activity
Limited scope of rationality	Increased rationality
Limited scope of logic	Increased logic
Lack of cumulative knowledge	Increase in cumulative knowledge
Personal transmission of knowledge	Impersonal transmission of knowledge
Cyclical notion of time	Durational notion of time
Knowledge is malleable	Knowledge has semi-permanent form
Conservative – ‘lack of spontaneity’	Creative
<b>HORTON</b>	
<b>COGNITIVE TRADITIONALISM</b>	<b>COGNITIVE MODERNISM</b>
Closed – no awareness of alternatives	Open – awareness of alternatives
Lack of inter-theoretic competition	Inter-theoretic competition developed
Consensual mode of theorising	Competitive mode of theorising
Personal transmission of knowledge	Impersonal transmission of knowledge
Lack of scepticism	Sceptical
Traditionalistic concept of knowledge	Progressivist concept of knowledge
Present knowledge passed on from ancients	Present knowledge is an improvement on the knowledge of the ancients

**Table 4.1 The Attributes of the Synthetic and Analytic Modes of Knowledge**

In response to criticism, in an article published in 1982 Horton reformulated his position; the closed and open dichotomy was dropped and the theory of alternatives and scepticism was refined. But much of the original argument was retained. In the new formulation ‘cognitive traditionalism’, which involves an incontestable form of knowledge, that is passed on from the ancestors through an unbroken lineage of person-to-person transmission, is opposed to ‘cognitive modernism’, which is marked by ‘inter-theoretic competition’. It follows from this that cognitive traditionalism has a ‘consensual mode of theorising’, which is done within the framework of established knowledge, whereas cognitive modernism is marked by a ‘competitive mode of theorising’ and a ‘progressivist concept of knowledge’. We are told that through the activity of inter-theoretic competition, knowledge gradually progresses through increasingly better formulations.

Goody's argument began in a joint article with Watt in 1963, and went through various permutations in the ensuing decades (1968, 1977, 1980, 1986, 1987). His aim is to understand the effects of writing on modes of thought. Like Horton he does not hold the view that people in traditional, pre-literate societies are irrational. He also has his own views about the lack of scepticism in pre-literate societies; as he puts it, they 'are marked not so much by the absence of reflective thinking as by the proper tools for constructive rumination' (1977:44 cited in Parry 1985:201). In Goody's opinion the proper tool for constructive rumination is literacy.

In 1962, Lévi-Strauss made the distinction between two modes of thought, which he classified as 'savage' and 'domesticated'. For Goody the problem with this formulation is that Lévi-Strauss makes no attempt to account for the transition from one to the other, nor for the fact, as he puts it, that 'modern man is emerging every day in contemporary Africa' (1977:16). In Goody's opinion, it is the advent of literacy in society, which brings about the domestication of the savage mind. With literacy, oral knowledge takes on a 'semi-permanent form' (1977:37); this leads to an accumulation of knowledge and an increase in scepticism, rationality and critical activity. For Goody this inevitably leads to: the breakdown in the need for person to person transmission; the growth of individualism; a steady increase in bureaucracy; and a durational as opposed to a cyclical notion of time. All these features, Goody tells us, are characteristic of modern society. There are a number of similarities between Goody's framework and that of Horton's. Like Goody, Horton sees oral transmission as conducive to the persistence of the traditional mode of knowledge. He also takes a similar view to Goody on literacy as a causative factor that brings about the transformation from the traditional to the modern mode, but to this he adds the factors of social and environmental change. Table 4.1 summarises the attributes Goody and Horton ascribe to the non-literate/literate, and the cognitive traditionalism/modernism dichotomies, and relates them to what I have called synthetic and analytic modes of knowledge.

I would now like to broaden the discussion by briefly considering Foucault's (1970) work on modes of thought which he calls 'epistemes'; this will lend further evidence to the relevance of the 'synthetic' and 'analytic' classification. An episteme is an overarching world view prevalent in a given historical period which serves as a

ground plan for all human activity. In this sense the episteme appears similar to Kuhn's (1962) concept of 'paradigms', the prevalent guiding models that are followed by scientific communities.

Although there is some similarity between Foucault's 'epistemes' and Kuhn's concept of 'paradigms', there are also important differences. For Kuhn, paradigms are 'exemplars', as he puts it, 'some accepted examples of actual scientific practice – examples which include law, theory, application, and instrumentation together – provide models from which spring particular coherent traditions of scientific research' (Kuhn 1962:10). A paradigm is 'an accepted model or pattern' (1962:23) shared by a scientific community, which is used by scientists as the basis of their work. Though Kuhn acknowledges that paradigms have a tacit component, particularly at the level of scientific practice (1962:191), they operate primarily at a conscious level; that is to say scientists are aware of the paradigm upon which their work is founded.

Unlike paradigms, Foucault's 'epistemes' are not exemplars; they are active at an unconscious level, structuring thought and behaviour, and as such are present, not only in the natural sciences, but in all areas of life. Though Foucault identifies a number of historical epistemic phases, for him the most decisive change in European life was marked by the historical watershed of the seventeenth and eighteenth centuries, which saw the birth of science and the period of the enlightenment. The attributes he gives for the 'epistemes' on either side of this divide correspond closely to what I have previously listed for the synthetic and analytic modes.

The synthetic mode corresponds to the attributes that Foucault lists for the Renaissance episteme. We are told that the key principle in the Renaissance episteme is 'resemblance'. Through one of the forms of 'resemblance', *convvenientia*, all things near to one another were seen to be interconnected into a continuous hierarchy. Lovejoy (1936:59) tells us that throughout the Middle Ages, up to the eighteenth century, the structure of the world as it was understood by 'most educated men' was one of a 'Great Chain of Being', which ranked all living beings into an infinite hierarchy from the Absolute Being through decreasing increments to the lowest forms of existence. Each level of existence is considered to be distinct but at the same time part of an indivisible continuous hierarchical series, separated by 'the

least possible degree of difference' (1936:59). Through other forms of resemblance such as analogy and sympathy, everything in the world was understood to be built upon layers and layers of reflections and analogies. According to Renaissance understanding, the resemblances between things is not of an arbitrary nature. The doctrine of signatures held that God had marked things with a special signature, which pointed towards a universal harmony.

In Europe in the seventeenth century, the world of resemblances and affinities was gradually replaced. According to Foucault, in place of unity there developed the principal of discrimination, and in place of analogy and resemblance the crowning principles became, designation, representation and analysis. Foucault was not the first to characterise the distinction between pre-modern and modern knowledge in this way. Heidegger (1977) had already identified 'correspondance' as the guiding principle of premodern knowledge and opposed this to the representational mode of modern thought (Merquior 1991:44), and a similar distinction is to be found in Lévy-Bruhl (1926).

Two other important changes also occurred around this time. Whereas the word 'belief' had once signified valid knowledge, in the Enlightenment it became associated with ignorance and superstition. Good (1994), following the ideas of Smith (1977, 1979) and Needham (1972), has brought into question the use of the word in the literature of medical anthropology. Following along the lines of enlightenment reasoning, if the disease categories of Biomedicine are taken to be universal natural categories existing outwith of culture, medical knowledge that does not accord with this must be considered in some way invalid. The outcome of this is the devaluation of culture as belief, where belief is the incorrect representation of the world. A similar transformation also occurred to the relationship between nature and culture. To the medieval mind, nature and culture were unified in one Great Chain of Being, in the Enlightenment they were rent apart and opposed to each other.

Throughout the literature of medical anthropology two images of medicine recur that reflect the divide between the synthetic and analytic modes of thought. This is epitomised in a publication by Fabrega and Silver (1973) where they contrast the system of medicine of the Zinacanteco of the Chiapas region of Mexico with biomedicine, each are presented as holding diametrically opposed medical views.

The Zinacanteco view, which relates to the synthetic mode, has many similarities with other medical systems, including Tibetan, Chinese, Ayurvedic, and Yunani medicine. It is characterised by a view of the body as an integrated holistic system that is interrelated with other systems existing within society and the universe. The emphasis is on the functions of the system as a whole (Porkert 1976). Body and mind are not thought of as separate. Here Meyer's comments on the conceptions of Asian medical systems are appropriate when he says that they, 'conceive body and mind as two interdependent poles of the same somatic and psychic continuum. Furthermore, this body-mind, the world and society, are interrelated, reflecting one another in a complex system of polysemy, parallels and metaphors' (Meyer 1995:14). Disease arises through dissonance occurring within the interrelationships between these systems and treatment involves restoring balance and harmony.

This was also the view of Galenic medicine, which was the orthodox form of medicine in Europe throughout the Middle Ages up until the ascendancy of the biomedical model in the early nineteenth century. For the Zinacanteco, the healing process focuses not only on the body, but social relations and supernatural agents, and the relationship between the afflicted person and the specialist who is trying to restore health is characterised by informality, closeness and shared meaning (Good 1994:27). Leslie has pointed to the same mode of thought in the great traditions of Asian medicine. As he puts it '(g)reat tradition medicine conceived human anatomy and physiology to be intimately bound to other physical systems. The arrangement and balance of elements in the human body were microcosmic versions of their arrangement in society at large and throughout the universe' (1976:4).

Porkert's (1976) comments on the approach taken by Chinese medicine are generally applicable here. In his view the approach taken involves a perception, which is synthetic and inductive; it focuses on the functioning of the system as whole as opposed to the biological substratum. He contrasts this with a rational perception of substratums, which is causal and analytic. This approach is typified by biomedicine where the image of the body is one of a complex biological mechanism and the concern is with biological substrata.

The scientific revolution that occurred in the sixteenth and seventeenth centuries and the mechanistic view of the universe that is represented in the writings of

Descartes and Newton, had very little impact on medicine in the early period. Up until the eighteenth century doctors continued to uphold Galenic views about the nature of health and disease. Gradually as more evidence accrued which contradicted Galenic physiology, the new science gained ever more ground. Such publications as the anatomical studies of Vesalius in 1543, and William Harvey's discovery of the circulation of the blood in 1628, were two of the first stirrings of the new medical paradigm, which would eventually replace Galenic orthodoxy. As I have mentioned, scientific methods are based on enlightenment notions of knowledge and language. Scientific methodology is about acquiring knowledge about natural categories, which are considered to be universal; such knowledge is acquired objectively, in a value free manner.

The current biomedical model views disease as a pathological entity deriving from somatic lesions or dysfunctions in biological systems. The disease entity produces physical signs that can be clinically assessed, and symptoms, which are the expressions of suffering individuals. The signs and symptoms must be interpreted as indicators of the somatic pathological condition. It is acknowledged that symptoms may be expressed in specific cultural idioms but the disease itself is taken to be an event existing outside of its social or cultural context; it is a pathological entity in the nature-based framework of human biology. The image of the body is one of a complex biological mechanism and the concern is with biological substrata (Pokert 1976). Body and mind are considered as separate. Treatments are mechanical and impersonal and symptoms are codes which the trained medical gaze can read as reflections of somatic dysfunctions.

As the mode of knowledge and learning in the Tibetan medical school in Dhorpatan has many of the attributes of the synthetic mode of knowledge, I will now take a closer look at these attributes and compare them with similar elements found in other systems of traditional knowledge.

## **4.2 The Synthetic Mode of Knowledge and Learning**

There is a strong relationship between Buddhism and medicine. The most fundamental teaching of the Buddha is couched in terms of a medical metaphor. The four noble truths begin with suffering as the condition of existence, the second truth

identifies the cause as desire, the third truth states that it is possible to eradicate the cause of suffering, and the fourth truth gives the method to do this – the eightfold path. Zimmer (1948) has shown that this has a direct parallel with the four successive problems the doctor of Indian medicine looks for when consulting a patient.

At the very foundation of Tibetan medical notions about health and disease lies the Buddhist concept of the three mental poisons (*dug sum*), which lead beings to successive rebirths in the six realms of existence. The three mental poisons of ignorance (*timug*), desire (*döchag*), and aggression (*zhedang*) are the root cause of the three humours of wind (*lung*), bile (*tripa*), and phlegm (*peken*) in the human constitution. I mention all this to emphasise the point that the dividing line between medicine and religion in the Tibetan medical context is often very tenuous; medical knowledge and ideas about how it should be transmitted are suffused with Tibetan Buddhist and Bönpo religious notions. The way that Tibetan religious notions overlap with the domain of medicine will be discussed in detail in chapters seven and eight. Both the Bön and Tibetan Buddhist religions have the same view about the nature of knowledge and how it should be transmitted, and the approach taken has many of the characteristics I have listed for the synthetic mode of knowledge. Before moving on to assess the validity of Goody and Horton's dichotomies, I will first consider these attributes as they are found in Buddhism, Brahmanism and Islam.

The Buddhist scriptures fall into two categories: the canon (*sutras*), which contains the texts ascribed to the Buddha, and the commentaries (*sastras*) of various Buddhist scholars. As I mentioned in chapter one, by the fourteenth century most of these texts had been translated into Tibetan and were compiled by the Tibetan scholar Buton into the collection of canonical texts known in Tibetan as *Kanjur* and the collection of commentaries known as *Tanjur*. The Tibetan *Kanjur* includes Hinayana and Mahayana *sutras* and also Tantric texts. The canonical texts contain the teachings of the Buddha on the nature of existence and the path to liberation; this knowledge derives from his enlightened awareness, and as such, it is complete and beyond dispute. It is left to the Buddhist aspirant to strive to a full understanding of what the Buddha said and by following his methods achieve the same realisation. However, new knowledge can be appended to this in the form of scholarly commentaries. The Indian Buddhist commentaries, which form the biggest part of

the Tibetan *Tanjur* collection, were written between the second and the tenth century AD. The Tibetan medical text itself has been the source of many commentaries of this nature. All of this is equally applicable to the Bönpo who also have their own *Kanjur* and *Tanjur* collections.

We should also note that many texts that are contained in the Tibetan canon originated a long time after the Buddha's final paranirvana, though tradition maintains that he originally first taught them. The new sutras that began to appear from around the first century BC formed the basis of the Mahayana vehicle of Buddhism. Buddhists claim that the world was not ready for the Mahayana teachings at the time of the Buddha, so he entrusted this knowledge to the safe keeping of *nagas*<sup>1</sup> and other deities, until the time when competent people had the power to retrieve and teach them. Perhaps the most celebrated scholar to have done this is Nagarjuna, who brought the largest collection of Mahayana texts, the *prajñāpāramitā sutras*, from the *naga* realm. The Tantric texts which developed later and contain the doctrines that form the basis of third vehicle of Buddhism, the Vajrayana or 'diamond vehicle' are ascribed to the historical Buddha in the same manner.

From what we have seen so far it is clear that Tibetan medicine and Buddhism have many of the attributes listed above under the synthetic mode of knowledge. This is true of many pre-modern forms of education. Take for instance what Eickelman tells us of Islamic education in Yemen. We are told that the 'text and commentary type relation is also part of a much wider pattern, one that goes to the heart of the general understanding of the growth of the Shari'a' (1978:33). The original revelation in the Quran was commented on by Muhammad in the Sunna, and these two works acted as the source for the corpus of further interpretation that became the Shari'a. Along with the text and commentary form of knowledge, personal transmission is the standard form in which knowledge is passed on. In a manner reminiscent of the Tibetan oral transmission (*lung*) of tantric texts, students in the quranic schools received licenses to give the oral transmission (*riwaya*) of particular texts (Eickelman 1973:22).

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<sup>1</sup> Tibetan *lu* (klu), a class of spirits often in the form of a serpent.

A further example of this two-fold classification of knowledge into a revelatory form and commentaries has been given by Parry (1985) in his work on Sanskrit pedagogues and Brahman sacred specialists in Benares. All of his informants make the distinction between two forms of knowledge: *shastrik*, which is based on the revelation of the gods found in the scriptures, and as such is eternally valid and beyond dispute; and *laukik* knowledge, which is ‘a mere matter of local usage’ (1985:204). This distinction relates to a much older twofold classification of knowledge that was present in the original oral tradition, which classified the Vedas into those that were ‘heard’ *sruti*, and those that were ‘remembered’ *smrti*.

Parry tells us that though technically the word *shastra* in the Brahmanical tradition refers to the ‘law books’ and compilations written after the Vedic period, the word *shastrik* in common usage is applied to practices and beliefs validated by various texts including Vedas, Puranas and Dharmasastras. As the absolute truth has already been revealed by the gods and now exists in written form, ‘knowledge then is not something to be *discovered*, as in the western scientific tradition, but something to be *recovered* from texts’ (Parry 1985:205).

This is not to imply that *shastrik* knowledge is unscientific, Parry informs us that the traditional approach to knowledge in India made no divide between religion and science; indeed the *shastras* themselves have been considered as a form of science. For this reason in modern Hindi the word *shastra* acts as suffix equivalent to the English ‘-ology’, so sociology becomes *samaj-shastra*. The Tibetan equivalent of this is the word *rig-gnas* meaning ‘culture’ or ‘auxiliary science’ or occasionally *rig-pa*, meaning ‘intelligence’, or ‘science’. The word is used in this way in the Tibetan name for Tibetan medicine, *sowa rigpa*, ‘the science of healing’.

### 4.3 Lineage

We have seen that three of the key features of Buddhist education in Tibetan monasteries are: an emphasis on oral transmission and memorisation, person-to-person transmission, and debate. These three features have been, and remain, very much a part of Buddhist education in general. Though Buddhism is a literate tradition, the style in which Buddhist texts are written and the manner in which they are taught display many characteristics of an oral tradition. The main purpose of the

*Sangha*, the collective monastic order, is to preserve and teach the Buddhist doctrines. The principal method of monastic education is person-to-person transmission. Traditionally after the 'Going Forth' (*pravrajya*) ceremony that marks entry into the monastic order, the candidate acquires two new relationships: he becomes the companion (*sardhaviharin*) of a preceptor (*upadhyaya*), and the pupil (*antevasin*) of a master (*acarya*) (Lamotte 1984: 55).

In Parry's study on the transmission of Brahmanical knowledge in Benares, he tells us that 'without the guidance of a guru, book learning is an obstacle to the acquisition of knowledge' (Parry 1985:209). The guru also plays an important role in relating what is said in the texts to how people are supposed to behave. The same emphasis on the role of the guru was found by Fuller in the Brahmanical schools where he carried out his research in South India. Here the students follow the *gurukula* system of education. This involves the students living with the guru and receiving his teachings on the Sanskrit text; in return they must carry out work for him (Fuller 1997). Both Parry and Fuller tell us that the personalised transmission of the texts, in part relates to Brahmanical notions about the power of the sound of words, and the importance of knowing how to say the words in the right way. Many of the texts are believed to contain the words of the gods and they are replete with mantras, which are considered to be charged with the deity's power. The guru's crucial role in this respect is not to explain the mantras, but to impart to the students the knowledge of how to pronounce them correctly in order to achieve their full magical potency.

The Vajrayana vehicle of Buddhism, which forms a major component of Tibetan Buddhism, gives even greater stress to the personal relationship between the guru and the student. The following comments are equally applicable to the Bön religion, which also has a strong Tantric component. The Tibetan equivalent of the Sanskrit term 'guru' is 'lama'. In the context of Tantric practice it is the lama who has the power to pass on to the student the knowledge and realisation embodied in the lineage of practice. Each Tantra centres on a particular deity (*vidam*). By assuming the role of the Tantric deity, the lama is able to carry out the appropriate empowerments that are necessary to do the practices associated with the particular Tantra. These empowerments are accompanied by the oral transmission of the text

(*lung*) and by explanations about the practices (*tri*) (Samuel 1993: 244). Through receiving the appropriate empowerments and the oral transmission of the text, the novice is connected to the lineage of the practice. In Tantric practice, the lama is identified with the Tantric deity, and is therefore looked upon as a fourth object of refuge.

Both the *Bumshi* and the *Gyushi* are classed as Tantric texts, and as such they can only be learnt by establishing a connection with a qualified teacher. The medical teacher does not have to be a lama and the students do not need to take a Tantric empowerment to begin their studies, but there is an awareness that the teachings have been preserved by a lineage of practitioners stemming back to the Medicine Buddha. The word 'Tantra' is related to the notion of lineage. The Tibetan word for 'Tantra' is *gyu*, which Das (1995) gives as 'a tantrik treatise; a string; a chain; that which joins things together; a connection whether physical or mental'. In Tibetan medicine the student attempts to connect with the lineage of the teachings. Every morning and evening the students in the medical school in Dhorpatan recited together the prayer to the masters of the medical lineage. Amchi Gege often explained to them about the history of the *Bumshi* and the medical lineage.

Tibetan medical knowledge is presented as revelation. On several occasions Amchi Gege explained to me that it derives from the spiritual insight (*ngön*) of Tönpa Shenrab. It is the purpose of the lineage to pass this insight on to future generations of practitioners. Through connecting with the medical lineage the medical student aspires to a vision of the completeness of Tibetan medical knowledge and by so doing the past is merged into the present. This represents a completely different view of the status of knowledge from the way it is generally perceived in the West. A student of biomedicine is not learning a finished, static body of knowledge; the student may hope that in time he or she may improve upon what they are learning. Thus lineage in the West is concerned with a continuous line of individuals who have nurtured or contributed to a certain trajectory of thought.

The lineage of practice is essential to the teaching of Tibetan medicine. In the main text, explanations are often given in a very terse form. Sometimes only a few words are given to represent a complex idea; this would be very difficult to understand without the teacher who can give the required commentary. Furthermore,

the medical text which is used in the school is written in the *u mé* Tibetan script, and many words are hidden or contracted in ways that again require the knowledge of a qualified teacher. Another example of the importance of personal transmission is pharmaceutical practice. The manufacture of some medicines involves a long complicated procedure, and if everything is not done correctly, the medicine will be ineffective, or even harmful. I asked one Bönpo doctor if he could make the type of Tibetan medicine known as precious pills (*rinchen rilbu*), some of which contain detoxified metals such as mercury. He replied that he had read the relevant texts but he did not have the oral transmission (*gyu rim*). One monk who was nearby at the time explained, 'it is like driving a car, knowing about the brakes and the steering wheel is not sufficient to be able to drive, somebody proficient in the technique is needed to demonstrate'. This relates with my point in chapter three on the importance of tacit knowledge in the learning process. On another occasion, Geshe Tenzin Dhargye was explaining to me that in the Bönpo tradition there are many old texts, which contain practices that are no longer done. When I asked him if it would be possible to re-establish these traditions, he replied that if someone had received the oral transmission (*lung*) of the practice, it would be possible, but if not it would be very difficult.

#### **4.4 Modes of Thought: the Effects of Literacy**

One of the main criticisms of Foucault's work on 'epistemes' is that he makes no attempt to account for the causes which bring about epistemic change. Following the French historian of science, Gaston Bachelard, he avoids any attempt to establish links between epistemic phases; what we get are discontinuous gaps between incommensurable historical modes of knowledge. We have seen that Goody levied the same charge against Levi-Strauss concerning the lack of an explanation of the cause of the shift between the 'savage' and 'domesticated' modes of thought. As we saw, for Goody the primary causative factor that brings about this change between pre-modern and modern modes of knowledge is the introduction of writing. For him it was this event that eradicated the problem of memory storage and 'the human mind was freed to study the static "text"' (Goody 1977:37), leading to increased rationality and critical activity. The same view is presented by Horton who sees oral

transmission as conducive to cognitive traditionalism, and the introduction of writing as weakening its hold (Horton 1982:251). I would now like to look more closely at this claim and assess why it is that with the existence of writing in Tibetan culture since at least the seventh century,<sup>2</sup> the learning process in the Tibetan medical school in Dhorpatan has retained many of the features of the synthetic mode of knowledge.

Akinnaso (1992), in a review of the literature on the relationship between literacy and forms of knowledge, identifies two principal schools of thoughts: one school views literacy as a powerful causative agent in bringing about changes in forms of knowledge and communication; the other school, though agreeing that literacy brings about social-cultural change, views this not in terms of a radical transformation of knowledge but as an adaptation of pre-existing forms. As far as the first view is concerned, that literacy will inevitably lead to modern forms of knowledge, what we have seen so far of the form knowledge and learning in the Tibetan medical school in Dhorpatan does not provide evidence for this. The high value that has been traditionally placed on memorisation and personal transmission has remained intact, even though Tibetan medicine has been a literary tradition for a very long period of time. There are also other examples of this. Parry's (1985) discussion of knowledge and learning amongst Brahman ritual specialists in Benares has much in common with the medical school in Dhorpatan. Though he acknowledges that literacy has the potential to bring about impersonal forms of communication, he points out that the Brahmanical tradition has gone out of its way to prevent this from happening. Though it is uncertain exactly when the Vedic texts were first committed to writing, there is general agreement amongst scholars that they had been transmitted orally for a long time before this, and that it was not for the lack of literacy that they were not written down.

If literacy is not the prime causative agent in bringing about the change from cognitive traditionalism to cognitive modernism then what other factor could account for the transformation? Parry points to the work of Eisenstein (1969, 1981, 1983) as a possible answer. For her the crucial cognitive distinction is not between literate and non-literate cultures, but between scribal and print cultures; in her view it was the

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<sup>2</sup> Traditionally the Tibetan alphabet was created by Thomi Sambhota, modelled closely on the Kashmir Sanskrit script around 632 AD (Stein 1972:59). But as I have explained in chapter 1, the Bönpo claim that many of their texts had been written down for a long time before that.

shift from script to print which brought about the revolution in modes of knowledge. But Eisenstein herself indicates that new forms of technology in themselves are insufficient to bring about this revolution, what is also essential is a favourable institutional context. As Parry notes, the printing press can be as easily used as an instrument of oppression as a means of spreading liberating knowledge. The importance of taking into consideration the wider institutional context of cognitive change is shown by Merton's (1949) study on the development of science in Europe in the sixteenth and seventeenth centuries. In Merton's view it was the religious values that arose from the Protestant revolution, which paved the way for scientific enquiry. As he puts it:

...the positive estimation by Protestants of a hardly disguised utilitarianism, of intra-mundane interests, of a thoroughgoing empiricism, of the right and even duty of libre examen, and of the explicit individual questioning of authority were congenial to the very same values found in modern science. And perhaps above all else in the significance of the ascetic drive which necessitated the study of Nature that it might be controlled (Merton 1949:346 quoted in Tambiah 1990:13).

Carruthers informs us that in the late Middle Ages books were more readily available than ever before, but this had little effect on the value and practices of memorial culture for many centuries (1990:8). For Carruthers medieval European culture 'was fundamentally memorial, to the same profound degree that modern culture in the West is documentary' (1990:8). Each of these two cultures has its own technology: for the former it is the various arts of memory (*arts memorativa*); for the latter it is the printing press. Furthermore, I would argue that the corresponding medium for conveying information in memorial culture is the text, and in documentary culture it is the book. Certainly books and texts are not thought about in the same way in Tibetan culture. The word for religious texts in Tibetan is the honorific *pecha*; the word for book is *deb*. *Deb* also has the honorific form *cha deb*, but it would be inappropriate to use either form for religious texts. Carruthers also makes the distinction between texts and books, as she views it, '(a) book is not necessarily the same thing as a text. 'Texts' are the material from which human beings make literature (1990:8).

In the Brahmanical tradition as in the Tibetan tradition the institutional framework favours personal transmission and memorisation, and consequently rather than the advent of literacy causing changes in the form of knowledge and transmission in the manner outlined by Goody, precisely the opposite has occurred;

the literary tradition has been adapted to the requirements of the oral tradition. From his work with Brahmans in Benares, Parry concludes that rather than leading to the breakdown in the traditional features of Brahmanical knowledge and methods of transmission, such as the emphasis on memorisation, personal transmission, and the notion that knowledge has been revealed by the gods and is beyond dispute, literacy has tended to reinforce these features. Thus rather than leading to cognitive modernism, literacy has contributed to a process of cognitive conservatism.

We have already seen that the *Bumshi* and the *Gyushi*, the principal medical texts used in the medical school in Dhorpatan, have been composed, using stylistic features such as the verse form, terse phrasing, and the abundant use of lists in order to facilitate oral transmission. Most texts in the Brahmanical, Buddhist and the Bön tradition have been composed in such a way, with the same purpose in mind. Thus the written form of the text has not in any way undermined the oral tradition, on the contrary the written text has lent further support to it; the ideal remains to be that the text should be no more than a support for the personal transmission of the lineage.

#### **4.5 Cognitive Syncretism**

So far I have discussed two modes of knowledge. These modes of knowledge, which I have referred to as synthetic and analytic modes, have been variously typified by other writers as: cognitive modernism and cognitive traditionalism, print culture and scribal culture, and documentary culture and memorial culture. The impression given from this series of dichotomies is that of self-contained cognitive worlds. But in practice the dividing line is not so clear-cut. We have already noted that memorial culture existed for many centuries in medieval Europe after the introduction of new forms of book technology, and that Buddhist and Brahmanical texts were not written down until a long time after the introduction of writing in India. Furthermore, empirical evidence shows that modes of knowledge are not exclusive domains; elements of cognitive modernism and traditionalism often exist side by side within the same system of knowledge. It is to these inter-epistemic elements, and particularly to forms of cognitive syncretism that I found in the medical school in Dhorpatan, that I will now turn.

Merquoir (1991:62) criticises Foucault's presentation of epistemes as fixed bounded all encompassing units. For him such a portrayal overlooks a range of transepistemic phenomena such as: anachronistic ideas in an epistemic phase, which foreshadow later modes of thought; the resurgence of concepts from previous epistemes; and 'epistemic lags' where fragments of previous epistemes linger and persist in succeeding periods. In each of Foucault's four epistemic periods, there is only one episteme that determines the possibilities of knowledge. It may be that in each of these periods there was only one prevalent episteme, but there have always been voices of dissent. For instance, Merquoir (1991:58) points out that during the Renaissance there was a humanist tradition in France that looked upon signatures, correspondence, magic and hermeticism with considerable disdain. Tambiah (1990) raises the same issue by citing E P Thompson's (1972) criticism of Thomas's (1971) notion that in second half of the seventeenth century it became possible to make a new clear-cut distinction between science and religion. Thompson is doubtful that the intellectual views of scientists and philosophers were taken on board by the masses. For him it is more likely that they withdrew into their own religious symbolism and he presents the rise of Wesleyanism as such a counter-enlightenment movement.

The point I wish to make here about trans-epistemic elements of knowledge has an illustrative parallel in economic theory. What I have referred to as the synthetic view, connects with Mauss's (1970) ideas on the wide net of interrelationships established in non-market based exchange systems and Karl Polanyi's (1971) notion of embedded societies. The analytic view corresponds to Mauss's atomised society based on market exchange and Polanyi's notion of disembedded societies. But again this division masks important overlaps, such as the importance of money in pre-capitalist societies and that in both capitalist and pre-capitalist societies the objects of exchange are equally fetishised (Parry and Bloch 1989).

The idea that modes of thought are not unified all-encompassing phenomena has been pointed out by several authors in the context of medical anthropology. For example recent research has show that the idealised form of biomedicine that has been adopted as a comparative category in much research is far from a true picture. Hahn and Gaines (1985) have shown how biomedical knowledge and practice varies

within one society, and Lock (1980) has shown variations at an international level. The same epistemological inconsistency appears to be true of the opinions of patients; as Young (1982) points out, patients sometimes give different epistemological accounts of their sickness at the same time.

So far I have presented the mode of knowledge and learning in the Tibetan medical school in Dhorpatan as representative of the synthetic mode of knowledge. Though to a certain extent this is a valid characterisation, what is actually happening in the school is more complex. Amchi Gege, like so many Tibetans of his generation is a stalwart of traditional Tibetan culture. Yet it must be said he is not wholly centred in memorial culture; he has many books as well as texts, and he frequently consults them with vigorous scrutiny, comparing what he reads in one book with what is written in another. This is especially true if different books present contrasting Buddhist and Bönpo treatments of the same subject matter. But if the tinge of modernism that has come his way has not been sufficient to bring into question the high value he places on memorisation, this is not true of his students. They, like many Tibetans have been influenced by modern values, and this has led them to question the merits of the way things were traditionally done in Tibet.

Generally the students have a very low estimation of the value of memorising. This is not just because of the immense amount of work it involves, but also they can not see the point of it. On several occasions students told me of their frustration with having to do so much memorising, in their view it did not help them understand medicine. The students' feelings are also shared by other Tibetans in the community. Whilst discussing the medical school with the settlement officer, he told me that the students will only learn through study and practice. He said that all too often in the past, monks would memorise many texts and afterwards not be able explain anything about what they contain.

It is the only Tibetan medical school that I am aware of where the students still have to memorise all of the main medical text. In 1997 I had the opportunity to meet one of the teachers from the medical school in Lhasa. He told me that the students in Lhasa now have to memorise only important parts of the text. He thought that the traditional approach of having to memorise all of it involved much work and was not essential to being a good doctor. Likewise, the students at the Tibetan Medical

Institute at Dharamsala, the medical school at Sarnath, and the Chagpori Medical Institute at Darjeeling, have to memorise only important parts of the texts. When I told this to one of the students at Dhorpatan he was surprised and thought their course must be very easy.

The main complaint that I heard repeatedly from the students was the relative lack of time devoted to explanation compared to memorising. What the students wanted was more exegesis and practice, and less memorising and miscellaneous chores. The period of my stay in Dhorpatan was a particularly difficult time for the students. In addition to the regular chores they had to carry out for Amchi Gege, they also had to help with the building of the new school and clinic. On top of all this, within the same period five Tibetan people died, which meant more work for the three monk students performing the necessary rituals. Even when the workload was such that there were no lessons for days on end, still the students were expected to memorise. This was a big strain for them, especially the monk students who had the extra religious work.

The following accounts give a feeling of the prevailing mood. I was sitting one evening with Nyima in the room he shares with Yungdrung, working on the qualities of medicinal plants. Around 9 o'clock, Yundrung returned from the Namdru Tang camp, where he had been helping Geshe Tenzin Dargye carry out a *puja* for an old Tibetan woman who had recently died. He looked exhausted. He sat down on his bed and, with sweat still falling down his forehead from the long walk back, he immediately set about the task of memorising the text. He was so tired his head would occasionally drop forward with the weight of sleep, then he would instantly straighten his posture and continue repeating the section, until his head fell again. After some time he stopped memorising and told us that he was not happy with the way things were going in the school, particularly that the lessons were being constantly disrupted with other activities. He said that he had been studying for five years and he thought that his knowledge was not very good. (Actually from my experience his knowledge was very good). He was contemplating leaving the school, but he was afraid that if he did, he would get a beating from his older brother. He complained about having to do so much memorising, which he said involved much

work but was of little use. What he wanted was more explanations and these were not happening quickly enough.

On another occasion around this time, I was sitting in the afternoon sun drinking Tibetan tea with Geshe Tenzin Dargye, when we were joined by Lhazom, one of Amchi Gege's female students. The constant disruptions in the lessons and the heavy workload seemed also to be taking their toll on her. She complained that she had spent six years at the school, and like Yungdrung she felt she knew very little about medicine. Curiously, a few days after this incident Amchi Gege told Geshe Tenzin Dargye that he was very happy with Lhazom's progress. The incongruence between the feelings of Amchi Gege and those of Lhazom derived from their different criteria: Lhazom was dismayed at how little she thought she understood, Amchi Gege was impressed at how much she had memorised.

Amchi Gege was born in Tibet and had spent most of his life living there. He is a firm believer in the traditional ways of Tibet, yet all around him he sees threats to the survival of his culture, from within Tibet and from outside. He told me that his method of teaching is the same as that used by his own teachers. But this is not entirely true. His teachers taught him whenever they had time, and he did not have to do written exams on what he had learnt. Already he has made some concessions to the modernist approach to education with the fixed daily schedule in the school, and the routine of the oral and written exams. Other Tibetan medical schools have gone further down this line.

Though the students were apt to question the methods of learning and even the authority of Amchi Gege, I never heard them question the knowledge they were being taught. At the same time as holding what they were taught in high value, they did not disparage other approaches to healing. The students were generally aware of the strengths of biomedicine, but they had also acquired opinions about its weaknesses, such as its 'side effects' and its cures not always being of a permanent nature. They were also generally positive about the work of traditional Nepalese healers.

We have seen that the form of knowledge and learning in the medical school in Dhorpatan has many of the attributes of the synthetic mode, and that literacy far from eroding these features, as Goody and Horton suggest, has reinforced them. Some of

the common themes that have occurred during the discussion are: an emphasis on personal transmission and memorisation; a division between sacred revealed knowledge which is beyond question, and scholarly commentaries upon it; the mystical power of the sound of words; and a blurred division between the domains of religion and science. But there are two qualifying comments that I should add here. First, the students are often questioning the value of the learning methods in the school, particularly the large amount of memorising they have to do. Finally, modes of thought are not exclusive and elements of different modes of thought often exist side by side. In Dhorpatan features of documentary culture exist quite comfortably side by side with memorial culture. In almost every lesson in the school Amchi Gege would consult books, sometimes two or three at the same time, to get a clearer understanding of some medical issue related to clinical practice or a subject in the main text. At the same time there was no doubt in his mind that the students had to memorise all the main text if they wanted to be good medical practitioners. For him consulting books is something to be done after this has been completed.

## Chapter 5 - Learning Medicine in the Classroom

There are three main contexts in which the students learn medicine: the classroom, pharmaceutical activities, and clinical interaction. In this chapter I will present the ways in which the students learn medicine in the classroom. As the course last for nine years, I only experienced a relatively small section of the course. On the subjects of the tree metaphor, diagnosis, therapeutics, and certain diseases classes of the third volume, I can speak from direct experience of what happened in the classroom. At the stage the students were at in the course when I was there, certain sections of the text, such as the anatomy and physiology sections of the second volume had not been taught by Amchi Gege, but the students were aware of these topics from Amchi Gege's teachings on other sections of the text. In what follows I will outline Tibetan medical theory related to anatomy, physiology, disease causation, diagnosis and therapeutic methods, as it is presented to the students from the text. Where possible I will draw on my own experiences of the learning process. The information presented here prepares the ground for the sections of the following three chapters which all relate in various ways to medical practice.

My understanding of the learning process in the school draws on two areas of experience. First, most mornings I had a one hour lesson with Amchi Gege; by this means, during the time I spent in Dhorpatan, I completed the first volume, the first five chapters of the fourth volume on pulse diagnosis, urine diagnosis, decoctions, medicinal powders, and pills, and several chapters of the third volume on nosology. Second, I sat in on the students' lessons, discussed with them their understanding of Tibetan medical knowledge, and observed them engaging in medical activities.

The following discussion of the learning process in the school accords with the theoretical framework, which I have outlined in chapter two. I move away from the view of learning as a simple unilinear cognitive process, which involves the transferral of transposable, immutable propositions into the passive repository of the student's mind. This restricted view of learning, has been criticised by Lave (1990:310) who refers to it as the 'culture of acquisition' (1990:310). The view that is taken here is that learning is something that occurs on numerous levels; it is the result of an interaction between mind, body, agency and social context. Knowledge often starts off as a series of propositions that are impersonal and isolated from social

context. But with increasing practical experience, propositional knowledge is gradually incorporated into the student's sphere of competency. In this way learning is not simply a matter of the acquisition of knowledge; more importantly it involves a process whereby knowledge becomes a mode of being in the world through an act of appropriation.

The process of becoming a Tibetan doctor, takes the student through progressive stages of a path leading to new ways of knowing and perceiving. As the students are gradually inducted into the medical practice, if the process is to be successful, knowledge, which was initially strange, unfamiliar, and decontextual, becomes taken for granted and second nature. If the students are to become competent medical practitioners, the cognitive memory of acquired knowledge must be transformed into the performative memory of medical practice. It is difficult to identify precisely what the stages are between the two poles of novice and expert. As I mentioned earlier, Dreyfus and Dreyfus (1986), based on their study of aeroplane pilots, chess players, car drivers, and adult learners of a second language identify five stages: novice, advanced beginner, competence, proficiency, and expert. At the level of novice, knowledge that is acquired takes the form of context-free objective facts, and rules of behaviour. Competency and expertise develop as this context-free knowledge is situated in practice. At the levels of proficiency, and expertise, knowledge is increasingly intuitive, and reflexive, and is carried out without conscious deliberation.

Broadly speaking, the learning process involves two forms of knowledge: explicit knowledge, which has a discursive nature and can be stored and transferred in propositional forms; and tacit knowledge, which is non-discursive and as such cannot be rendered in a propositional form; it is acquired in person-to-person interaction in situated contexts. As we will see, the classroom in the medical school is the arena where the students learn Tibetan medical knowledge as a series of propositions. The higher levels of competence are developed when this knowledge is situated in pharmaceutical practice and in clinical interaction, both of which will be discussed in the following chapter.

## 5.1 The Teaching Method

As I have discussed in chapter one, the students have two one-hour classes every day, except Sunday; one in the morning and one in the afternoon. Amchi Gege expected the students to attend all the lessons; he did not repeat material because of student absence. If students miss lessons then it is up to them to get the information from other students. The students are aware that the nine-year programme is longer than the curriculums followed by other schools of Tibetan medicine, and they are generally of the opinion that things could be speeded up. Amchi Gege does not share this opinion. One evening, shortly after we had eaten, he was reading a book written by Thupten Phuntsok, a Tibetan doctor who lectures at the University of Beijing. In the book, Thupten Phuntsok explains that he had studied Tibetan medicine privately in Kham for twelve years before becoming a doctor. Amchi Gege gave this as evidence of how fortunate the students were to have to study for only nine years.

In August 1998 the students were still studying the final chapters of the third medical text, which gives detailed information on Tibetan nosology. According to the official syllabus this should have been finished by the end of the sixth year. Another disparity between the official course syllabus and what was actually happening in the school was that for some time whilst I was there, during their afternoon lesson, the students studied chapters six to nineteen of the fourth text, which give detailed information on different forms of medicines and their correct use; this according to the official syllabus should have commenced after the completion of the third text.

There is a further issue about the length of the course that requires some explanation. Amchi Gege's ten students started at different times yet they were all at the same stage in the syllabus. The reason for this is that when new students start, Amchi Gege teaches them at a free time in the day, and the other students attend the lesson by way of revision. This is in fact what occurred during my lessons. The first text of the *Bumshi* I was taught alone. This was presumably because Amchi Gege felt that the other students were already thoroughly conversant in the knowledge found in this volume of the text. When I moved on to the other volumes, the students were expected to attend all my lessons. During the lessons, Amchi Gege would

occasionally ask them questions to make sure they had understood the subject the first time round.

Amchi Gege told me that he was teaching in the same way that he had been taught and as such in a way consistent with Tibetan tradition. As a rule the students must first memorise the text before it is explained to them. As we have seen in chapter three, memorising is highly valued by Amchi Gege and as such it is a fundamental part of learning medicine in the school. It is the only school that I am aware of where the students are still obliged to memorise all the main medical text.

Amchi Gege always teaches in the same manner. He first reads to himself the passage of the *Bumshi* he is teaching, and then he elaborates on the information in the text, drawing from his own experience, and where necessary information in various commentaries. The two main commentaries he uses are the Bönpo *Khyungtrul Menpé*, and the Blue Beryl (*Vaidurya ngönpo*), the famous Buddhist commentary written by the regent Sangye Gyamtso in the seventeenth century. Sometimes he draws from three or four books to give different angles on the same point. All the students have their texts open in front of them and follow what he is saying. Amchi Gege responds sternly and with vigour to student distraction or lack of concentration, if it is noticed. He wields a very firm hand of discipline during the lessons, and indeed at all other times the students are in his vicinity. Where necessary, he shows the students plants or minerals, either the real item or an illustration. He also uses as teaching aids, anatomical diagrams with Tibetan names for body parts, and illustrations of Tibetan medical implements that are mentioned in the text, even though many of these instruments are no longer used. Time and time again throughout the lessons, the sacred nature of Tibetan medicine is emphasised. The very act of learning medicine accumulates karmic merit, and each lesson finishes with a short prayer dedicating this merit to the benefit of all sentient beings.

My lessons were facilitated by the good nature of the young head lama of Dhorpatan, Geshe Tenzin Dhargye. I have mentioned earlier that his work in the clinic in the Bönpo monastery at Dolanji, in the Himachel Pradesh state of North India, and in the nearby hospital at Chandigarh for six months, meant that he had acquired a familiarity with the procedures and concepts of biomedicine. As the head lama, he also has a wide ranging knowledge and expertise in Tibetan ritual and as we

will see in chapter eight he assumed the central role in the healing process when disorders were thought to be caused by harmful spirits. These characteristics taken in combination with the fact that he speaks good English meant that he was invaluable to me in my attempts at understanding the Tibetan medical worldview. During each of my lessons, Geshe Tenzin Dhargye acted as translator, and Nyima who also knows a little English helped out whenever necessary. It must be said however, that even with the help of these two very competent people, and three Tibetan dictionaries, the lessons were far from easy going. Sometimes we could spend half of the lesson trying to understand the meaning of one word.

Only a few of the students have acquired the habit of taking notes, and those that have, do it with a certain reserve. As most of the students do not own their medical texts, they make notes during the lesson in school exercise books, but this only to a very limited extent. A premium is placed on collecting information directly in the mind rather than storing it on paper. The senior medical student, Nyima, who had received a western style education in the Bönpo settlement at Dolanji, was something of an exception; he wrote copious notes in his own copy of the *Gyushi*. His notes were to serve as a mnemonic device enabling him to recall Amchi Gege's explanation. As far as I could understand, the note-taking disposition is something new to Tibetan education, and is a skill not easy to acquire. One Bönpo *Geshe* I met in Kathmandu told me that although there is a modern tendency for monks to take notes, usually this is done only to a very limited extent. He himself had tried to take notes when lamas gave important teachings, but afterwards he had difficulty understanding what he had written. A Tibetan scholar who had studied at the University of Beijing told me that from his experience, modern Tibetan scholars do take many notes, but this is a recent innovation.

Every morning I also had one hour of teaching and the students had to sit in on my lessons by way of revision. From my observations in the student's classes, and from how the students behaved in my classes, there was a stark contrast between how they approached learning medicine and how I did. I have internalised the Western predilection for acquiring knowledge through the medium of taking layer upon layer of notes. Through these notes I wrote down almost verbatim what Amchi Gege said

during the lessons; the idea being that ultimately it would not remain in my notes but would eventually be transplanted into my memory.

Another big difference with my approach to the teachings and the approach of the other students was when it came to clarifying what Amchi Gege intended to convey. During their lessons, the normal pattern is for the students to remain attentive to what Amchi Gege is saying; they hardly ever ask questions,<sup>1</sup> either during the lesson or at the end of it. When they do it is only to clarify minor points of detail. There was never debate or critical analysis during the lesson; the atmosphere was generally antipathetic to such approaches. There seemed to have been a tacit agreement that asking questions reflected, not the unclear way in which the teaching was expressed, but the unclear mind that was unable to comprehend. The students are accustomed to this manner of approaching knowledge, and though they might have their doubts about its merits, it is more or less natural to them.

On one occasion Geshe Tenzin Dhargye told me he thought that the biggest difference between the Tibetan and Western approaches to education had to do with the attitude to asking questions. Whereas the Western style approach to education encourages the student to ask questions, the traditional Tibetan approach discourages it. He gave me the example that when he was studying in the dialectics school at the monastery in Dolanji, one teacher severely reprimanded him for asking too many questions, calling him a donkey. The view appears to be that if a student doesn't understand on the first explanation, the problem is with the student, not the teacher.

On several occasions this approach led to tension during my lessons. The cause of this was my predilection for questioning all that I did not feel that I fully understood. Geshe Tenzin Dhargye was in the awkward position of having to relay my questions to Amchi Gege sometimes three or four times before I finally understood. Meanwhile Amchi Gege became irate due to Geshe Tenzin Dhargye asking my questions over and over again, then this anger would rub off on Geshe Tenzin Dhargye, who after some time would direct it at me. There would never be the smallest vestige of anger after the lesson, but when such occasions arose, the lesson became even more of a struggle. Certainly, when I realised what was happening, I made an extra effort to understand what Amchi Gege was saying straight away.

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<sup>1</sup> On the issue of student questioning in apprenticeship, see Goody 1978.

Towards the end of my stay in Dhorpatan, Amchi Gege told me that he had found my constant questions very useful in that it deepened his own understanding of what he was teaching. The tacit prescription against the asking of questions seems to apply mainly to the period of the lesson. It appeared to be quite acceptable to ask questions about the teachings at other suitable times, such as in the evening during and after dinner, or at lunchtime. Quite often at these times general discussion would occur about the condition of particular patients who had recently visited the clinic, or Amchi Gege would provide some anecdote that illustrated what had been discussed in the lesson or related to some aspect of recent clinical practice.

The discipline in the school is very strict. If the students are playing around when they should be studying or working, Amchi Gege is quick to respond. He usually vents his anger by shouting at the students; normally this is enough, as they know from experience that if they don't immediately amend their action they are likely to be beaten. I only saw Amchi Gege beat one student, but I heard that it had happened on several occasions. Geshe Tenzin Dhargye said that this is the traditional Tibetan approach, and was the way he was taught in the monastery. During their lessons the students must remain quiet and fully focused on what Amchi Gege is saying. If they do not, they will suffer the consequences. Even outside lesson time, discipline in the school is enforced. On an evening, when the students are supposed to be memorising, if no sound is coming from their rooms, it is highly likely that Amchi Gege will visit to find out why. One night he went to Nyima and Yungdrung's room enraged by the sound of talking instead of the sound of memorising. He angrily accused them of being possessed by a spirit and said that he was going to get two of the monks to perform a ransom ritual.

In return for the privilege of being taught medicine the students must be respectful to Amchi Gege, carrying out whatever work he needs doing, and usually there is much to be done in and around the gompa compound. As I indicated earlier, exactly the same form of relationship between the master and his students was observed by Fuller (1997) in Brahmanical schools in South India, where it is referred to as the *Gurukula* system. Above all, the students in the medical school must work hard at their studies, or as Amchi Gege occasionally threatens, they will not be allowed to stay at the school. Their studies in medicine must come before everything. For

instance, for some months after I first arrived, I gave the students lessons in English. During this period some of the students were also being taught Tibetan astrology (*tsi*) by Geshe Tenzin Dhargye. Amchi Gege soon put a stop to all of this when it seemed to him that the students' interest in these subjects was detracting from their studies in medicine.

The students were not entirely happy with the way things were proceeding with their studies. This was not due so much to the tight discipline they had to undergo in the school; although the students did work hard in their studies, they always found time to enjoy themselves, even when they were under Amchi Gege's close surveillance. Authority in the school resembles what Weber (1968) classified as traditional authority. In the refugee context, a high premium is placed upon the preservation of Tibetan tradition, and as Amchi Gege is a pillar of this tradition, his authority is thus justified and legitimated.

The main gripe that the students had concerned the amount of work which they had to do that was not directly related to their studies. The monk students were often asked to perform religious services either in the temple or the community. Whenever this occurred it inevitably meant that there would be no lessons for them or the other students. Geshe Tenzin Dargye told me that in the monastery at Dolanji this problem is overcome by concentrating all the major rituals and prayers during one month when the monks are given a break from their studies. At all other times, except in emergencies, they must devote their time to their studies.

For the students in the medical school, in addition to the demands of religious activities, there are all manner of other types of work that need to be done: cooking, working in the fields, taking care of the horses, work on the new medical building, and so on. The main problem for the students was that they wanted to learn, but more often than not their time was consumed by having to do other activities. Feelings ran high over this issue and as a consequence, in the two-year period that I was there, four of the male students left. Two of them returned after a two-month absence, but when they returned they had given up being monks and resolutely refused to take up robes again. After long and difficult discussions involving the students' parents, Amchi Gege accepted them back.

Most of the learning that happens in the classroom is concerned with acquiring propositional knowledge about Tibetan medical theory and practice. It is the kind of knowledge that Ryle (1949) refers to as ‘knowing that’, rather than ‘knowing how’. In terms of the Dreyfus model, the classroom is where the novice medical students acquire context free objective facts about Tibetan medicine. For the students in the medical school, the lessons in the classroom are not the first stage in the learning trajectory. Before they receive lessons in the classroom, they should have first memorised the relevant section of the medical text. As I have suggested in chapter three on the role of memorisation, the structure of the main medical text, the repeating nine syllable phrase, the constant use of lists, and the terse elided syntax, amount to it being more of an elaborate mnemonic device, than a self contained teaching on Tibetan medicine.

The students already have the relevant parts of this mnemonic device in their minds before they receive teachings. In the lessons, what they have memorised is rendered into a coherent, intelligible form through Amchi Gege’s explanations. As more sections of the text are illuminated in this way, new propositions can be contextualised into the emerging overall pattern of the teachings. In this way what is happening in the classroom is something more than a simple passive process of the accumulation of propositional knowledge. The students are not empty vessels, but bring to the classroom what they have memorised and a developing understanding of medical theory and practice. It is possible that what is presented in the lessons will be passively absorbed, but if the student is attentive, new teachings will be interpreted in the light of what they have already learnt. The students are given fifteen minutes at the end of each lesson to clarify their understanding of what they have been taught through discussion in pairs. As far as their knowledge of Tibetan medical theory goes, I would estimate that all the students have reached the third stage of ‘competence’ in the Dreyfus model, some of the senior students seem to have developed the next stage of ‘proficiency’ in certain areas of medical knowledge.

As we have seen, unlike in other Tibetan medical schools, the course curriculum (see section 1.7) does not follow the sequence of the text. The students begin with the

first volume,<sup>2</sup> which gives a summary of the whole medical teaching using the metaphor of a tree with three roots. The first root covers the condition of the body; it provides a summary of the factors, which lead to health and disease. The second root covers diagnosis, and the third root presents the various forms of treatment. The first volume<sup>3</sup> provides the ground plan for all that follows in the three subsequent volumes. The second volume presents detailed information about anatomy, physiology, pathology, the qualities of medicines, methods of treatment, and diagnosis.<sup>4</sup> In the medical school in Dhorpatan this is the final text that is studied. The third volume contains ninety-two chapters on Tibetan nosology<sup>5</sup>. This is by far the largest volume of the medical text and takes the students more than four years to complete, according to the official course syllabus. Before commencing the third volume, the students study the first five chapters of the fourth volume,<sup>6</sup> on pulse and urine diagnosis, medicinal decoctions, powders and pills. The rest of the fourth volume is completed immediately after the third volume. It is entirely dedicated to forms of treatment. It includes a further seven types of medicinal compounds, cleansing medicines such as suppositories, enemas and emetics, and the external treatments: moxibustion, bloodletting, hot and cold compresses, medicinal massages, steam baths, and minor surgery.

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<sup>2</sup> The *Gyushi* consists nominally of four 'tantras': the Root Tantra (*tsa gyu*), the Explanatory Tantra (*shé gyu*), the Instruction Tantra (*men ngag gyu*), and the Final Tantra (*chi ma gyu*). The titles of the corresponding parts of the *Bumshi* do not include the word tantra (see chapter 2). As the four parts taken together form a coherent and comprehensive explanation of the doctrines and practice of Tibetan medicine, and as Amchi Gege mostly uses the *Bumshi* in the school, I have referred to them as volumes.

<sup>3</sup> The contents of the first volume of the *Gyushi*, the Root Tantra, can be found in Clark (1995), Tsarong (1981), Donden (1986), Donden and Kelsang (1983), and Parfionovitch, Meyer and Dorje (1992).

<sup>4</sup> The contents of the second volume of the *Gyushi*, the Explanatory Tantra, can be found in Meyer (1988), Clark (1995), Donden (1986), Donden and Kelsang (1983), Parfionovitch, Meyer and Dorje (1992), Rechung (1973).

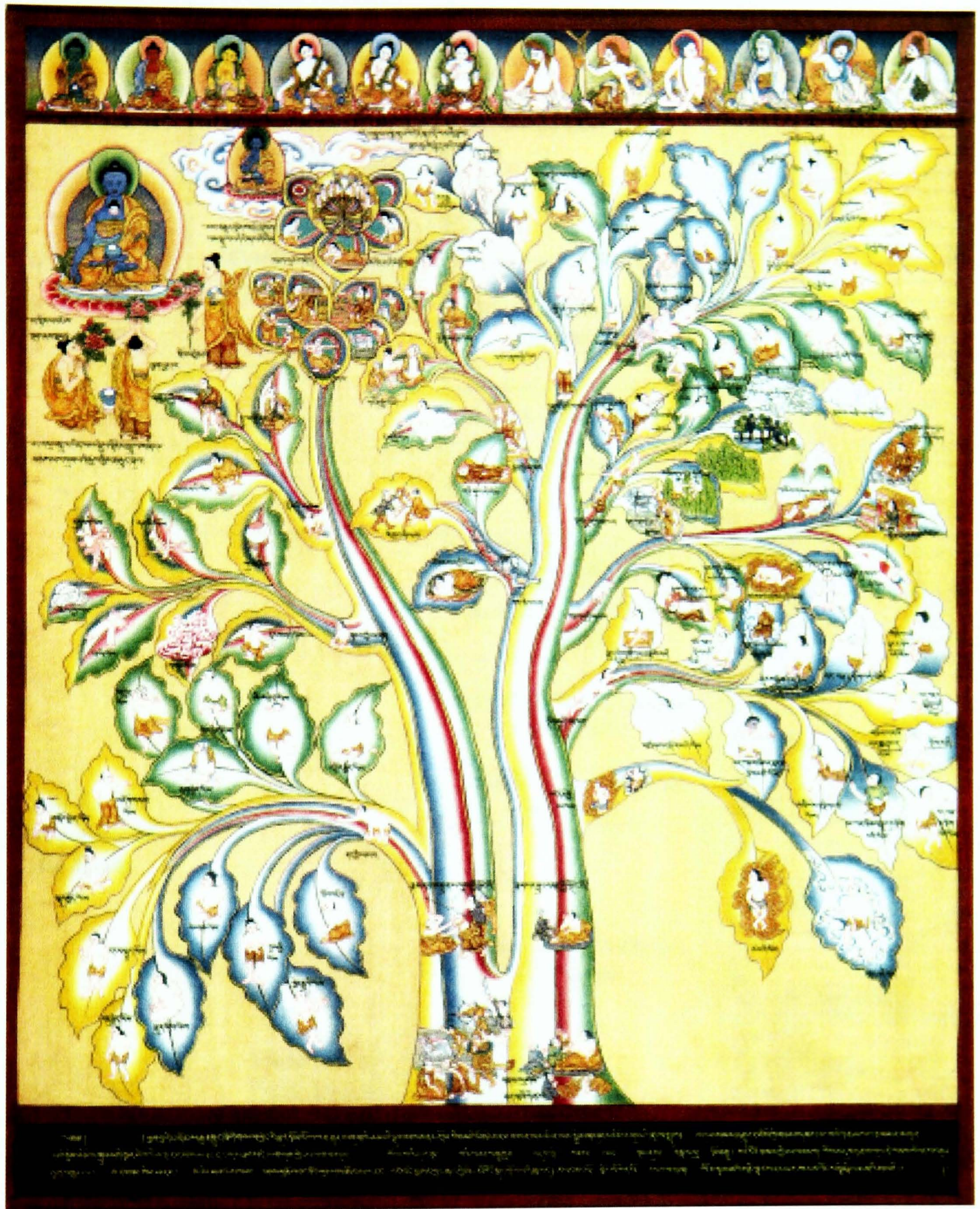
<sup>5</sup> There are very few publications that contain translations of material in the third volume of the *Gyushi*. Clifford (1984) provides translations of chapters 77-79 on diseases caused by harmful spirits, Badaraev et al. (1981), chapter 49 on *lang thab*, a disease affecting the abdominal region, Emerick (1987) has also translated chapter 79, as well as Chapter 90 (1990) on rejuvenation and extraction of essences. In addition, the chapters on Diabetes, Tumours, and Virilification and Rejuvenation, in Donden (1986), provide summaries of information found in the third volume of the *Gyushi*.

<sup>6</sup> The fourth volume of the *Gyushi* consists of 27 chapters. Meyer (1990) has translated the first chapter on pulse into French. The pulse chapter, and chapter 2 on urine analysis, can be found in Rechung (1973). Both Donden (1986) and Rabgay (1994a, 1994b) provide outlines of urine and pulse diagnosis based on information taken from the first two chapters of the fourth volume.

As Amchi Gege explained to me, he is teaching the text the way that it was taught to him. Amchi Gege comes from a family medical lineage; he was taught mainly by his grandfather, but he also learned from other Tibetan doctors in the Kham district of east Tibet. In this context his study of the text went hand in hand with his induction into medical practice. The same situation pertains in the school in Dhorpatan. For the students, when patients arrive a classroom lesson can be quickly transformed into a clinical experience. The students learn medical practice by acting as Amchi Gege's assistants. Because they are involved in clinical practice from very early on in their training it is necessary that they have some understanding of diagnosis, medicines, and pathology as soon as possible. This explains the structure of the teachings. In medical schools such as the Chagpori Institute at Darjeeling, the Tibetan Medical Institute at Dharamsala, and the Tibetan medical school in Lhasa, the students first study medicine in the school for a number of years, and only after this are they placed in clinics to gain practical experience of what they have learnt. In these schools the four volumes of the main medical text are taught sequentially.

During my lessons with Amchi Gege, I studied the first volume, the first five chapters of the fourth volume and selected chapters of the third volume. In the following sections on how the students learn anatomy, physiology, the general principles of disease causation, diagnosis, and therapeutic techniques in the classroom, I will first outline the summary of the subject found in the first volume as it was taught to me and the other students in the school. I will then give further details on each of the subjects drawing on the relevant sections of the following volumes. Most of what follows is based on a combination of the lessons I had with Amchi Gege, my observations of the students' lessons, and discussions I had with them about the teachings.

Although neither the students nor myself had formally studied the second volume with Amchi Gege, as this presents a detailed exposition of a large part of what is summarised in the first volume, I will also draw on this based mostly on the references given above. I should add that by the time the students arrive at this text they will have already acquired a considerable knowledge of anatomy, physiology, pathology, diagnosis and methods of treatment through their studies of the third volume of the medical text.



**Plate 14 - Root of the Condition of the Body.**

Root	2 Stems	12 Branches	Leaves (flowers and fruits)
<b>Root 1. The Condition of the Body</b>	<b>Stem 1. The Condition of the Healthy Body</b>	<b>Branch 1. The Humours</b>	1. life holder wind 2. upward moving wind 3. pervading wind 4. fire companion wind 5. downward expelling wind 6. digestive bile 7. colouring bile 8. stimulating bile 9. eyesight giving bile 10. complexion clearing bile 11. supporting phlegm 12. mixing phlegm 13. gustatory phlegm 14. satisfying phlegm 15. joining phlegm
		<b>Branch 2. The Bodily Constituents</b>	1. chyle 2. blood 3. flesh 4. fat 5. bone 6. marrow 7. regenerative fluid
		<b>Branch 3. The Excreta</b>	1. faeces 2. Urine 3. Sweat
		<b>2 Flowers</b>	Flower of longevity Flower of good health
		<b>3 Fruits</b>	Fruit of spirituality Fruit of happiness Fruit of wealth
		<b>Branch 1. The Primary Causes of Disease</b>	1. desire / wind 2. anger / bile 3. stupidity / Phlegm
		<b>Branch 2. Contributory Causes</b>	1. seasons / time 2. harmful spirits 3. diet 4. behaviour
		<b>Branch 3. The Entrances of Disease</b>	1. skin 2. flesh 3. channels 4. bones 5. 5 solid organs 6. 6 hollow organs
		<b>Branch 4. The Locations of Disease</b>	1. phlegm – top of the head 2. bile – middle part of body 3. wind – lower part of body
		<b>Branch 5. The Pathways of Disease</b>	1. bones 2. ear 3. body hair 4. heart and related blood vessels 5. large intestine 6. blood 7. sweat 8. eyes 9. liver 10. gall bladder / small intestine 11. chyle, flesh, fat, marrow, reproductive fluid 12. faeces, urine 13. nose, tongue 14. lungs, spleen, kidneys 15. stomach, bladder
	<b>Stem 2. The Pathological Condition of the Body</b>	<b>Branch 6. The Time of Predominance</b>	1. old age - wind 2. prime of life - bile 3. childhood - phlegm 4. cold place - wind 5. dry place - bile 6. moist and lush place - phlegm 7. summer, early evening, dawn - wind 8. autumn, midday, midnight - bile 9. spring, late evening, morning - phlegm
		<b>Branch 7. The Conditions Having Fatal Issue</b>	1. exhaustion of lifespan 2. humours disturbed in spite of treatment 3. other factors aggravate disease 4. damage to vital organs 5. irreversible wind sickness 6. fatal hot disease 7. fatal cold disease 8. incurable disease 9. fatal harmful spirit influence
		<b>Branch 8. The Humoural Reactions</b>	1. wind lowered, tripa raised 2. wind diminished, peken raised 3. wind raised, tripa diminished 4. wind raised, peken diminished 5. Bile lowered, wind raised 6. Bile lowered, phlegm raised 7. Bile raised, wind lowered 8. Bile raised, phlegm lowered 9. phlegm lowered, wind raised 10. phlegm lowered, bile raised 11. phlegm raised, wind lowered 12. phlegm raised, bile lowered
		<b>Branch 9. Summary</b>	1. Cold diseases: wind and phlegm 2. Hot diseases: blood and bile

**Table 5.1 Root of the Condition of the Body**

## 5.2 Learning Medicine Through the Tree Metaphor

Medical teaching in the school begins with the first volume of the medical text which summarises the whole of the medical teaching using the metaphor of a tree with three roots, nine trunks, forty-seven branches, two-hundred and twenty-four leaves, two flowers and three fruits. In drawings of this tree, the three roots give rise to what appears to be three separate trees, but they are in fact joined together below the ground symbolising the intimate interrelationship of all the different elements of the medical teaching. During Amchi Gege's lessons he often made use of illustrations of the tree found in various books. Most often he used the Lhasa edition of the seventy-two *thangkas* that the regent Sangye Gyatso had made in the seventeenth century to illustrate his commentary, the *Blue Beryl*. During the time that I was there he arranged for the whole of the tree diagram to be painted by a Tibetan artist living in Dhorpatan. This was then put up on the wall of the classroom in the new medical building.

In respect to anatomy, physiology, and pathology, what concerns us here is the first root, which represents the condition of the body (see Plate 14). It has two trunks: the first trunk summarises the condition of the healthy body; the second summarises the pathological condition of the body. The first trunk has three branches and twenty-five leaves (see Table 5.1). Amchi Gege first gave the names of each of the branches and leaves and then he went on to explain each in turn.

One of the basic principles of Tibetan medical theory is that everything in the macrocosmic environment and the microcosm of the human body is made up of various combinations of the five elements (*chungwa*) of earth, water, fire, air and space. Another fundamental principle is the notion that all psycho-physical processes in the body can be divided into three categories. Each of these series of processes is co-ordinated and maintained by a certain force, which drawing on Galenic terminology, is usually rendered as a 'humour'. Though there is some justification in using this word, the Tibetan word *nyépa* that is usually translated as 'humour', actually means 'fault' or 'wrong doing'; a point I will return to shortly. In Tibetan medicine, the three humours are: wind (*lung*), bile (*tripa*) and phlegm (*peken*). Wind has the elemental nature of air, bile that of fire, and phlegm that of earth and water

(Tsarong 1981:9). The humours are referred to in Tibetan by names, which have specific physical referents, but the term refers to much more than this. According to Tibetan medical theory there are five forms of each of the humours, which govern specific functions in the body. The first branch of the first trunk has fifteen leaves, which represent each of these humours. During the lessons on the first volume, Amchi Gege gave the name and the principle location in the body of each of these fifteen humours, and a short explanation of their function. This is summarised in Table 5.2 along with more detailed information given in the second volume.

The next branch has seven leaves, which represent the seven bodily constituents (*lü zung dün*): the essential nutrient (chyle), blood, flesh, fat, bone, marrow, and regenerative fluid. The final branch of this trunk has three leaves, which represent the three forms of excreta: the stool, urine and sweat. At the top of the first trunk are two flowers representing health and long life, and the three fruits of spiritual life, wealth and happiness. These fruits and flowers can only be attained if the humours, the bodily constituents, and three forms of excreta remain in a state of homeostasis: for the three humours this means that they remain in the correct location and proportion. Thus within the first few lessons the basic principles of Tibetan medicine are established. As I have mentioned in chapter two, the pattern of the medicine tree whereby all the basic principles of Tibetan medicine are laid out in a coherent structure, serves the purpose of providing a framework upon which layer upon layer of associated material can be brought together as the students expand their knowledge of medicine.

### **5.3 Anatomy**

The second volume of the medical texts has thirty-one chapters, and eleven sections, which are further subdivided into four broad parts: the subject of medicine, modes of treatment, therapeutic methods, and the healer. Each of the chapters has further subdivisions; this is in keeping with what I said earlier about the use of lists as an aid to memorisation; this manner of structuring information is found throughout the text. The first of the four parts has two sections, which deal with the subject of medicine, namely the body and disease. The section on the body provides the most detailed account of anatomy and physiology in the main medical text. This

section comprises of chapters two to six of the second volume which expand on the basic outline that is given by the leaves and branches on the first trunk of the first medicine tree, giving a much deeper exposition of the body and its components.

Chapter four deals specifically with anatomy. It begins by outlining the parts of the body and their quantities in proportion to the size of the body. For instance the amount of wind should fill the bladder, and the amount of bile should fill the scrotum. The components that are listed are: the three humours, the seven bodily constituents, the excreta, the five solid organs<sup>7</sup> (*dön nga*), and the six hollow organs (*nö druk*)<sup>8</sup>.

The text then moves on to describe the various 'channels' in the body. Here the medical teachings clearly overlap with wider Bön and Tibetan Buddhist notions about the nature of the mind and the body and the relationship with the macrocosmic environment. The highest yoga (*anuttarayoga*) Tantric texts speak of a subtle anatomy, which is permeated by a vast network of channels (Tib. *tsa*, Skt. *nāḍī*)<sup>9</sup> - traditionally 72, 000 are spoken of. There are three main channels, which run down the centre of the body. At various points on the central channel there are seven centres (Tib. *Korlo*, Skt. *Cakra*), which are confluence points for the other channels.<sup>10</sup> The mind is related to 'winds', or 'subtle energies' (Tib. *lung* Skt. *prāṇā*) that flow through these channels. Certain yoga practices (*tsalung*) involve the manipulation of these 'winds' (Samuel 1993:236) with the aim of gaining spiritual insight. Some of these 'winds' are related to physiological functions and are mentioned in the main medical text (Meyer 1995:127).

The text lists four classifications of channels.<sup>11</sup> The first class consists of the three 'channels of formation' (*chagpé tsa*). These are the first channels to be formed in the human embryo. The nature of these channels and the three humours is intimately related to Buddhist and Bönpo notions about the causes that lead human beings to be constantly reborn into samsaric existence. As it is explained earlier in the section on

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<sup>7</sup> Heart, liver, lungs, spleen, and kidneys.

<sup>8</sup> Intestine, stomach, seminal vesicle/ovaries, colon, gall bladder, and bladder. Meyer (1995:129) views this classification of 5 solid and 6 hollow internal organs as pointing to early Chinese influence.

<sup>9</sup> The Tibetan word *tsa*, denotes 'channel', 'vein', 'artery', 'nerve', and 'pulse'.

<sup>10</sup> The central channel is called, *uma* (*sushumnā*), the left channel, *kyangma* (*idā*), and the right channel *roma* (*pingālā*). See Meyer (1988:60) for an illustration of the three channels and the chakras.

<sup>11</sup> See *tangkas* 9-13 in Parfionovitch, Meyer and Dorje (1992) for illustrations of the channels described here.

the body, conception occurs when certain factors come together: the non-defective sperm and menstrual blood, the five elements, and the consciousness that is swept by the force of karma to be reborn. The root cause that leads beings to be born into samsaric existence is a deep, fundamental ignorance (Tib. *ma rigpa*, Skt. *avidyā*) of their own nature, this leads to a false sense of self (*dagzin*), which in turn leads to the three afflictive emotions of ignorance (*timug*), desire (*döchag*), and aggression (*zhedang*). As I have discussed earlier it is these so called ‘three mental poisons’ (*dug sum*) that generate the karma, which impels beings to be born into one of the six realms of samsaric existence.

The power of the afflictive emotions and karma, which carries the consciousness into rebirth, is carried through into the embryo, and has a causal affect on how the body subsequently develops. Each one of the mental poisons has a direct causal relationship with one of the three humours: desire is the cause of wind, aggression brings about bile, and ignorance generates phlegm. In a like manner, the three mental poisons are related to the ‘three channels of formation’. The first channel has the nature of the water element. It rises from the umbilical region moving up the left side of the body passing the heart and the throat and finally forming the brain, and thereby mental confusion and dullness; it is related to phlegm and as such this humour is associated with the upper body. The second channel of formation is related to the fire element and the blood. It passes through the middle of the body carrying the essential nutriment of the digested food to the liver, from there it heads to the tenth vertebra and forms the ‘black life channel’ (*sogtsa nagpo*); this channel is the source of anger, which is situated in the black life channel and the blood. As we have seen, anger is the cause of the bile humour and consequently this humour is associated with the middle of the body. The third channel of formation is associated with air, it goes downwards and forms the genital organs, which are the seat of desire, and thus the humour of wind is associated with the lower body. From this we can see that unlike the biomedical perspective, which tends to view consciousness as an epiphenomenon of physiological processes, in Tibetan medicine quite the opposite view is taken.

The second series of channels, are called the ‘channels of existence’ (*sipé tsa*). There are four principal channels of existence. The first is situated in the brain and is

surrounded by 500 small channels; these provide sensory experience. The second is situated in the heart, it is called 'good mind' (*yizang wa*), it is surrounded by 500 small channels; these provide various mental functions such as the sense of self, memory and intellectual processes. What the brain perceives is rendered intelligible by the heart centre. In discussions I had with Amchi Gege on the subject, he was firmly of the opinion that the seat of the mind is the heart and not the brain. The third channel is situated at the navel, it is surrounded by 500 small channels, it functions to develop and maintain the body. The fourth channel, which is surrounded by 500 small channels is situated at the genitals and is responsible for procreation.

The connecting channels are of two sorts: black and white. The vital channel (*roma*) that is at the right side of the body has a dark colour because of the presence of blood and bile; it gives rise to the 'black channels' of the blood vessels. The channel in the left of the body (*kyangma*), is of a lighter colour due to the presence of phlegm and wind, it gives rise to the 'white channels' of the nervous system.

The final series of channels that are mentioned in the text are the three 'life channels' (*tshe yi tsa*). Although they are described as channels, what is actually referred to in the text is the movement of the life force (*la*) in the body. The first, which is described as the 'one that penetrates the whole of the head and body',<sup>12</sup> is a life force, which circulates round the body according to the lunar cycle. On the first day of the cycle it is located at the feet, it gradually moves up the left side of the female body, and the right side of the male until the full moon on the fifteenth day of the Tibetan month when it reaches the head. It is important to know the location (*lané*) of this 'life force' before doing moxibustion or bloodletting. The second life channel is called the one 'that accompanies the breath'; this relates to the wind (*lung*) that is drawn in through the breath.

The third life channel requires some explanation as it relates directly to certain forms of illness and the use of ritual in healing, which I will discuss in chapter eight. The text says this channel, 'is like the soul (*la*) and roams about'. Both Buddhist and Bönpo philosophy have the same view of the nature of the self. The individual consists of the five aggregates (Tib. *phungpo*, Skt. *skandha*) of form, feelings, perceptions, mental formations, and consciousness. The aggregates give the

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<sup>12</sup> I have used Meyer's translations of the titles of the three life channels (1988:125).

appearance of an abiding self, but in reality such a self does not exist. What transmigrates from life to life is a stream of consciousness propelled by the force of afflictive emotions and the karma they generate.

However, in the medical school the three human components that were most often spoken about were the body (*lü*), the consciousness (*namshé*) and the soul (*la*). The *la* acts as a kind of vital principle essential to the healthy functioning of the body. It can leave the body of its own volition, usually through the channel at the ring finger, or it can be taken by harmful spirits. Its absence is potentially fatal. The condition of the *la* can be diagnosed by palpating the ulna artery. On several occasions during my stay in Dhorpatan patients were diagnosed as suffering from an absent *la*; I will describe some of these incidents in chapter eight.

The *la* was spoken about in different ways, sometimes it appeared to be a soul that could survive death; sometimes it was talked about as a vital energy that circulated in the body. Amchi Gege, when he was teaching me about the *la* pulse, explained that it originates from the consciousness; he said the *namshé* is like the mother and the *la* is like the son. He added that it is the support (*ten*) of the body. He said that after death the *la* should 'go with the *namshé*. It may remain behind in the place where the person died, but this is not propitious. Nyima, the senior medical student, following what he had been taught by Amchi Gege, described it in physiological terms as the most refined nutrient of the metabolic process.<sup>13</sup> When I asked Geshe Tenzin Dargye for clarification, he said the *la* should be thought of along with another two aspects of the mind: the *sem* and the *yi*. He explained that the mind that consists of constantly shifting thoughts is the *sem*; the *yi* is a deeper layer of mind in which the thoughts circulate. He gave the metaphor of *yi* as a village and *sem* as people wandering about in it. He said that the *la* provides the energy for all this to happen. He added that when a person dies the *la*, *yi* and *sem* are separated and this causes great mental turmoil for the deceased person. In the Bönpo ritual that is carried out for the dead, the *la*, *yi* and *sem* are first brought back together, to give the deceased person peace and mental clarity.<sup>14</sup>

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<sup>13</sup> The phrase he used was 'the nutrient of the nutrient' (*dangmé dangma*). In the text the most refined nutrient produced from the metabolic process is the vitality fluid (*dang*).

<sup>14</sup> A short description of the ritual is given in Norbu (1995:87); a full account of it can be found in Kvaerne (1985).

When I discussed all this with Lopon Tenzin Namdak at Triten Norbutse Bönpo monastery in Kathmandu, he said that the notion of the *la*, *yi* and *sem* is important in the Bönpo religion. He explained that *sem* is the mind; he likened it to ‘a lame man who can see’. *Yi*, he said, is a subtle wind, which supports the mind; the metaphor he used for this was ‘a blind horse’. He explained that the *la* is the karmic traces (*bagchag*), which sets everything in motion; he said the *la* is like the food for the lame man and the horse. This is how the *la* is conceptualised in Bönpo philosophy, but as we will see in chapter eight, from a ritual point of view it is treated like a soul or a vital life force.<sup>15</sup> Lopon Tenzin Namdak also pointed to this aspect of the *la* when he explained that traditionally in Tibet, objects in the natural environment could be used as its support, such as a tree (*la shing*), a lake (*la tsho*), a piece of turquoise (*la yu*) or a mountain (*la ri*). He said that the early kings of Tibet had Mt. Kailash as the support of their *la*. It was thought that if the snow melted it showed the weakening of their vital energy; he added that now there is much less snow on the mountain.

#### 5.4 Physiology

Having outlined the components of anatomy, in chapter five of the second volume, the text moves on to expound the principles of physiology. The emphasis in the text is not so much on how the bodily components and the three humours function to produce health; rather the explanation is couched in terms of how pathological conditions can arise. The various components on the leaves of the first branch of the first tree on the condition of the non-pathological body are presented in negative terms as either objects of harm or the agents of that harm. Thus the chapter on physiology is divided into two parts: the human constitution that is the object of harm (*nöcha kham*), namely the seven bodily constituents and the three forms of excreta; and the pathogenic agents that cause the harm (*nöcha nyepa*), the three humours.

According to Tibetan medical theory the metabolic process has seven stages. After the food is ingested it is transported to the stomach by the ‘life sustaining wind’ (see Fig. 5.1). In the stomach the metabolic process is set in motion by the ‘fiery

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<sup>15</sup> For more information on the *la* as the soul, see Tucci (1980:190) and Stein (1972:226).

heat' (*méd-rö*), of the 'digestive bile'. The 'digestive bile' provides the heat that is necessary to break down the food. The 'decomposing phlegm' breaks down the food, and the 'fire companion wind' operates to support the heat of the digestive bile and separate the nutrients from the residues in the digested material. This process, whereby the food is broken down into nutrients and residues through the combined action of the three humours, is repeated during each of the seven metabolic stages. The nutrient that is produced from the digested food is the first bodily constituent, the chyle (*dangma*). This passes along 'nine channels' from the stomach to the liver, where it is transformed into blood. As Meyer (1988:131) notes, there is a relationship here with the second channel of formation, the *roma*. In the above section on anatomy we saw that it is responsible for carrying the chyle to the liver. Near this location it forms the 'black vital vessel', which is the source of the blood vessels in the body.

At each stage of the metabolic process a nutrient is formed as one of the body's constituents. The process that produces the nutrient also generates a residue; in this way all the components of the body are generated according to a sequential pattern. The seven-stage sequence of the metabolic process can be seen in Figure 5.1. The digested food in the stomach produces the nutrient chyle, and the residues of the stool and urine. The nutrient of chyle is blood, and the residue is the 'mixing phlegm'. The nutrient of blood is the flesh; and the residue is bile. The nutrient of flesh is adipose tissue, and the residues are the secretions of the body's nine orifices. The nutrient of the adipose tissue is bone, and the residues are sebum and sweat. The nutrient of bone is marrow, and the residues are the teeth, nails and body hair. The nutrient of marrow is the regenerative fluid (*kuwa*), and the residues are the oiliness of the body and eye mucus. The regenerative fluid has two parts: a residue, which forms the sperm and menstrual blood; and a refined part referred to as the 'vitality fluid' (*dang*), this resides in the heart but its presence permeates the whole body, giving long life, vitality, and a bright sheen to the body's complexion.

In order that the metabolic process will function well it is necessary that the 'fiery heat', which provides the energy for all the transformations is neither too intense nor too weak. If this is the case and nothing disrupts the natural process of the metabolism, then health will be experienced. But as we have seen it is the three

humours that are ultimately responsible for bodily processes, and if these are disturbed, this will manifest as a disruption in the body's constituents. For this reason the humours are presented in the text as the agents of harm rather than health.

As we have seen, what is said in the medical text about the moment of conception, entirely accords with Buddhist and Bönpo philosophical notions about the nature of existence. Through the fundamental ignorance of the true nature of the mind, the three mental poisons of ignorance, desire, and aggression arise; these generate the karma that impels beings to be born into one of the six realms of existence. The three mental poisons that are present in the consciousness generate the three humours that govern all physiological processes in the body. Meyer (1995:128) has noted that Tibetan medicine is following a tradition here that can be found in certain Mahayana texts where the three mental poisons are related to the three humours of Indian Ayurvedic medicine.

The three humours have a dual nature: if they are in their right proportions and locations, they are the cause of health; but if by some means they are disturbed then pathological conditions will arise. Indian Ayurvedic medicine, with which Tibetan medicine shares many of its theories,<sup>16</sup> uses two separate terms to refer collectively to the humours, depending on whether they are in an healthy state, in which case they are referred to as *dhātu*, 'constituents', or in a disturbed state, when they are referred to as *dośa*, 'defects' (Meyer 1995:128).<sup>17</sup> In Tibetan medicine, on the other hand, following the Buddhist and Bönpo view that suffering is innate to all forms of samsaric life, the humours are named only according to their negative aspect as 'faults' (*nyépa*) or sometimes 'illness' (*né*). The text graphically likens the inherent disposition of the humours to generate sickness to an insect becoming poisoned as a consequence of feeding on a poisoned tree.

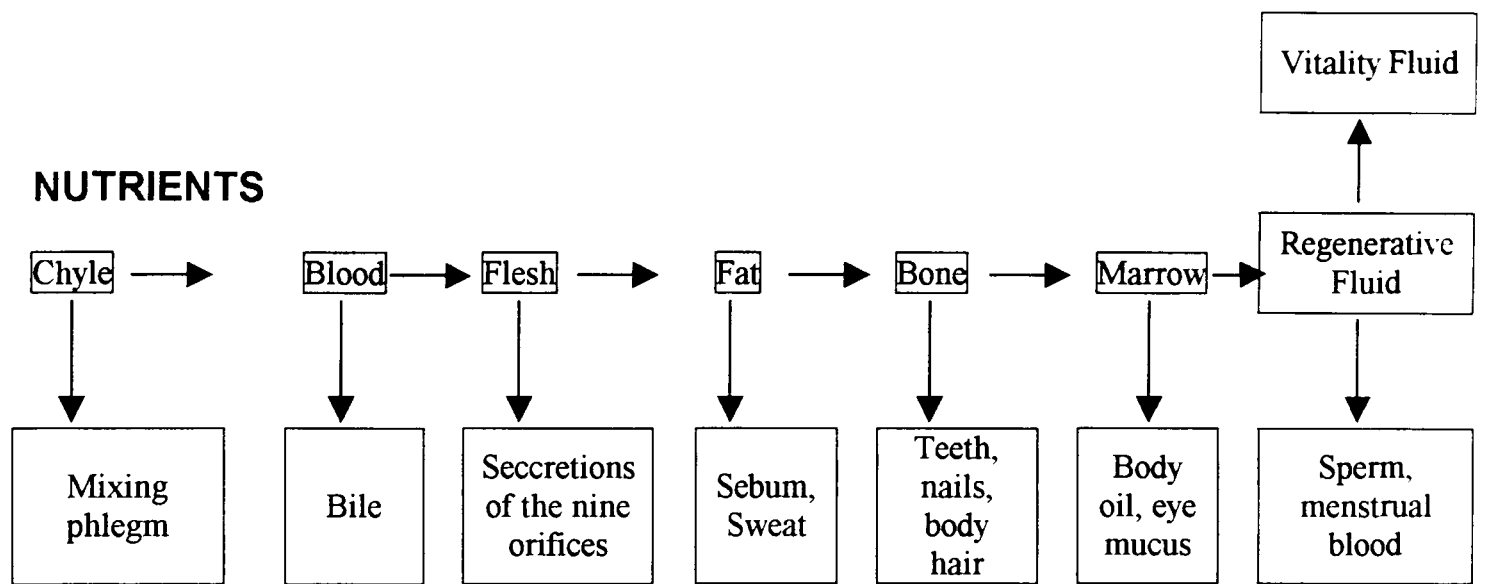
Each of the three humours is responsible for a range of psychophysical functions. Wind is responsible for: breathing, movement, circulation in the body, the passage of the bodily wastes, making the senses sharp, and sustaining the body. Bile is responsible for: hunger and thirst, digestion, body heat, the clearness of the complexion, courage and intelligence. Phlegm is responsible for the firmness of the

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<sup>16</sup> Meyer has noted that Tibetan medical notions of physiology (1988:133) and its humoral theory (1988:136) corresponds almost exactly to that of Ayurvedic medicine.

<sup>17</sup> The three *dośas* are, *vāta*, *pitta*, and *kapha*; these correspond respectively to *lung*, *tripa* and *peken*.

body and the stability of the mind; it enables sleep, allows the body's articulations, gives patience, and makes the body soft and lubricated.



## RESIDUES/WASTES

Fig. 5.1 The Seven Bodily Constituents and their Residues

As we have seen on the first branch of the first tree each humour has five principal forms. Table 5.2 gives the names, functions, and locations of these humours; for the five winds there is the additional information of the pathways through which each circulates. All this information can be found in the second volume of the medical text. The text also gives a list of qualities for each humour that relate to its elemental nature. The qualities of wind are: rough, light, cool, subtle, firm and mobile; the qualities of bile are, oily, sharp, hot, light, strong-smelling, purgative and moist; and the qualities of phlegm are, cool, oily, heavy, smooth, dull, firm and adhesive. Types of behaviour or food that have the same qualities of a humour will tend to increase it. Tibetan medical therapy is of an allopathic nature; if a humour is disturbed, medicines, food and behaviour are proscribed with the opposite qualities.

From Table 5.2 it can be seen that it is the three humours that are responsible for all psycho-physiological processes. The focus in Tibetan medical notions of anatomy and physiology is not so much on biological substrata but the functioning of the system as a whole, which is governed by the three humours. I asked all of the students about what they knew about the function of organs in the body, such as the liver or the kidneys. Their response was to either attempt some explanation in terms

<b>The Five Winds</b>	<b>Life Holding Wind</b> <i>(Sogzin lung)</i>	<b>Upward Moving Wind</b> <i>(Gyen du gyuwé lung)</i>	<b>Pervading Wind</b> <i>(khyabché lung)</i>	<b>Fire-Companion Wind</b> <i>(me dang nyampé lung)</i>	<b>Downward Expeller Wind</b> <i>(thur du selwé lung)</i>
Location	Top of the head	Chest	Heart	Stomach	Genitals/rectum
Pathway	Throat and breastbone	Nose, tongue, and throat	All the body	Hollow organs	Colon, bladder, genitals, thighs, small intestine
Function	Swallowing, breathing, sheds tears, sneezing, belching, gives clarity to the senses	Speech, body strength, body colour, gives strength to mind, gives clear memory	Capacity for movement	Separates the nutrients from the wastes during digestion and helps form the body's constituents	Retentions and expulsion. Flow of sperm, menstrual blood, urine and stool. Helps during birth.
<b>The Five Biles</b>	<b>Digestive Bile</b> <i>(tripa juché)</i>	<b>Colouring Bile</b> <i>(tripa drubché)</i>	<b>Accomplishing Bile</b> <i>(tripa dangyur)</i>	<b>Eyesight Bile</b> <i>(tripa thongché)</i>	<b>Complexion Clearing Bile</b> <i>(tripa dogsal)</i>
Location	Between digested and indigested food	Liver	Heart	Eyes	Skin
Function	Digests food, provides body heat and strength, and supports the other bile humours	Provides colour of bodily Constituents	Provide Body heat, courage, pride, intelligence, will power	Provides eyesight	Gives a clear complexion.
<b>The Five Phlegms</b>	<b>Supporting Phlegm</b> <i>(peken tenché)</i>	<b>Decomposing Phlegm</b> <i>(peken yéché)</i>	<b>Experiencing Phlegm</b> <i>(peken yongché)</i>	<b>Satisfying Phlegm</b> <i>(peken tsimché)</i>	<b>Connecting Phlegm</b> <i>(peken jorché)</i>
Location	Chest	Stomach	Tongue	Head	Articulations
Function	Provides body moisture and supports the other phlegms	Breaks down the food in the stomach	Provides tastes	Provides the sensation of satisfaction from the senses	Connects the body's joints and enables movement of the limbs

**Table 5.2 - The five types of Wind, Bile and Phlegm**

of the three humours or more usually to say that they did not know because this information is in the second volume of the medical text, which they had not yet studied. In fact most of the information that is contained in the second volume on physiology has been outlined above, and as we have seen it is entirely oriented towards the function of the three humours rather than specific physiological components.

From what has been said so far about Tibetan medical notions of anatomy and physiology it can be seen that they are an expression of what I described in chapter four as the synthetic mode of knowledge. This is equally true of the great medical traditions of Chinese and Ayurvedic medicine and Galenic medicine in its medieval European form, and its contemporary South Asian form of Yunani medicine. Tibetan medicine shares many features with these other systems of medicine; they are all based on humoral theories, they view the human body as a microcosmic reflection of the wider environment, and health is produced through the balanced functioning of the humours.

## **5.5 The General Principles of Disease Causation**

There are three main locations in the medical text where the nature of disease is presented: it is summarised in the first volume, explained in detail in the third section of the second volume, and the whole of the large third volume is dedicated to Tibetan nosology. The students had studied the first volume with Amchi Gege and had arrived up to chapter seventy-three of the ninety-two chapters of the third volume, the last time I was in Dhorpatan. Although they had not been taught the chapter on disease in the second volume, they were certainly well aware of Tibetan medical notions concerning it.

The second stem of the first medical tree provides a schematic layout of the principles involved in pathology. It has nine branches and sixty-three leaves. The three leaves of the first branch give the primary cause of illness: the three humours. The four leaves of the second branch give the factors that lead to a disturbance in the humours: season, spirits, diet, and behaviour. The six leaves of the third branch give the various locations where disease enters the body. The three leaves of the fourth branch give the main locations in the body of each of the humours: phlegm in the

upper body, bile in the middle region, and wind in lower area. The fifteen leaves of the fifth branch cover the various points traversed by the three humours: these cover the seven bodily constituents, the excreta, the senses, and the five solid and six hollow organs. The nine leaves of the sixth branch give the age in the person's lifespan, place, and time during the day and season where each humour predominates. The seventh branch has nine leaves, which give circumstances that have fatal outcomes such as an intractable fever or wind disease. The twelve leaves of the eighth branch give the effects that lowering or increasing a humour has on the other two humours. The ninth and final branch has two leaves, which classify all diseases of the humours as either cold (wind and phlegm), or hot (bile and blood) diseases. When Amchi Gege teaches about this tree he elaborates on the subject of each leaf so that by the time he has finished the students have a solid foundation for what is to follow in subsequent sections of the text and what they will encounter in clinical practice.

What is said in the first volume on the nature of disease is elaborated on in chapters eight to twelve of the second volume. Chapter eight expands on the first branch on the primary causes (*gyu*) of diseases, which it divides into remote and close. The remote cause is the fundamental ignorance, which generates the three mental poisons. In turn the three mental poisons lead to the three humours in the body, which are listed as the close cause of disease. Chapter nine expands on the second branch on the contributory causes (*kyen*) of disease. The leaves on this branch list four contributory causes: season, diet, behaviour, and harmful spirits. In chapter nine these appear amongst a list of general causes of disease: season, harmful spirits, incorrect treatment, poison, diet, and negative karma; the text then goes on to describe specific causal factors for each of the three humours; these relate to the humours properties. For example wind is said to be: rough, light, cool, subtle, firm and mobile. If any contributory cause is present which has any of these properties, and this cause is sustained for a prolonged period of time, this will bring about pathological conditions in the wind humour.

Chapter nine of the medical text gives three forms of modification that a humour goes through when it is disturbed. The first stage is 'accumulation' (*sog*). When a cause is present that has similar properties to the humour this will first lead it to

accumulate in its own location. As the humour accumulates, a natural process ensues where one begins to desire forms of behaviour or diet, which have the opposite qualities of the humour. The following stage is 'arising' (*dang*), when the humour becomes pathogenic and spills over into the pathways of the other humours; it is at this time that symptoms of the pathological condition manifest in the body. The third stage is 'calming' (*zhi*); this refers to the time when the disturbed humour is returned to a state of balance in its own location by appropriate diet, behaviour and therapy.

<b>Wind</b>	<b>Bile</b>	<b>Phlegm</b>
Intestines	Between the navel and the stomach	Chest
Hip articulation	Stomach	Throat
Bones	Blood	Lungs
Skin	Perspiration	Head
Ears	Chyle	Chyle
All the body's articulations	Serum	Flesh
Colon	Eyes	Adipose tissue
	Skin	Marrow
	Between the digested and undigested food	Semen
		Stool
		Urine
		Nose (sense of smell)
		Tongue (sense of taste)
		Upper stomach (the place of 'undigested food')

**Table 5.3 The Locations of Disease According to the Pathological Humour**

The way that disease enters the body is explained in chapter ten of the second volume. The contributory causes of disease are likened to an archer who shoots the arrow of the qualities (coarse, rough, smooth etc.) at the target of the three humours. The way disease manifests depends on the interrelationship between the three humours, the bodily constituents and the excreta. First the humour accumulates in its own location: wind in the bones, bile in the blood and perspiration, and phlegm in the chyle, flesh, adipose tissue, marrow, the regenerative fluid, and the stool and urine.

When it overflows from its own location, a process ensues whereby disease manifests as the pathological humour follows six pathways. As it is explained in the *Blue Beryl* commentary:<sup>18</sup> the humoral disturbance first ‘disperses’ (*dram*) to the skin; then ‘extends’ (*gyé*) to the flesh; then ‘passes’ (*gyu*) in the channels, then ‘attaches’ (*zhenpa*) to the bones, then it ‘descends’ (*bab*) on the five full organs, and ‘falls’ (*lhung*) on the six hollow organs. Once the disease has entered the body through the six passageways it manifests in certain locations depending on the pathological humour: these locations can be found in Table 5.3. It can be seen that the locations of the disease relate to the various physiological functions of each of the humours in their five forms, which are shown in Table 5.2.

### 5.5.1 Concepts of ‘Infectious’ disease in Tibetan medicine

Although the students had not studied the section in the second volume on disease causation, they had acquired an extensive knowledge of it from their studies of specific diseases in the third volume. From conversations I had with the students about the nature of disease, their view was generally in accordance with what is said in the text. But on occasions they would try to interpret Tibetan medical notions according to well-known biomedical concepts.

The Tibetan word *sin* or sometimes *sinbu*, meaning ‘insect’, ‘worm’, or ‘parasites’, which occurs in the medical text, was frequently identified by some of the students as ‘germs’ or ‘bacteria’. Sometimes the fit between the two categories worked well such as when one patient came to see Amchi Gege with toothache (*sinbu né*), which was described to me as caused by *sin* eating at the tooth. On another occasion, Nyima, the senior medical student, accounted for the infectious nature of the two groups of diseases collectively known as *nyené* and *rim*, by *sin* carrying it from person to person. The original cause of *nyené* is the *nyen* class of spirits; by saying that they created the *sin* that transports the disease from person to person he managed to embrace both Tibetan and biomedical theories of disease causation.

Meyer has commented on this tendency amongst Tibetans to modernise the Tibetan medical system by using biomedical terms. He criticises Rechung Rinpoche

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<sup>18</sup> I have relied here on Meyer’s (1988:141) French translation of the Tibetan passage.

for using words such as ‘lupus’, ‘typhoid’, and ‘germs’ without giving the original Tibetan word (Meyer 1988:39). On the subject of *rim*, although he acknowledges that the text describes it as a contagious disease he feels it inappropriate to translate *rim tshé* as ‘infectious disease’ as Yeshe Donden (1986:96) has done, as it ‘lends to Tibetan medicine a pathogenic conception that is foreign to it’ (1990:240). For the same reason he objects to Lobsang Dolma Khangkar’s (1986:166) translation of *sinbu* as ‘bacteria’ (Meyer 1990:239).

Tibetan medicine is referred to in Tibetan as *sowa rigpa*, the ‘science of healing’, but much of what is said in the text can be used as guidance for maintaining good health. As we have seen the key to good health in Tibetan medicine is diet and behaviour. The students knew about this, but when I questioned them about the cause of good health most of them prioritised good hygiene practices. Not because Amchi Gege had told them this, but because it had been instilled into them by the teacher at the local school in Dhorpatan. Almost all of them were firmly of the opinion that good health was related to having clean water, clean food, clean body and clothes, and going to the toilet in a place far away from where people live. Amchi Gege never presented me with a Tibetan medical germ theory of disease, though he himself carried out practices that related to it such as putting iodine solution and elastic plasters on wounds.

## 5.6 Learning About Specific Diseases

Tibetan nosology is first outlined in the last part of section three of the second volume, where diseases are enumerated according to various different criteria. In this place very little is said about the nature of the disease; the purpose appears to be to enumerate the various forms of disease according to a pattern of lists and sub-lists. As I have mentioned this is a typical device for a tradition that values memorisation and the oral transmission of knowledge.

The text commences by listing three broad classifications of disease: by cause, by host, and by the type of disorder. There are three types listed for the classification by cause: disorders arising when contributory factors disturb the three humours in this life; disorders arising from negative karma accrued in a previous life; and a mixture of the two. Disease that results from the effect of negative karma can only be

remedied with a religious approach, which is directed at neutralising the karma. Disorders that arise from causes in this life are of two sorts: endogenous (*rangzhin né*), that is to say internal disturbances of the three humours; and exogenous (*chikyen*), for which the text lists, poisons, weapons, and harmful spirits.

For the classification according to host, the text enumerates seventeen male diseases, thirty-two female diseases, twenty-four diseases affecting children, and diseases specific to old people. For diseases that are common to all people it gives 101 affecting the humours, 101 principal (*tsowo*) disorders, 101 diseases classified by location, and 101 classified by type. This gives a total of 404 diseases. The number 404 is cited in a number of different locations in the medical text as representing the entire range of Tibetan nosology. For example at the beginning of the first volume we are told that the Medicine Palace, where the Medicine Buddha gave the teachings, is made of precious gems that heal the 404<sup>19</sup> diseases arising from the three humours. This number should not be taken literally. As it is stated in the last part of the section on nosology in the second volume, the three humours and their fifteen forms can act singly or combine to affect the seven bodily constituents and the excreta in countless different ways.

The third volume is by far the largest part of the medical text. It gives details about the wide range of diseases known to Tibetan medicine, their causes, symptoms and treatment. It is through studying this volume that the students learn about the different forms of diseases, which they may encounter in clinical practice. It comprises of ninety-two chapters divided into fifteen sections. The first chapter begins with the standard formula found at the beginning of each of the four tantras with the request for the teachings. The broad classes of disease dealt with in the fifteen sections are as follows: section one has four chapters on humoral diseases; section two has six chapters on chronic internal disorders; section three comprises of sixteen chapters on fevers; section four has six chapters on disorders of the upper body; section five comprises of eight chapters on disorders of the solid and hollow organs; section six has two chapters on genital disorders; section seven has nineteen chapters on miscellaneous disorders; section eight has eight chapters on internal sores and ulcers; section nine has three chapters on paediatrics; section ten has three

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<sup>19</sup> Meyer (1995:130) has noted that though the number 404 does not appear in Ayurvedic texts, it is mentioned in several early Mahayana texts as the total of 101 diseases amplified by the four elements.

chapters on gynaecology; section eleven has five chapters on disorders caused by spirits; Sections twelve comprises of three chapters on poisons; section fourteen has one chapter on geriatrics; and finally section fifteen comprises of two chapters on fertility treatment. The disease classification of each of the ninety-two chapters can be found in Appendix B.

Each of the chapters follows the same structure, giving the primary and secondary causes of the disorder, its different types, the symptoms, and the forms of treatment. Throughout the entire period of my stay in Dhorpatan, the students were studying this volume of the medical text. The last time I was there in August 1998, the students had arrived at chapter seventy-three on child disorders caused by spirits. In my own lessons with Amchi Gege, after I had been taught the first Tantra, and the first five chapters of the fourth Tantra, I also went on to study several chapters in the third volume.

Based on the experience of my lessons and my observations of the students lessons, Amchi Gege always taught in the same way. He would read a passage of the text to himself, and then elaborate on it drawing on information in commentaries. The commentary he relied on mostly for explaining the contents of the third Tantra was Khyuntrel Rinpoche's *Men Jor Tongtsa*. The students listened to him and took the occasional notes in their text or in exercise books. On rare moments they would ask Amchi Gege to clarify points. Sometimes he would ask the students questions about the subject he was teaching, which related to things he had taught in previous lessons.

One word that I heard Nyima and Geshe Tenzin Dhargye use many times was 'cancer'. They were familiar with the English term and used it frequently to translate the Tibetan disease category of *tren*. From the outset of my stay, Nyima informed me that 'cancer' was very common in the valley of Dhorpatan, and indeed from records that I kept of patients who came to the clinic, *tren* was by far the most frequently diagnosed disease (see Table 6.2). Both Nyima and Geshe Tenzin Dhargye were of the opinion that given time Tibetan medicine could treat 'cancer' very effectively. In order to clarify all this, when I moved on to the third volume in my lessons, the first chapter I asked Amchi Gege to teach me was the chapter on *tren*. In what follows I will summarise the teachings that I was given. This will serve two purposes: first, it

will provide an example of how the disease categories that are found in the third tantra are presented as propositional knowledge in the classroom; and second, in the following section on clinical practice I will show how the students engage with this knowledge in interactions with patients who were diagnosed as suffering from this condition. As the word *tren* refers to various types of growths in the body I will adopt the more appropriate translation of ‘tumour’.<sup>20</sup>

Amchi Gege based his teachings, as usual, on the main *Bön* medical text the *Bumshi*. The chapter begins in the standard way by saying that it was taught by Tönpa Shenrab after his son Tribu Trishi requested the teachings. It then situates *tren* as one of the ‘five great chronic diseases’<sup>21</sup> (*chong chen de nga*) covered in section two of the third tantra. Amchi Gege explained that these diseases are listed together because they all share the same cause of poor digestion (*ma zhu ba*). The text then goes on to discuss *tren* according to seven subjects: primary cause (*gyu*), contributory causes (*kyen*), types (*chewa*), location (*népa*), how they develop (*gyurtshül*), symptoms (*tagpa*), and treatment (*chö thab*).

### **1. The primary causes of *tren***

The primary causes of *tren* are: the three humours, blood, *sin*,<sup>22</sup> serum (*chu ser*), and hair. Amchi Gege said that a problem arising in the digestive process combines with one or a combination of these causes to produce the *tren*.

### **2. Contributory causes of *tren***

The contributory causes of *tren* are: karma (*lé*), spirit (*dön*), dysfunctional digestions (*ma zhu*), weapon (*tshön*), falling (*dram*),<sup>23</sup> a disturbance (*thrug*) caused

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<sup>20</sup> Some of the tumours that patients had may well have been cancer, but it seems that this was not always the case. Nyima mentioned that ‘cancer’ is also described in other sections of the third volume.

<sup>21</sup> Chapters six to eleven: digestive disorders (*ma zhu wa*), tumours (*tren*), first stage oedema (*kyabab*), second stage oedema (*or né*), and third stage oedema (*mu chu*). Consumption (*zad byed*), which is also listed in this section of the text, is according to Amchi Gege, considered to be separate from the first five.

<sup>22</sup> Following what I mentioned earlier I have declined to translate this word by the biomedical terms ‘germ’, or ‘bacteria’ as Nyima, and Geshe Tenzin Dhargye translated it to me. However the terms ‘worm’, ‘insect’ or ‘vermin’ given by Das (1995) are also inappropriate in this context, consequently I have left the word untranslated.

<sup>23</sup> The word means ‘to hurt’, but what seems to be meant here is the effects of a hefty blow. Whenever this word came up in my lessons, Amchi Gege always gave the examples of falling from a horse or a hill.

by incorrect diet or behaviour, giving birth (*bu tsé*), a wet place, and a cold place.

### **3. Types of tren**

The text lists eleven types of *tren*: phlegm *tren*, *tren* of the upper stomach (*lhen*) region, stone *tren* (*do tren*), wind *tren*, blood *tren*, bile *tren*, channel *tren*, hair *tren*, water *tren*, *sin tren*, and pus *tren* (*nag tren*).

### **4. Locations of the tren**

The text gives twelve locations which *tren* affect: the lungs, heart, liver, diaphragm (*chin tri*), kidneys, spleen, gall bladder, stomach, colon, intestines, bladder, and womb.

### **5. The process by which the tren develops**

The text describes how seventeen forms of *tren* develop. In most cases this involves a breakdown in the metabolic process whereby the undigested nutrient (*dangma mazhu*) stays in the liver and creates impure blood, which then mixes with it. If this mixture stays in the liver it will in time, through the action of the wind humour, be rendered hard like ‘stone’, and transformed into a *tren*. When this mixture passes to other locations of the body listed in the text, *tren* are formed there in the same way. In two cases it is the undigested residue (*nyigma mazhu*) that is transformed into the *tren*, this occurs in the stomach and colon, and in the area just under the sternum (*lhen*).

All this information came from Amchi Gege’s commentary on what is found in the main text. As is often the case the main text gives an elided phrase, which summarises the information, but cannot be understood unless the teacher explains it. The relevant nine-syllable phrase for what I have just said about the ‘liver blood *tren*’ and the possible affects on the spleen, stomach, colon or womb, can be translated, ‘blood *tren* liver spleen stomach colon womb’ (*khrag. skran. mchin. mtsher. pho. long. mngal. du. ’ong*). No explanation is given in the main text to give meaning to this string of words in the context of the medical teachings.

A stone like *tren* may also be formed in the gall bladder if the undigested nutrient passes into it from the liver and wind acts upon it, which seems to be the Tibetan

medical explanation for gallstones. The *tren* can also be formed by blood staying in a location and being transformed by wind; the text lists wounds as a possible cause of this problem, and also childbirth when blood remains in the womb. If the undigested nutrient enters the channels it may mix with serum and form what is referred to as a 'water *tren*' (*chu tren*), which clings to the side of one of the hollow or solid organs; because of the presence of the serum it is not hard like the other *tren*. The only *tren* amongst the list given in the text that is not formed by the action of the wind humour is the *sin tren*; in this case it is the *sin* that form the *tren* in the stomach or the colon, in a process that Amchi Gege likened to 'winding up a ball of wool'.

Quite often after my lesson with Amchi Gege I would discuss what I had been taught with Nyima, in an unintentional parallel to the students' discussion groups. He invariably showed a good understanding of what he had been taught in the lessons. He described the process whereby the undigested nutrient and impure blood mix in the liver, to smoke arising from a fire. When he was describing the nature of the 'water *tren*' to me he gave the graphic image of frog's spawn.

Amchi Gege concluded his commentary on the section on the development of *tren* by saying that all *tren* can be classified into two groups: 'hot *tren*', which are caused predominantly by blood and bile; and 'cold *tren*', where phlegm and wind play a key causative role. He then added a threefold classification of *tren* according to their location: 'outer *tren*' (*chi tren*) are situated between the flesh and the skin; 'middle *tren*' (*bar skran*) are situated on the surface of the solid and hollow organs; and internal *tren* (*nang tren*), are situated inside the solid and hollow organs. Outer *tren* can be seen easily, middle *tren* can be felt with the hands, and internal *tren* are known through the symptoms.

## **6. The symptoms of *tren***

The text gives a range of general symptoms that are relevant for most forms of *tren*, and then lists twenty-three groups of symptoms for specific forms of *tren*. Amchi Gege explained that there are four methods of diagnosing *tren*: pulse, urine, investigation of the signs (*tshen nyi la tag pa*), and questioning the patient.

The general pulse for *tren* is 'faint' and 'weak' (*zhen*); this is felt on all the pulse locations. When examining the urine the doctor should look at the appearance, colour

and location of the bubbles: if the patient is suffering from *tren*, the bubbles will look like fish eyes; if they are white, yellow or red, this indicates respectively a *tren* of a phlegm, bile or blood nature; their location in the bottom, middle or upper area of the urine is a sign that the *tren* is located in these regions of the body.

The text gives fourteen general characteristic signs of *tren*, which may be present: wherever the *tren* is located, nearby there may be a dark mark on the skin (Amchi Gege joked that people wash so much these days that it is difficult to see this mark); pain in the area where the *tren* is located; difficulty to digest food; cold body; belching; vomiting; loss of weight; *chang*<sup>24</sup> and fresh butter exacerbate the problem; diarrhoea; a sensation of wind in the bowels which can never be evacuated; constipation due to the dryness of the stool; eating 'bad meat' (*sha ra*<sup>25</sup>) exacerbates the problem; after eating only a small amount of food the stomach feels full and hurts; after eating one feels cold and ill; and finally, any form of exertion makes the condition worse. Amchi Gege explained that the doctor should elicit information about these fourteen general characteristics and the specific symptoms by asking the patient about their experience.

The text then goes on to list twenty-three groups of symptoms according to types of *tren* and the various locations where they are found. For example, for the 'liver blood *tren*' (*chinpi tra tren*), which occurs in the liver due to wind acting on the mixture of the undigested nutrient and impure blood, Amchi Gege gave the following commentary. First he explained that the location of the liver can be found by touching the tips of the finger of the right hand on the right ear lobe with the arm kept close to the chest; the liver is located next to the elbow. He then gave the following symptoms: red urine; fever; thin and quick pulse; when the body is hot or cold there is pain in the back and in the area of the chest; the skin goes a bluish colour; loss of weight; drinking *chang* or eating liver meat causes vomiting; as the liver becomes inflamed this compresses the gall bladder and bile is leaked into the body causing the eyes and the urine to become yellow. Another example is the 'brown blood *tren*' (*mugpö tra tren*), which is the name give to the *tren* which forms in the stomach after the mixture of the undigested nutrient and impure blood has

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<sup>24</sup> A traditional Tibetan alcoholic drink made from fermented barley.

<sup>25</sup> Amchi Gege explained that this term means meat that comes from an animal that has died of a disease.

passed into it from the liver. For this type of *tren*, Amchi Gege explained the symptoms as: a sharp pain (*tsha*) in the stomach; when the stomach is pushed a beat can be felt; when the body is hot or cold the condition worsens; difficulty to eat food; and when the stomach is full pain is felt.

### 7. *Treatment of tren*

Amchi Gege began by summarising that there are four methods of treatment that are used for *tren*: medicines, external treatment, diet, and behaviour. The text first lists six general treatments; these relate to the outer, middle and inner types of *tren* in their hot and cold forms. It then goes on to outline the treatments for fifteen specific forms of *tren*. As these treatments involve sometimes numerous stages, and medicinal compounds that often consist of a large number of ingredients, I will restrict my explanation here to only two of them: the treatment for ‘internal hot *tren*’ (*tsha nang tren*); and for the ‘brown blood *tren* located in the stomach and colon’ (*pho long né su mug pé tra tren*). This will give an impression of the way the students are taught about therapeutic methods for specific diseases in the classroom, and the knowledge they bring with them to clinical practice.

#### ‘internal hot tren’

For an internal *tren* that is of a hot nature, the treatment begins with the medicinal compound *tigta chuchig*. The name follows the pattern I described earlier giving the name of the principle ingredient of the medicine, in this case *tig ta*, followed by the total number of ingredients, which is here, eleven, *chuchig*. The ingredients are:

1. *tig ta* (plant) [*Swertia chirayta*]
2. *serji metog* (plant) [*Herpetospermum pedunculatum*]
3. *dumo nyung* (plant) [*Holarrhena antidysenterica*]
4. *sil sum*, ‘the three cool ones’: *chu gang* (bamboo pith), *gur kum* (saffron) and *li shi* (cloves)<sup>26</sup>
5. *dragzhun* (bitumen)
6. *ru ta* (plant) [*Saussurea lappa*]

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<sup>26</sup> Amchi Gege explained that these three medicines are used for fevers of the upper body; for the lower body *li shi* should be replaced by *sug mel* (green cardamon).

7. *pi pi ling* (plant) [*Piper longum*]
8. *tsha la* (borax)
9. *a ru ra* (fruit, chebulic myrobalan) [*Terminalia chebula*]
10. *drön thal* (ash made from *drön bu*, cowrie shell)
11. *chongzhi dragtül* (ash made from *chong zhi*, calcite)

The following three medicines are added to the above ingredients. Amchi Gege explained that they have the specific task of ‘melting’ the *tren*. They are prepared together by heating them in a sealed metal container:<sup>27</sup>

1. *dong rö* (mineral) [realgar] Amchi Gege explained this is a red stone that smells of sulphur.
2. *hong len* (plant) [*Picrorhiza scrophulariaefolia*]
3. *da li* (plant) [*Rhododendron anthropogon*]

All these medicines are mixed together with cane sugar (*kara*), and ground into a powder and made into pills; these are then given to the patient. If the medicine is having a healing effect, certain signs will manifest: the *tren* will gradually become soft, the fever will become stronger, and the patient’s appetite weaken. For the patient it feels like the condition is becoming worse; but this is sign that the medicine is working.

At the time when the signs appear that the medicine is taking effect, the doctor should do bloodletting on the point connected with the effected organ: either the liver point on the forearm, or the colon point on the foot. Amchi Gege explained that before doing the blood letting, a medicine should be given which separates the pure and impure blood. This has 5 ingredients:

1. *drebu sum* – three fruits that are often used together in medicinal compounds: *a ru ra* (chebulic myrobalan) [*Terminalia chebula*], *ba ru ra* (beleric myrobalan) [*Terminalia belerica*], *kyu ru ra* (emblic myrobalan) [*Emblica officinalis*].
2. *ma nu pa tra* (plant) [*Inula racemosa*]
3. *pi pi ling* (plant) [*Piper longum*]

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<sup>27</sup> Heat is a method commonly employed in Tibetan pharmacology to change the properties of medicinal substances, usually as a process of detoxification.

After making a slight incision on the vein, the first blood to appear will be the discoloured, impure blood. After a short time clean blood will begin to flow marked by the colour changing to a clear red. Amchi Gege said that this change is very easy to see. When the change occurs, the bleeding must be stopped; this can be done either by reciting a mantra, or by putting some medicine on the wound. Amchi Gege explained that the reason why bloodletting is done is because if the impure blood is not eliminated, though the *tren* may be cured by the medicine, there is a possibility that the condition will return.

As the third volume contains information that relates to medical practice, it provides a synthesis of information found in the other three volumes of the medical text. By the time the students move on to study this volume, they have a thorough theoretical knowledge of diagnosis, but only a partial knowledge of therapies and pharmacology. Therefore, whenever necessary, Amchi Gege must explain about subjects that are found in the second and the fourth volumes, which the students had not at that time studied. For instance, bloodletting is explained in detail in chapter twenty of the fourth volume; the students had not studied this chapter, but they were reasonably familiar with the principles involved from Amchi Gege's lessons on the third volume, such as here in the chapter on *tren*. In their studies of the third volume, the students develop an awareness of how the theories and practices that they had studied in other sections of the text relate to specific disease; as this awareness develops, so too does the potential for clinical competency.

The next stage in the treatment of the 'internal hot *tren*' involves adding certain medicines to the medicinal compound given above, which cleanse the five solid organs, and the six hollow organs and all the channels associated with them. By adding these medicines all the extraneous material will be cleared out through the urine and the stool. This subject is dealt with in detail in chapter seventeen of the fourth volume on gentle enemas, and chapter nineteen on channel cleansing.

The final treatment that is listed in the text is to take a hot bath (*chu lam*). Amchi Gege said that for *tren* the best kind of hot bath is one that has a predominance of calcite (*chongzhi*). The patient should stay in the water for as much time as possible over the period of a week. If the patient feels a sensation like the water is pushing them up and they want to vomit, this indicates that the wind humour is becoming

disturbed, in which case they should stop the bath. For each of the three forms of hot *tren*, the recommended food and behaviour is the same: the food should be cool and light, and one should avoid becoming too hot or cold, and physical exertion.

***'brown blood tren located in the stomach and colon'***

The section on the treatment of specific forms of *tren* begins by outlining procedures according to five locations of the *tren*: heart, lungs, liver, spleen, and kidneys. The text then moves on to discuss the treatment of ten specific types of *tren*. In what follows, to give an example of how Amchi Gege teaches this part of the text, I will give his commentary to the section on the 'brown blood *tren* located in the stomach and colon'.

The first medicine that should be given has five ingredients:

1. *tarbu* (40g) (plant) [*Hippophae rhamnoides*]
2. *gyam tsha* (20g) (rock salt) [*Sallucidum*]
3. 'u su (coriander seeds)
4. *manu patra* (plant) [*Imula racemosa*]
5. *bu ram dkar po* (white molasses)

The first four ingredients are ground into powder, and then a small amount of white molasses is added. Amchi Gege explained that as the medicine must be taken as a powder, care must be taken not to add too much molasses. The powder should be taken in the morning and evening with hot water that has been boiled and allowed to cool. The next stage is to make a hot compress from:

1. *chulo* [*Rheum spiciforme royie*]
2. *dragkya hawo* (plant) [*Corallodiscus kingianus*]

The plants should be first cleaned then ground into a powder to which is added a little salt (preferably *len tsa*). This is then wrapped inside a cloth and used as a hot compress on the location of the *tren*, either the stomach or the colon; this should make the *tren* become soft.

After the hot compress, the *tsha lé jong*, cleansing medicine is given. This consists of five ingredients:

1. *domtri* (bear's bile)
2. *hong lan* (plant) [*Picrorhiza scrophulariaefolia*]
3. *durji* (plant) [*Euphorbia*]
4. *tsha la* (borax)

Amchi Gege explained that the salt *tsha la* is used in many *tren* medicines; it is usually first detoxified by subjecting it to extreme heat in a metal container. However, for this cleansing medicine it is not heated in this way but dissolved in boiling water, at which point the other ingredients are added to the liquid. The purpose of the first medicinal compound and the hot compress is to soften the *tren*. When this has been accomplished the cleansing medicine is used to eliminate it from the body. If the *tren* is not eliminated, the text gives a stronger medicinal compound and cleansing medicine that should be used.

The pattern of the teaching that we can see here for *tren* is repeated in each of the ninety-three chapters of the third volume. The students learn the causes of the disease, its various forms, the part of the body affected, the symptoms and the methods of treatment. The third volume of the medical text is a veritable handbook of medical practice. In his teachings on it Amchi Gege weaves together into a coherent whole, elements of medical knowledge that are covered in the other three volumes of the medical text, and relates them to specific instances of disease that the students may encounter in medical practice.

## 5.7 Diagnostic Theory

We have seen that when a cause is present with the same qualities of a humour, this will cause it to increase in its own location, and if the cause is sustained it will become pathogenic and spill over into the sites of other humours. When this occurs, symptoms of the underlying pathological condition will become present. These symptoms are manifest in the experience of the patient, the appearance of the body, and the qualities of the urine and pulse. Learning diagnosis involves two stages: first,

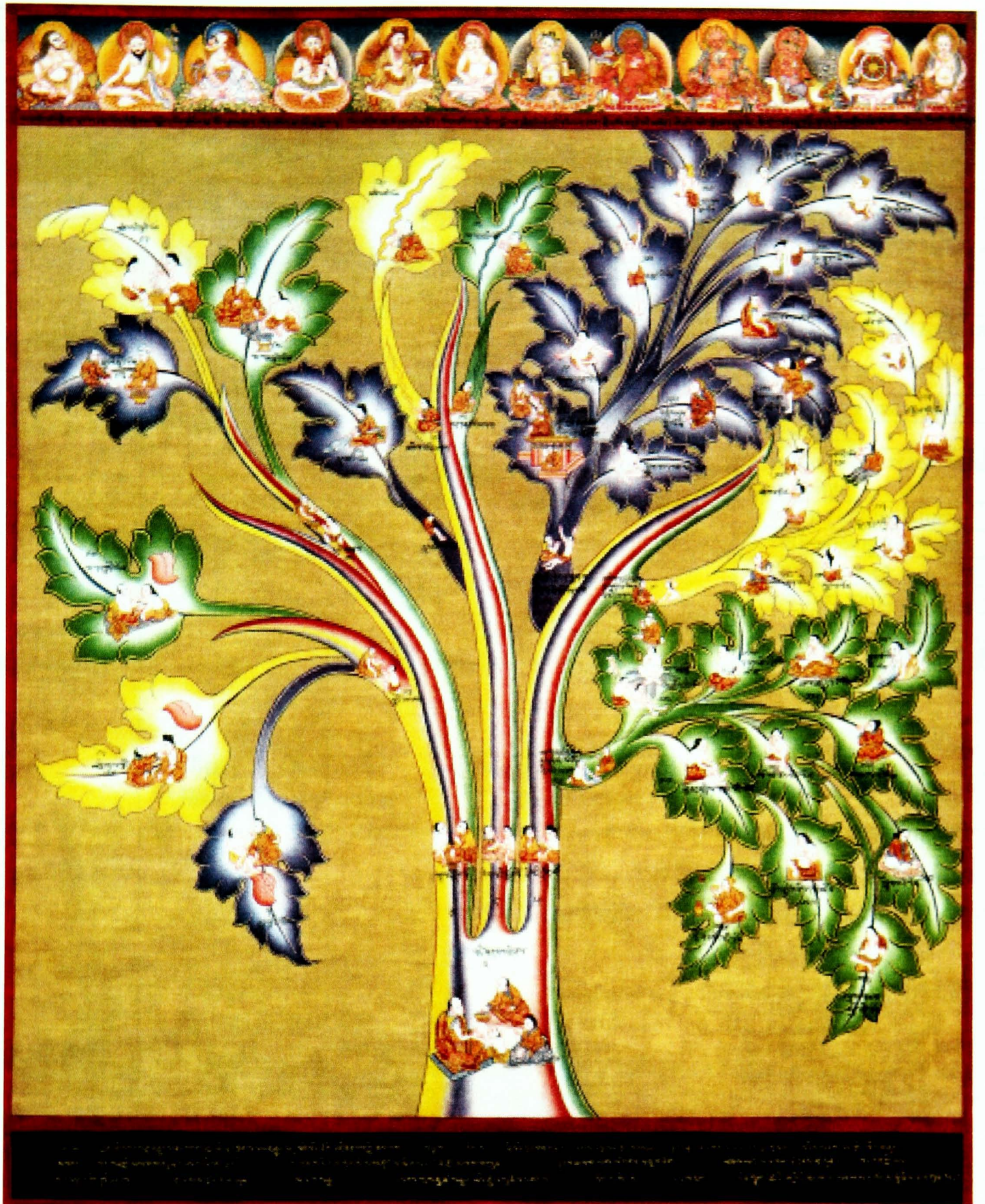


Plate 15 - Root of Diagnosis.

Root	3 Stems	8 Branches	38 leaves
<b>Root 2. Diagnosis</b>	Stem 1. Visual Diagnosis	Branch 1. Tongue Diagnosis	1. Wind tongue
			2. Bile tongue
			3. Phlegm tongue
		Branch 2. Urine Diagnosis	1. Wind urine
			2. Bile urine
			3. Phlegm urine
	Stem 2. Pulse Diagnosis	Branch 1. Wind pulse	1. Wind pulse
		Branch 2. Bile pulse	2. Bile pulse
		Branch 3. Phlegm pulse	3. Phlegm pulse
	Stem 3. Diagnosis through questioning	Branch 1. Questions for wind disorders	1. light and rough food and behaviour
			2. yawning
			3. stretching and sighing
			4. shivering
			5. aching hips, waist, lumbar area, joints.
			6. sharp shifting pains
			7. vain attempts to vomit
			8. dulled senses
			9. worried mind
10. worse when hungry			
11. rich and nutritious diet			
Branch 2. Questions for bile disorders		1. fast acting and hot behaviour and food	
		2. bitter taste in mouth	
		3. headache	
		4. raised temperature	
	5. pains in upper body		
	6. pain after digestion		
	7. cool place diet and behaviour		
Branch 3. Questions for phlegm disorders	1. heavy and oily food and behaviour		
	2. poor appetite		
	3. difficult digestion		
	4. vomiting		
	5. bad breath		
	6. bloated stomach		
	7. belching		
	8. physical and mental heaviness		
	9. feeling cold		
	10. feeling unwell after eating		
11. warm behaviour and diet			

**Table 5.4 Root of Diagnosis**

during their lessons in the classroom the students learn the symptoms of specific pathological conditions; then in clinical practice they must develop the skills necessary to perceive these indicators. Learning to relate what is said in the text to a patient's urine sample, or an actual sensation of the pulse, requires considerable practical experience. In the following chapter I will consider the students attempts at diagnosis. Here I will outline the way the students learn diagnosis in the classroom.

The students spend a considerable part of their first year in the school studying diagnosis. They are first taught the general principles of diagnosis summarised by the branches and leaves of the second root of the tree metaphor. After finishing the first volume of the medical text, they then move on to the pulse and urine chapters of the fourth volume; this, according to the official course syllabus should bring them to the end of their first year of study. The second root, the root of diagnosis, has three stems (see Plate 15 and Table 5.4), which provide a general outline of the methods of diagnosis used in Tibetan medicine. The first stem summarises the methods of visual examination. It has two branches, each with three leaves representing wind, bile and phlegm disorders: the first branch gives the appearance of the tongue; the second branch describes the appearance of the urine. The second stem summarises the method of pulse diagnosis; it has three branches, each with one leaf representing the qualities of the pulse for each of the humours. The third stem is the stem of questioning. It has three branches, one for each of the humours. The first leaf gives the type of food and behaviour that disturbs the humour, and the last leaf gives food and behaviour that have a positive therapeutic effect. The range of leaves in-between these, represent the specific symptoms associated with each humour. By making reference to this knowledge the doctor can elicit information from the patient that will contribute towards an accurate diagnosis.

Before moving on to discuss the techniques of pulse and urine diagnosis I will briefly consider what is said in the second volume on the subject of diagnosis. In a like manner to the pattern we saw for the first root on the condition of the body, the second volume expands on the knowledge that is summarised by the root of diagnosis, thereby building on the students' existing knowledge. The second volume does not give information on specific diagnostic techniques, rather it gives general

guidelines on diagnosis, and a list of symptoms related to pathological conditions in the humours and the seven bodily constituents.

The symptoms of disease, which are mentioned on the branches of the stem of questioning, are expanded on in chapter eleven of the second volume. As we have seen, health derives from each of the humours being in the correct quantity, and location. The text lists symptoms for each of the humours, the seven bodily constituents and the three excreta when they are in a state of 'increase' (*phel*), 'decrease' (*zé*), and for each of the three humours when they are 'disturbed' (*trug*).

The symptoms, which indicate a disturbance of the wind humour, are: the pulse is empty (*tong*) and floating (*kyel*); the urine looks like water and as it cools down it becomes thinner; the tongue is dry, red and rough; insomnia; yawning; dizziness; pain when one attempts to move; shifting pains; light-headedness; sighing; restlessness; goose pimples; pain in the hips and in the region of the waist; and so on. The symptoms of a disturbance in the bile humour are: a fast (*gyog*), thin (*tra*), and taut (*gyé*) pulse; urine which is a reddish yellow colour, foul smelling, and gives off a large amount of steam; the tongue is thickly coated; headaches; insomnia; bitter and sour tastes; yellow eyes; high temperature; thirst; diarrhoea with blood; unpleasant smelling sweat; vomiting blood and bile; and so on. The symptoms of a disturbance in the phlegm humour are: a sunken (*chin*), indistinct, slow (*del*), pulse; pale coloured urine that has hardly any odour or steam; the tongue and the gums are a pale colour; abundance of mucus in the throat and nose; a sensation of heaviness; poor digestion; swollen body; itchy skin; stiff limbs; intellect not clear; pains in the kidneys and lumbar area; lethargy; mental dullness; and so on. Certain conditions such as the times of the day when the humour is ascendant, or the stage of the digestive process exasperate the symptoms: the early evening, at dawn, and after digestion for wind; midday, midnight and during digestion for bile; and at dusk and shortly after eating for phlegm.

Diagnosis is also the focus of the sixth part of the second volume, which comprises of chapters twenty-four to twenty-six. The subject of chapter twenty-four is diagnosis of the humoral condition of the patient. It begins by reiterating what was established on the stem of questioning, that diagnosis must take into consideration three aspects of disease: the cause, the symptoms, and the factors that

have a positive or negative affect on the condition. The text then proceeds to explain that the focus of diagnosis is the three humours in all their pathological modes. The diagnosis should also take into consideration the constitutional humoral characteristics of the patient, and environmental influences, such as the nature of the place and the season. The chapter concludes by making some general observations about visual diagnosis, diagnosis through feeling, and questioning. Chapter twenty-five gives a series of procedures to be followed if the doctor fails to understand the nature of the disease; the approach taken is one of beguiling the patient rather than confessing one's shortcomings. Chapter twenty-six gives a series of criteria to enable a doctor to decide if treatment should be undertaken or not.

Though the students had not studied the second volume, they had acquired a very good working knowledge of diagnosis from their studies of the third and fourth volumes combined with their experience of clinical practice. The third volume comprises of ninety-two chapters on Tibetan nosology. Each chapter gives detailed information about a class of disease, relating to causal factors, symptoms and treatment. As the students had arrived to chapter seventy-three of this volume they had acquired a wide-ranging knowledge of symptoms.

After finishing the summary of medical theory and practice given in the first volume, the students move directly on to the first and second chapters of the fourth volume on pulse and urine diagnosis. As these chapters are quite long, in what follows I will present a summary of their contents,<sup>28</sup> with the twin aim of outlining the basic principles of diagnostic knowledge that the students bring to clinical practice, and presenting the way the students learn this knowledge in the classroom.

## **5.8 Learning the Theory of Pulse Diagnosis**

Amchi Gege began by saying that the chapter on pulse is divided into thirteen topics. In the first lesson he gave the titles of these topics and a brief explanation. He then went on to discuss each topic in detail drawing where necessary on his favourite commentaries: the *Khyungtrek Menpé* and the *Blue Beryl*. The first topic gives advice on how the patient should behave prior to the diagnosis. Amchi Gege said that during this period the patient should avoid any kind of behaviour or food, which might

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<sup>28</sup> See note three for translation of these chapters.

agitate the humours and thereby confuse the diagnosis. He gave the examples of rich food such as meat and alcoholic drinks, and behaviour such as sexual intercourse, and hard physical or mental activity. This is the ideal, but in the clinic in Dhorpatan it seems that generally people did not modify their behaviour very much prior to the diagnosis.

The second topic concerns the ideal time to take the pulse. Amchi Gege explained that this should be done at sunrise. We saw earlier that this is the time when the wind humour comes into ascendancy. Amchi Gege said that if the pulse is to be felt in a state that most closely reflects the condition of the body, it should be done before the wind humour rises. Again this is an ideal that to my knowledge was never carried out in Dhorpatan. Sometimes patients arrived to the clinic very early in the morning, but Amchi Gege rarely saw them before 8 a.m.

The third topic focuses on the location where the pulse should be felt. The pulse is felt with the index finger (*tshön*), the middle finger (*ken*), and the ring finger (*chag*).<sup>29</sup> The index finger is positioned on the radial artery, at the distance of one thumb phalanx from the first crease on the wrist just below the thumb. The other fingers are placed next to it gently touching one another. The fourth topic describes the pressure that should be applied by each finger. The index finger should press gently at the level of the skin. A little more pressure should be applied with the middle finger allowing it to penetrate to the level of the flesh. The ring finger should press the hardest so that it penetrates to the level of the bone.

The fifth topic describes the method of taking the pulse. Each finger takes two pulses: the pulse on the upper section of the finger relates to one of the solid organs; the pulse on the lower section of the finger relates to one of the hollow organs. This can be seen in Table 5.5. The information given in the table is relevant for a male patient; for a female patient the heart and lung pulses are swapped to the same location of the opposite hand. Amchi Gege explained that before taking the pulse, one should ensure that neither the patient nor the doctor is unduly hot or cold. If the patient is male, the doctor begins by examining the pulse on his right wrist, if the patient is female the doctor begins with her left wrist pulses. As the heart and lung pulses are located on the opposite arms of a man and woman, this means that in both

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<sup>29</sup> These terms are not Tibetan but Chinese (Meyer 1990:221); Amchi Gege was aware of this, but he still insisted that Tibetan pulse diagnosis did not derive from Chinese medicine.

cases the doctor begins with the heart pulse. At this point, Amchi Gege said that these first five topics are known as the preliminary topics (*ngöndro*), as they deal with the method of taking the pulse; the following eight topics discuss the qualities of the pulse.

<b>Finger Position</b>	<b>Six hollow organs</b>	<b>Five solid organs</b>
<b>Left Hand</b>		
Top of tip of first finger	Lungs	
Bottom of tip of first finger		Colon
Top of tip of second finger	Liver	
Bottom of tip of second finger		Gall Bladder
Top of tip of third finger	Right Kidney	
Bottom of tip of third finger		Bladder
<b>Right Hand</b>		
Top of tip of first finger	Heart	
Bottom of tip of first finger		Intestine
Top of tip of second finger	Spleen	
Bottom of tip of second finger		Stomach
Top of tip of third finger	Left Kidney	
Bottom of tip of third finger		Seminal Vessicle/Ovaries

**Table 5.5 The Twelve Pulses in Tibetan Medicine**

The sixth topic concerns the three types of constitutional pulse: the male pulse, the female pulse, and the Bodhisattva pulse. These are the three classifications of pulse that relate to the type of constitution a person may have: the male pulse is thick (*bom*) and rough (*ragpa*); the female pulse is thin (*tra*) and fast (*nyurpa*); and the bodhisattva pulse is long (*guling*), smooth (*jam*), and supple (*nyen*). Amchi Gege explained that it is necessary to understand the constitutional pulse of a person, in order that it is not mistaken for a pathological pulse. He said that the male, female,

and bodhisattva pulses are very similar respectively to the wind, bile, and phlegm pulses, and these constitutional pulses should not be misunderstood as a pathological condition of the humour.

Season	Month	12 astrological animals	Governing element	Natural symbol	Internal Organs	Constellations	Pulse
Spring	1 (Feb) 36 days	tiger	wood	New leaves appear on trees	liver and gallbladder	<i>tapa</i>	Like the call of the lark ( <i>chokha</i> ) thin ( <i>tra</i> ) and taut ( <i>drim</i> )
	2 (Mar) 36 days	rabbit				<i>wo</i>	
	3 (Apr) 18 days	dragon	earth		spleen and stomach	<i>nag pa</i>	Like the call of the sparrow short ( <i>thung</i> ) and smooth ( <i>jam</i> )
Summer	4 (May) 36 days	snake	fire	Leaves grow and flourish	heart and intestines	<i>saga</i>	Like the call of the cuckoo ( <i>khu chug</i> ) thick ( <i>bom</i> ) and long ( <i>ring</i> )
	5 (Jun) 36 days	horse	fire			<i>nön</i>	
	6 (Jul) 18 days	sheep	earth		spleen and stomach	<i>chu tö</i>	Like the call of the sparrow short ( <i>thung</i> ) and smooth ( <i>jam</i> )
Autumn	7 (Aug) 36 days	monkey	iron	Wheat harvest, fruit ripens	colon and lungs	<i>dro zhun</i>	Like the sound of a locust's wings ( <i>khyung trug</i> ) short ( <i>thung</i> ) and rough ( <i>rtsub</i> )
	8 (Sept) 36 days	bird	iron			<i>trum tö</i>	
	9 (Oct) 18 days	dog	earth		spleen and stomach	<i>chugpa</i>	Like the call of the sparrow short ( <i>thung</i> ) and smooth ( <i>'jam</i> )
Winter	10 (Nov) 36 days	pig	water	The black deer grows its horns	Kidney and bladder	<i>mindrug</i>	Like the call of the snipe ( <i>thingril</i> ) smooth ( <i>'jam</i> ) and slow ( <i>dal</i> )
	11 (Dec) 36 days	mouse	water			<i>go</i>	
	12 (Jan) 18 days	ox	earth		spleen and stomach	<i>gyal</i>	Like the call of the sparrow ( <i>thilpa</i> ) short ( <i>thung</i> ) and smooth ( <i>'jam</i> )

Table 5.6 The Influence of the Seasons and the Five Elements on the Pulse

The seventh topic presents the influence of the seasons and the five elements on the pulse. According to the Tibetan system each season consists of three months: two months of thirty six days, and a transitional month of eighteen days. Each of these months corresponds to an astrological sign, one of the five elements,<sup>30</sup> one solid and internal organ, an event in the environment, a constellation, and a certain type of pulse; this information can be seen in Table 5.6. As each element is associated with one of the hollow and solid organs, at the time of the year when that element predominates, those organs have an influence on the constitutional pulse. Thus if the doctor is to make an accurate pulse diagnosis, the possible influence of the time of the year must be taken into consideration.

The eighth topic explains the seven extraordinary pulses, these are the pulses of: the household, the traveller, the enemy, wealth, harmful spirits, fire-water inversion, and the pregnancy pulse. Pulse reading here is more an act of divination than medical diagnosis. By discerning subtle qualities in the pulse, the doctor is able to give information about a person's household, enemies, or the sex of the child of a pregnant woman, and so on. Amchi Gege said that these pulses are very difficult to understand and require what is now a rare level of expertise.

The ninth topic relates to information that is conveyed about the state of the body by the frequency of the pulse. Amchi Gege began by explaining that a healthy pulse should have five beats for each breath cycle of the doctor: two during inhalation, two during exhalation, and one in-between. A pulse that has six beats or above indicates a fever condition; a pulse that has below five beats indicates a cold sickness.

The tenth topic describes the pulses of various classes of disorders. It begins by giving twelve general pulses, six for hot disorders and six for cold. The six hot pulses are: strong (*dragpa*) prominent (*gyépa*) fast (*gyogpa*) twisting (*drihwa*), hard (*thrangpa*), and taut (*drimpa*). The six cold pulses are: weak (*zhen*), deep (*ching*), impaired (*gü*), slow (*bul*), loose (*lhöd*), and empty (*tong*). The text then goes on to describe the specific pulses of forty-six different kinds of disorders.

The eleventh topic discusses pulses that indicate imminent death. The topic is divided into three subjects: changes in the pulse, missing pulses, and stoppages. The text lists several types of change in the pulse that signify death. For instance, the

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<sup>30</sup> The five elements and the twelve astrological signs here correspond to those of Chinese astrology.

wind death pulse changes like ‘wind blowing a flag’, and the phlegm death pulse changes from quick to slow like ‘water dripping off the roof of an old house’. The text then gives a list of missing pulses, which indicate imminent death; each of these should also be accompanied by other symptoms. For example death is signified if the heart and intestine pulse is missing and the tongue is dark, and the eyes are aslant. On the subject of stoppages, Amchi Gege explained that death is indicated only if there is a regular pattern to the stoppage, such as a repeating pattern of ten beats and a pause; this is known as the ‘death stoppage’ (*chi dö*).

The twelfth topic gives details about the characteristics of the pulse indicative of disorders caused by harmful spirits. The text lists a range of different disorders which have this cause, but in each case the pulse is the same: the main indicator is the irregularity of the pulse; there may also be breaks in the frequency, but unlike the death pulse they occur in an irregular manner; it is taut (*ten*), and in some cases feels like two beats are occurring at the same time (*chamdrel*).

The thirteenth topic concerns the pulse of the life force (*la*). Amchi Gege explained that the *la* has three ‘pathways’ in the body. He said it circulates round the body in monthly cycles; this is the first life channel, which is discussed above. The second ‘pathway’ is the twelve pulses that are taken on the radial artery. The third ‘pathway’, which is the focus of this topic is life force pulse taken on the ulnar artery; the text relates the qualities of this pulse to the condition of the patient’s *la*.

## 5.9 Learning the Theory of Urine Diagnosis

The first lesson on urine diagnosis began in the same way as the first lesson on pulse diagnosis. Amchi Gege said that the chapter is divided into eight topics; he gave the title of each topic and a short summary. During the lessons on urine diagnosis, again he made use of the two commentaries: the *Khyungtrek Menpé* and the *Blue Beryl*. He began the lessons by saying that urine is like a mirror that reflects the condition of the body.

The first topic concerns the preparations that should be undertaken prior to the diagnosis. On the night before the diagnosis, the patient should avoid foods that affect the colour of the urine such as: tea, buttermilk, or alcohol. The patient should also avoid sexual intercourse, and any excessive physical or mental activity. The

urine, which is to be diagnosed, should be passed at the latter part of the night (*nam mé*). Amchi Gege explained that this means in the early morning, in order that the urine is not contaminated by food from the previous evening. The second topic gives the time when the examination should be done, which is just after dawn.

The third topic describes the qualities of the container in which the urine should be examined. Amchi Gege personally uses a white porcelain cup, but he said that a tin (*lcags dkar*) container would also be suitable. The main issue is that the container must show the colour of the urine clearly and reliably; therefore a coloured container should not be used.

The fourth topic concerns how the urine is formed in the body. After the food is digested in the stomach, the residue passes to the intestine and there it is separated into the stool, which passes to the colon, and the urine, which collects in the bladder. The nutrient of the digested food passes from the stomach to the liver where, as we have seen in the above section on physiology, it is transformed into blood. The residue that is produced here passes to the gall bladder where it is broken down into a nutrient, serum (*chu ser*), and a waste, which passes to the bladder and appears as the sediment (*ku ya*) in the urine.

The fifth topic discusses the qualities of the urine of a healthy person. Eight characteristics are considered. The text says that the colour should be that of the melted butter of a female yak (*dri*). Amchi Gege described this as pale yellow. The smell should be like the smell of urine found in places where goats or sheep stay; it should not be strong or weak, but moderate. The steam should also be moderate in both its quantity and the time it is visible. The bubbles should be moderate in size and quantity. The sediment should also be of a moderate quantity, and it should be evenly distributed throughout the urine. The surface film (*drima*) on the urine should be neither thick nor thin. When the steam dissipates, the urine should change colour (*dog*); this change should progress from the outer part of the urine to the centre. The colour of the urine after the change should be a pale yellow. Amchi Gege added here that one must take into consideration the age of the patient, the season, and the environment, all which affect the colour of the urine.

The sixth topic details the qualities of the urine of a sick person. Nine qualities of the urine should be observed over three periods of time. When the urine is hot and

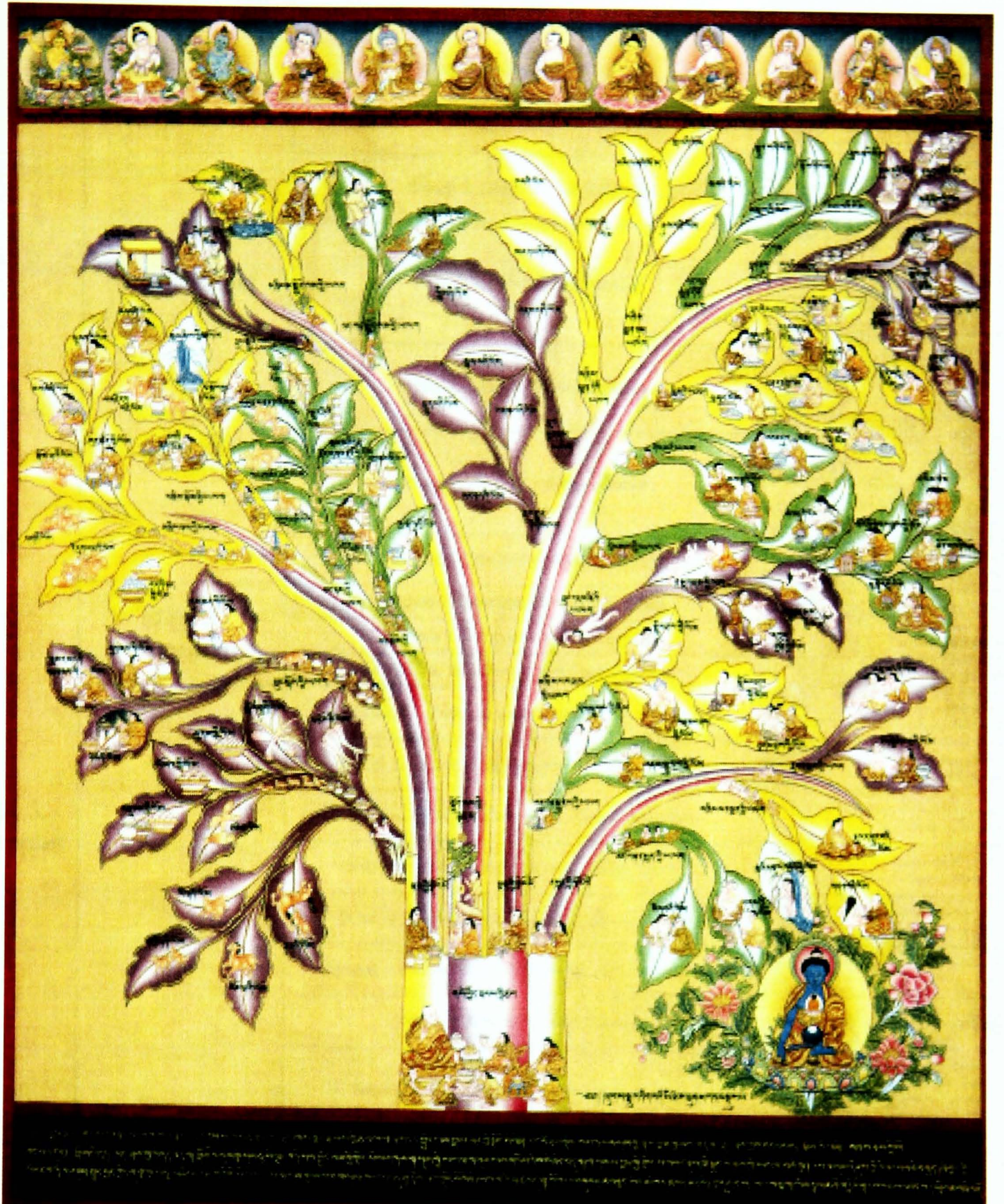


Plate 16 - Root of Treatment

Root	4 Stems	27 Branches	98 Leaves
<b>Root 3. Therapies</b>	<b>Stem 1. Diet</b>	Branch 1. Foods for wind diseases	1. horse flesh 2. donkey 3. marmot 4. one year old dried meat 5. human flesh 6. grain oil 7. one year old butter 8. raw cane sugar 9. garlic 10. onion
		Branch 2. Drinks for wind diseases	1. milk 2. beer made from angelica root 3. molasses 4. bone wine
		Branch 3. Foods for bile disease	1. fresh butter 2. game meat 3. goat's meat 4. meat of tole (yak, dzo cross) 5. tsampa porridge 6. Boiled white dandelion leaves 7. Boiled dandelion
		Branch 4. Drinks for bile diseases	1. cow or goat yoghurt 2. cow or goat buttermilk 3. hot water 4. cold water 5. water boiled repeatedly
		Branch 5. Foods for phlegm diseases	1. mutton 2. wild yak meat 3. wild beast's meat 4. fish 5. honey 6. warm doughball made from old grain
		Branch 6. Drinks for phlegm diseases	1. female yak yoghurt and butter milk 2. strong beer 3. boiled water
	<b>Stem 2. Behaviour</b>	Branch 1. Behaviour for wind disorders	1. warm place 2. company of good friends
		Branch 2. Behaviour for bile disorders	1. cool place 2. peaceful activity
		Branch 3. Behaviour for phlegm disorders	1. warm place 2. strong exercise
	<b>Stem 3. Medicines</b>	Branch 1. Tastes of medicines for lung disorder	1. sweet 2. sour 3. salty
		Branch 2. Potencies of medicines for lung disorders	1. oily/nch 2. heavy 3. smooth
		Branch 3. Tastes of medicines for bile disorders	1. sweet 2. bitter 3. astringent
		Branch 4. Potencies of medicines for bile disorders	1. cool 2. thin 3. slow acting
		Branch 5. Tastes of medicines for phlegm disorders	1. hot 2. sour 3. astringent
		Branch 6. Potencies of medicines for phlegm disorders	1. fast-acting 2. rough 3. light
		Branch 7. Broths for wind disorders	1. Bone broth 2. broth of meat, butter, molasses or chang 3. broth made from sheep's head
		Branch 8. Medicinal butters for wind disorders	1. nutmeg medicinal butter 2. garlic medicinal butter 3. 3 fruits medicinal butter 4. 5 root medicinal butter 5. black aconite medicinal butter
		Branch 9. Medicinal decoctions for bile disorders	1. Inula racemosa decoction 2. Tinospora sinensis decoction 3. swertia decoction 4. 3 fruits decoction
		Branch 10. Medicinal powders for bile disorders	1. camphor 2. white sandalwood 3. saffron 4. bamboo pith
		Branch 11. Medicinal pills for phlegm disorders	1. Black aconite 2. various salts
		Branch 12. Medicinal powders for phlegm disorders	1. pomegranate 2. pale pink rhododendron 3. very hot compound 4. salt calcinates 5. calcite
		Branch 13. Enemas: cleansing treatment for wind disorders	1. gentle 2. cleansing 3. forceful
		Branch 14. Purgatives: cleansing treatment for bile disorders	1. general 2. special 3. forceful 4. gentle
		Branch 15. Emetics: cleansing treatment for phlegm disorders	1. forceful 2. gentle
	<b>Stem 4. External treatment</b>	Branch 1. External treatment for wind disorders	1. massage 2. hot application
		Branch 2. External treatment for bile disorders	1. inducing sweat 2. blood letting 3. shower
		Branch 3. External treatment for phlegm disorders	1. hot/cold applications 2. moxibustion

**Table 5.7 Root of Treatment**

fresh the doctor should note its colour, steam, smell, and bubbles. When it is lukewarm, the sediment and the surface film should be observed. Finally, when the urine has cooled down, the doctor should note the time of the change, the manner in which it occurs, and the appearance of the urine after the change. The text then goes on at some length describing the various possible attributes of these nine qualities and relates them to specific pathological conditions. For example: if the colour of the urine is bluish, this indicates a disturbance of the wind humour; if it is yellow this indicates bile; and white indicates a phlegm disorder; if there is a large amount of steam this denotes a fever condition; if the bubbles are big and bluish this indicates a wind disorder. Usually the urine is stirred with a stick to create the bubbles. If this is done and the bubbles created are small and disappear very quickly this indicates a bile disorder. The seventh topic describes the qualities of the urine, which signify the imminent death of the patient. The eighth topic describes the qualities of the urine, which signify the action of harmful spirits; an outline of the contents of this section can be found in chapter eight.

## **5.10 Therapeutic Methods**

The students are first introduced to therapeutic methods by Amchi Gege's teaching on the third root of the tree metaphor given in the first treatise. The third root has four stems which cover the range of therapeutic methods used in Tibetan medicine: diet, behaviour, medicines, and external treatments (see Plate 16 and Table 5.7). The first stem has six branches, the leaves of which give foods and drink that are used for disorders of the three humours. The second stem has three branches, which give the recommended behaviour for disorders of three humours. The third stem has fifteen branches, which describe the various characteristics of medicines. Finally, the fourth stem has three branches, which give different types of external treatment that are used for disorders of the three humours. The root of treatment with its ninety-eight leaves provides the students with a detailed foundation in therapeutic techniques, which is expanded on in chapters thirteen to twenty-one of the second treatise and in the whole of the fourth treatise.

Food, like medicine, has certain properties that can affect the functioning of the humours. In the root treatise numerous foods and drinks are given, which are

beneficial for disorders of each of the humours. The logical corollary of this is that foods that are beneficial for one humour are likely to have the contrary affect on another humour. The second treatise gives detailed information about the types of food and drink that Tibetans commonly eat. Examples from five classes of food are discussed: grains, meat, oil, vegetable, and cooked foods. Information is also given about foods that should be avoided, about how to recognise food that contains poison, and about the correct quantity of food that should be eaten.

Behaviour can also affect the humours in a positive or negative way. As both wind and phlegm disorders are by nature cold, the root treatise recommends that the patient should stay in a warm place. For patients with bile disorders, due to its hot nature, they should stay in a cool place. The root treatise also gives a certain type of activity that is suitable for disorders of each humour; for wind, the patient should stay in pleasant company, calm activity is recommended for bile, and for phlegm, physical exercise is beneficial. The second treatise discusses behaviour according to three categories: routine behaviour, seasonal behaviour, and occasional behaviour. The first category gives advice about general behaviour, such as exercise, sleep, sex, and moral and religious attitudes. The second category deals with how behaviour should be modified at different times of the year to suit changing seasonal influences. Finally, the third category explains that the natural processes and needs of the body such as, vomiting, yawning, sneezing, sleeping, hunger, urinating, and so on, should not be impeded.

The reason why a substance has medicinal properties according to Tibetan medical theory is summarised in the first treatise by the first six branches of the stem of medicines. Each branch has three leaves, which give the tastes and potencies of medicines that cure each of the three humours. For each of these tastes and potencies the text gives a substance as an exemplar of these properties. When Amchi Gege teaches this subject, he has these substances ready at hand for the student to observe and taste.

The theory that underlies this is explained in section six of the second treatise. As I have discussed earlier, according to Tibetan medical theory everything that exists is made up of various combinations of the five elements: earth, water, fire, air and space. The healing properties of a substance derive from its constituent elemental

nature, and this is reflected in its taste. The text identifies six tastes, which are produced by six pairs of elements; this can be seen in Table 5.8.

<b>Taste</b>	<b>Elements</b>
Sweet	Earth and Water
Sour	Fire and Earth
Salty	Water and Fire
Bitter	Water and Wind
Hot	Fire and Wind
Astringent	Earth and Wind

**Table 5.8 The Elemental Nature of the Six Tastes**

Medicines with a sweet, sour, salty, and hot taste cure wind disorders; bitter, sweet and astringent tastes cure bile disorders; and hot, sour and salty tastes cure phlegm disorders.

During the process of digestion, the tastes of the medicine are transformed producing three so-called ‘post-digestive tastes’ (*zhujé*): sweet and salty medicines produce a sweet post-digestive taste; sour remains sour; and bitter, hot and astringent medicines, in the post-digestive stage, become bitter. Each of the post-digestive tastes cures disorders of two of the humours: sweet cures wind and bile; sour cures phlegm and wind; and bitter cures phlegm and bile.

Chapter twenty of the second treatise explains that the properties of a medicine derive from the element, which predominates in its makeup. If the element is earth, the medicine will have heavy (*chiwa*), firm (*tenpa*), blunt (*tül*), smooth (*jampa*), oily (*num*) and dry (*kampa*) properties; it is used to cure wind disorders. If the element is water, the medicine will have liquid (*lawa*), cool (*silwa*), heavy, blunt, oily and pliable (*nyen*) properties; it is used to cure bile disorders. If the element is fire, the medicine will have hot (*tshawa*), sharp (*nowa*), dry, coarse (*tsub pa*), light (*yang ba*), oily and mobile (*yowa*) properties; it is used to cure phlegm disorders. If the element is wind, the medicine will have, light, mobile, cold (*drangwa*), coarse, and dry properties; it is used to cure phlegm and bile disorders.

Medicines are effective because they have the opposite properties to those of the humours; these qualities are referred to in the text as the eight potencies (*nüpa*). Medicines with heavy and oily potencies cure wind disorders; cold and blunt potencies cure bile disorders, and light, coarse, hot and sharp potencies cure phlegm.

In addition to this: light, cold and cool potencies increase wind; hot, sharp and oily potencies increase bile; and heavy, oily, cool, and blunt potencies increase phlegm.

After making these general comments on the potencies of medicine the chapter then goes on to give details about the qualities of a large number of specific medicines according to eight classifications: precious medicines (*rinpoché yi men*), stone medicines (*do yi men*), earth medicines (*sa yi men*), tree medicines (*shing men*), mucilaginous medicines (*tsi men*), plant medicines (*thang men*) herbal medicines (*ngo men*) and animal medicines (*sog chag men*).

As we saw earlier when conditions are present which adversely affect the humours, a process ensues whereby the humour first accumulates in its own location and then spills over into the locations of the other humours. If the disorder is at the first phase, medicines are used, which pacify the humour in its own location. If the condition has reached the second phase, before the humour can be pacified in its own location, medicine is first given which gathers the humour from the pathways it has wrongly infiltrated. In certain cases, the pathological condition may have to be ejected from the body. The whole range of Tibetan medicines thus falls into two categories: pacifying, and cleansing. These form respectively the second and third sections of the fourth treatise. In their studies in the classroom the students had completed both of these sections.

External treatments (*ché*) are first presented by the fourth stem of the root of treatment. It has three branches: the first branch gives massage and hot applications as treatments for wind disorders; the second branch gives inducing sweat, and blood letting for bile disorders; and the third branch gives hot and cold applications, and moxibustion<sup>31</sup> (*mé tsa dregpa*) for phlegm disorders.

Hot and cold applications, involve pressing on certain areas of the body, with objects such as a warm or cold stone, or fennel seeds wrapped in a cloth and dipped in hot oil. Bloodletting (*tar*) involves making a small incision in a vein and allowing pathological blood to leave the body. The incision is made on one of seventy-nine locations, depending on the nature of the disorder. For several days before it is done, the patient is given a decoction, which serves to separate the pathological blood (*né tra*) from the healthy blood. Moxibustion involves the burning of small cones of the

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<sup>31</sup> Moxibustion is practised in Chinese medicine, but the name comes from Japan (Meyer 1988:66 n.1).

herb gerbera (*trawa*) on one of seventy-one locations on the body that are related to various disorders. Another form of heat treatment used in Tibetan medicine is cauterisation with a metal instrument. Amchi Gege explained to me that there are numerous different types of medical baths classified according to their mineral content; such natural hot pools are commonly found in the mountains in Tibet and throughout the Himalayan region.

If all other forms of treatments have been ineffective, for some disorders the text recommends surgery, indeed the whole of chapter twenty-two of the second treatise deals with types of surgical instruments. However, nowadays, with the exception of minor problems, surgery is not practised.

From the foregoing discussion it can be seen that there is a logical pattern to the way the students learn medicine in the classroom. This pattern partly relates to the way medical knowledge is presented in the text, but also partly relates to the way that Amchi Gege has chosen to teach it. The lessons begin with the first treatise which through the tree metaphor lays the structural foundation for the entire medical teaching, thus by the end of the first six months the students have a basic understanding of all aspects of Tibetan medical theory and practice. All subsequent teachings can be related to the basic pattern that is laid out in the first treatise.

After completing this, the students immediately move on to the pulse, urine, medicinal decoctions, powders, and pills chapters of the fourth volume. Amchi Gege approaches the text in this way because the students are involved in the practice of medicine from a very early stage in their studies: either in a clinical context as Amchi Gege's assistants, or in a pharmaceutical context, collecting medicinal plants, preparing raw ingredients, or compounding medicines according to his instructions.

After studying the fifth chapter of the fourth treatise on medicinal pills, they then begin the long study of the third treatise on Tibetan nosology, which again accords with the early emphasis on medical practice in the school. The second volume, which as we have seen, concentrates on medical theory, is the final volume to be studied in the school at Dhorpatan. By the time the students reach this volume, they will already be familiar with much of its contents, as an outcome of Amchi Gege's

teachings on the causes, diagnosis, and treatments of the large number of specific diseases discussed in the third treatise.

To a certain extent, it is not necessary to have studied the theoretical material contained in the second volume in order to practise medicine. In fact, Nyima told me that many practising amchis in Mustang had only studied the first and the fourth treatises; a circumstance which also applies to Ladakh. The students study a large amount of material in the third treatise, which they will almost certainly never encounter in clinical practice, and as such it is likely that this will never reach the stage of performative memory.

Learning medicine in the school in Dhorpatan involves three simultaneous processes: the students memorise the text; receive teaching on what they have memorised; and engage in medical practice. As they progress through the various stages of increasing competency from novice to expertise, the structural framework that they learn during their studies of the first treatise is built upon with layers and layers of new explanations and experiences in the clinic and the pharmacy. All of the students in Dhorpatan had been studying medicine for more than four years, some for as many as eight years. As such they all knew a great deal about Tibetan medical theory and practice, at least at the level of propositional knowledge. In the next chapter I will present how the students learn through medical practice, this is the arena where the propositional knowledge they acquire in the classroom is appropriated and made a part of their sphere of practical competency.

## Chapter 6 - Learning Medical Practice

We have seen from the Dreyfus model of learning that expertise develops as knowledge, which was initially presented as a series of decontextualised and impersonal propositions, is increasingly situated in practice. In the previous chapter we saw how the students learn the theory, which underlies medical practice; in this chapter I will give examples of how this knowledge is brought to medical practice. We have also seen that the transformative process whereby the students pass from novice to higher levels of knowledge and expertise, involves various forms of memory. The students begin by memorising the text. I have explained that this is not simply a passive form of rote learning; it provides a structural framework, which facilitates understanding and provides a matrix whereby associated elements of the medical teachings can be seen to form part of a coherent whole. The students had studied a large part of the medical text in the classroom with Amchi Gege and from the many conversations I had with them they displayed a very good knowledge of medical theory. However, much of this understanding remained at the level of a mode of knowing rather than a mode of being. In what follows I will present examples of how practical competency develops in clinical interaction; how the propositional knowledge acquired in the classroom is appropriated and thereby transformed into the performative memory of medical practice. This chapter forms a unit with chapter eight, which also focuses on how the students learn medicine by engaging in medical practice, but the main focus in chapter eight will be on the use of ritual in healing. Chapter seven prepares the way for this by presenting information on the relevance of Tibetan religious notions to Tibetan medicine.

The central mechanism in the development of performative memory in the school is what Lave refers to as 'legitimate peripheral participation'. From very early on in their medical studies, the students are gradually inducted into the practices of medicine by carrying out various tasks for Amchi Gege, either under his supervision or according to his instructions. The principal method through which the students develop competency in clinical practice is by acting as Amchi Gege's assistants. I will begin by looking at how the students learn the practice of pharmacology: collecting and identifying medicinal plants; preparing the raw material; and compounding medicines. I will then move on to summarise the chapter of the third

volume, which describes the classification of disease referred to as *tren*. Finally I will give examples of how the students learn medicine through clinical interaction.

## 6.1 Learning Pharmacology

As we have seen in the last chapter, the students first receive an introduction to the properties of medicinal substances during their studies of the first volume. Though they had not studied the sections of the second volume, which give extensive details on the subject, over the course of their studies they had acquired most of this information from Amchi Gege's commentaries to other sections of the medical text. The students are engaged in medical practice in both the clinic and in the pharmacy almost from the outset of coming to the school; as such they are involved in medical practice some considerable time before they fully understand the theory, which underlies that practice. Because of the practical orientation of the course in the school in Dhorpatan, after studying the first volume, the students move on to study the chapters of the fourth volume on pulse and urine diagnosis, medicinal decoctions, powders, and pills. As the students often assist Amchi Gege to make medicinal compounds, it is important that they have a basic grasp of practical pharmacological knowledge as soon as possible.

Dhorpatan is an ideal place to learn about the Tibetan pharmacopoeia as many of the medicinal plants that are commonly used can be found in and around the valley (see Plate 4). About 150 medicinal plants grow in the immediate vicinity, and many more can be found within a few days' walk. There are many Tibetan pharmacopoeias; the most famous is Dilmar Geshe Tenzin Phuntsok's *The Pure Crystal Orb and Crystal Rosary*,<sup>1</sup> composed in 1717, which lists 2294 drugs. Although Tibetan medical texts list thousands of drugs, in practice only a few hundred are regularly used. Amchi Gege used about 200 drugs in his range of medicinal compounds. Most of the ingredients used are plant products, but animal and mineral products are also commonly used. As I mentioned in chapter one, some important ingredients cannot be found in Dhorpatan, and these must be bought in Kathmandu. As it is impossible to gauge how many patients will come to the clinic

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<sup>1</sup> *Drimé Shelgong Sheltreng*. The Crystal Orb is the main text and the Crystal Rosary is the author's own commentary.

in one year, or the kinds of diseases that will occur, occasionally stocks run out; in which case one or two students are sent to Kathmandu to buy more.

Most of the plant collecting takes place in the late summer and the autumn. Amchi Gege divides the students up into three or four groups, gives them a list of plants that are required, and sends them off in different directions. The last time I went out with the students, just before we set off, he reeled off a list of about twenty plants, and finally he said 'bring wild pig excrement, and make sure you don't mistake it for dog', which is apparently what they had done before. Usually they go early in the morning and come back in the evening; occasionally a few of the students are sent collecting in distant areas, which can take several days.

Amchi Gege rarely goes looking for plants with the students; he had already imparted enough knowledge to the students for them to manage well without him. On the few occasions when he did go, there seemed hardly a plant that he did not recognise. Whenever he points out a medicinal plant, he always explains about its characteristics: which part is used, the time of the flowers and the fruit, whether it is poisonous, what taste it has, how many types there are, and so on. Although it is mostly plant products that are gathered around Dhorpatan, a few mineral and animal products can also be found, and he is quick to point these out whenever the occasion arises.

By the time I arrived in Dhorpatan, the students had already acquired an impressive knowledge of local medicinal plants. They could all recognise at least 80-100 plants, some students many more. As Nyima had spent many years studying with his father in Mustang, his knowledge of plants far surpassed the other students. He was always keen to expand his knowledge. Every time I went out looking for plants with him, he would return with several plants that he did not recognise, and ask Amchi Gege about them. As we saw in the previous chapter, all medical substances display one or more of eight different potencies. The main indicator of the potency of a medical substance is its taste, which can be one or more of six different types. Amchi Gege, when introducing the students to a new medical substance, usually asks them to taste it. Frequently when I was out looking for medicines with Nyima, his first response, when he found a plant that he did not recognise, was to taste it.

In the medical text, information about medicinal compounds is found in chapters three to nineteen of the fourth volume, and throughout the third volume, which is a compendium of Tibetan disease classifications, covering pathogenesis, diagnosis and therapeutics. Usually the main text says nothing about the quantities of the different ingredients, or how specific ingredients should be prepared, or which part of a plant should be used. It is the responsibility of the teacher to provide the extra information, which will bring texture and detail to the basic fabric of the text. This information is found in commentaries, or remains strictly part of the oral transmission.

When he is teaching about medicinal compounds, Amchi Gege expands on the basic information found in the main text, giving detailed information on the various ingredients, and how they should be prepared and compounded. During the lessons, whenever a medical substance is mentioned for the first time, Amchi Gege either shows the students the real thing, if he has it, or if not, a picture of it. The pharmacopoeia he most often uses in this context is one recently published in Lhasa entitled 'The Book Born from the Pure Crystal Mirror'.<sup>2</sup> This book includes 861 coloured photographs of medicinal substances.

Hardly any information is given about medicinal plants in the main text; almost every time a plant is mentioned, some further explanation is needed. A plant referred to by one name in the text can have several different types, and the specific type which is referred to in the context described, is not specified. For example a very commonly used ingredient in medicinal compounds is gentian (*tigta*); Amchi Gege told me that it has twelve types of which three are commonly used. Saffron (*gurgum*) has three types: only the petals are used of two of them, and only the leaves of the third. Usually nothing is mentioned about the part of the plant that should be used; Amchi Gege supplies this knowledge. Whenever I saw the plant *kyerpa* written in the text, I knew from what Amchi Gege had taught me that only the thin yellow skin that lies under the bark is used. Moreover, many medicinal ingredients that are listed in the text are poisonous, and before they are used they must undergo a process of detoxification; this is also not specified. What is written in the text would be impossible to put into practice without receiving the essential information of the oral transmission.

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<sup>2</sup> *Khyung pé drimé shel gyi melong* (dka' b'i rdo rjes brtsams 1995).

There are ten basic types of Tibetan medicinal compounds: decoctions, powders, pills, pastes, butters, ashes, concentrates, beers, herbal preparations and precious medicines. In the course of their studies, the students gain experience in making all of these forms, with the exception of precious medicines; this is because the ingredients, which include, gold, silver and precious stones, are too expensive to be purchased by the school.

When he is teaching about medicinal compounds in the classroom, Amchi Gege does not normally specify the exact quantity of each ingredient that is used; the students learn this when they make the compound. Usually there will be one main drug, which is the principle ingredient, combined with a variety of other drugs. The names of Tibetan medicinal compounds reflect this. For example gentian eight (*tigta gyepa*) has gentian as the principle drug along with seven auxiliary drugs. Some of the auxiliary ingredients support the action of the main drug; others balance out any iatrogenic effects. The main side effect is disturbances caused to the non pathological humours; we have seen from the branch of humoral reactions, the eighth branch of the second stem of the first tree, that a medicine, which lowers or raises a humour, is likely to have a counter effect on one or both of the other humours.

During my lessons, in response to my request, Amchi Gege always specified the type of plant, and the part that should be used. He also always gave the quantities of each of the ingredients in grams. Whenever he was uncertain of the exact proportions, he would refer to various commentaries, where the amount is given in the traditional Tibetan units of weight measurement, the *karma* and the *zho*. Amchi Gege explained that there are ten *karma* in a *zho*, and by his reckoning a *zho* is more or less equivalent to a gram.

The students are given plenty of opportunities to put what they learn into practice. One technique that Amchi Gege used was when the stocks of a medicinal compound ran low he would ask a few of the students to collect together all the ingredients for the compound in the correct proportions by consulting various medical texts, he would then verify what they had done before the ingredients were ground into a powder. The only potential difficulty here for the students was getting the right proportions; they could easily recognise many of the ingredients and they knew where to find them in the storeroom (see Plate 11).

The students also had to prepare specific ingredients before they could be used in the medicinal compounds. The method most often used was subjecting it to intense heat. For example, garlic is put inside a sealed metal container and heated until it becomes black; calcite is heated for a long time in fire until it is reduced to ash; the stool of wild pigs is also transformed through a heating process before it is used. This process is undertaken to either eliminate the toxic properties of the substance or to render it in a form that is more suited to the properties of the compound. For the students many of these activities have now become routine.

In the previous chapter we saw how the students learn medicine in the classroom. Before receiving teachings from Amchi Gege, the students should have first memorised the relevant section of the medical text. Even if they reflect upon what is written in the text, it is unlikely that they will understand very much. As I have previously discussed, to facilitate memorisation and the oral transmission of the medical knowledge, syntax and clarity of meaning have been sacrificed in favour of preserving the verse form of the text. Phrases are often elided or rendered in a terse style, which make it almost impossible to understand the exact meaning that is being conveyed. The text does not provide detailed explanations of medical theory and practice, it provides the basic elements that must be illuminated by the explanations of the teacher; the text serves as a support for the oral transmission of the medical lineage.

From what I have been saying it should be clear that learning medicine in the school involves three phases: the memorisation of the medical text, Amchi Gege's explanations based on his own experience and his familiarity with various commentaries, and engaging in medical practice. To understand how the students develop competency as medical practitioners, we need to focus on the manner by which these three levels of learning converge to bring about the transformation of propositional knowledge into the performative knowledge of medical practice. In order to give an idea of how these three levels work together in pharmaceutical activities, I will present Amchi Gege's commentary to the section of the medical text, which describes one medicinal pill, and my observations of Nyima making it.

The medicine is called *Khyung Nga*, and is found at the beginning of the chapter on medicinal pills, which is chapter five of the fourth volume of the medical text.

The name of this medicine does not follow the usual pattern of giving the name of the principal ingredient followed by the total number of ingredients in the medicine. *Nga* is the Tibetan for ‘five’ and denotes the total number of ingredients, but ‘*khyung*’ is not the name of the principal ingredient. *Khyung* is the Tibetan word, which equates with the Sanskrit *garuda*, both words referring to the same mythological eagle. I say ‘mythological’, but it must be stressed that many Tibetans, including Amchi Gege, do not think of it in this way. For Amchi Gege, the *khyung* is an emanation of the Buddha, and as such it is a very real healing power. The medicine is named after this creature because, as we will see, it is considered to have a special relationship with it.

The main text condenses all the information concerning this medicine into ten lines.<sup>3</sup> The only information given in the text is the names of the medicines, the part of the *khyung*’s body they are associated with, and the names of the diseases the medicine is used for. In what follows I will give Amchi Gege’s commentary, which accompanied these ten lines. As we will see, he gave considerably more information than is contained in the main text.

He began by saying that the medicine is associated with the *khyung*, it comprises of five medicines, each of which is a part of the *khyung*’s body. The first medicine, *men chen* (black aconite), is the heart of the *khyung*; twenty grams of the root are used. Many Tibetan medicinal substances have several names, and Amchi Gege sometimes uses them interchangeably. When he gives the name of a medicinal substance for the first time he always mentions other names that are used to refer to it. Another common name for this medicine is *bong nga nagpo*. Only the root is used, which Amchi Gege stressed is poisonous. The second medicine, *latsi* (musk), is the blood of the *khyung*; three grams are used. The third medicine, *ruta* (costus root), is the bones of the *khyung*; ten grams of the root are used. The fourth medicine, *chudak nagpo* (acorus calamus), is the ligaments of the *khyung*; six grams of the root are used. The fifth medicine, *arura* fruit (*terminalia chebula*), is the flesh of the

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<sup>3</sup> Dang po spyi `jom gtso bo ha la nag po dang / gla rtsi ru rta chu dag a ru ra / snying la bong nga khrag la gla rtsi dang / rus par ru rta chu rgyu ras chu dag dang / sha la a ru ra`i nad sel bas / tshad du sbyur ba dri chus ril bu dril / `du ba lnga `joms khyung gi ri lu `de / nam gyi srod la lnga bdun dgu rim ru btang / gag lhog gzer gsum gnyan srin glang thab dang / khyad par chu ser mdze nad `joms pa`i mchog (folio 49).

khyung; forty grams are used. Amchi Gege always gave an exact number of grams for each ingredient, but this is meant only to indicate the correct proportions.

At this point Amchi Gege then told the following story about the origin of this medicine, which he took from a Bönpo commentary<sup>4</sup> to the *Bumshi* written by *Kongrong Menlha Dundrub*. In the east of India there was a kingdom ruled by a king called Sangha Pala. At some point, the king and all his people were beset by a series of virulent diseases. These were sent by various types of spirits such as the *lu* and the *sinpo*. The people responded by praying fervently to the three jewels (*konchog sum*), and the Tantric deities (*yidam*). The Buddha answered their supplications by appearing in an emanation body (*tulku*) in the form of the *khyung*, and curing all their diseases. The *khyung* informed them that when he dies, they must make medicines from his body to use to cure these diseases in the future. The five parts of the *khyung*'s body correspond to the five elements: the heart is fire, the blood is water, the bones are earth, the ligaments are wind, and the skin is the sky element.

Amchi Gege then went on to explain how the medicine should be made. This is best demonstrated by describing my observations of Nyima, the senior medical student, making it. To begin with, the four plant ingredients must be ground into a fine powder; as a general rule, the finer the powder, the more powerful the medicine. The powder is then put into a metal pan, containing water and a little butter. Nyima said that initially the consistency should be like *thugpa*, the traditional Tibetan stew. The mixture is then brought to boiling point and allowed to simmer for a long time. Nyima stipulated that the heat applied to it should be gentle and constant. After about two hours of simmering and constantly stirring the mixture, it eventually became a thick dark paste. At this point Nyima added the musk. The following day, Nyima and a few of the other students, spent hours painstakingly rolling the mixture into little balls about a centimetre in diameter. On the third day, the pills had hardened and they were rolled continuously for an hour or so, in wide gently concaved metal dishes, until their exterior became smooth. Finally they were rolled in a cloth, to further smoothen and harden the exterior; the purpose of this is to trap the aromatic and medicinal qualities of the medicine inside the pill.

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<sup>4</sup> kong rong sman bla don grub kyis mdzad pa'i rig zeg re'u le'i rkya pa phyi rgyud lhan thabs rin po che 'gor lo las.

The number of pills given should be adapted to the strength of the illness and the size of the patient: a small dosage is five, medium is seven and large is nine. They should be taken in the early evening. Amchi Gege explained that the quantity of *menchen* to be used should be adapted to the strength of the patient, on a scale between five and forty grams. The medicine is used for several different types of diseases: *gagpa* and *lhogpa*, disorders affecting the area of the throat; *nyenser* and *nyensin*, classes of infectious fever; *lhangthab*, a disease involving pains in the stomach and abdomen,<sup>5</sup> and a disorder of the serum (*chuser*) leading to leprosy (*dzéné*).

As we can see there is a large difference between what is said in the main text and what Amchi Gege teaches on the subject. Sometimes his explanations are concise and straightforward, at other times, as with this medicine, they are long and discursive. All of the students had gained experience at making medicines. In fact, making medicines in the school had become something of a routine matter. By the time that I arrived in Dhorpatan, the longer standing students had already been inducted into the practices of preparing raw ingredients and combining them into medicinal compounds. When stocks of a medicine needed replenishing, Amchi Gege would ask the students to make some more, usually they already knew how to do this, in which case his role would be not so much to teach them as to verify that they were doing things correctly.

## 6.2 Data on Patients Attending the Clinic and Clinical Interaction

It was rare for a day to go by when no patients came to see Amchi Gege. On average about three patients came daily. It was quite common for eight patients to come. The most I witnessed in one day was fifteen. In order to shed light on the method Amchi Gege used to induct his students into clinical practice, I recorded the procedure, which occurred for 153 patients. This figure does not represent all the patients who came in a given period, I was not always at the clinic when patients arrived, and for the first period of my stay I did not record any details about the patients who arrived. Most of the patients listed below were recorded in the last ten months of my stay in Dhorpatan.

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<sup>5</sup> The name gives a graphic image of the nature of the illness. *Lhang* is the Tibetan word for 'ox': the pain of the illness is likened to being penetrated by an ox's horns.

Age Group	Bishwa Karma		Magar		Nauthar		Tibetan		Chettri		Thakali		Bahun		Nepali		Chantel		European		Total		Age Group Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Below 3	1	3			2																3	3	6
3-10								2													0	2	2
11-20	1	1	1	1		3	1	3		1					1	2	2	1			6	12	18
21-30	2	3		2		4	3	4	3	4	1				1	4		3		1	10	25	35
31-50		1	1	6		3	15	7	2	3				1	6	2	7	4	1		32	27	59
51-60				1			8	3					1		2	2	1				12	6	18
Above 60			1				4	2							1	1					6	3	9
<b>Total Male / Female</b>	<b>4</b>	<b>8</b>	<b>3</b>	<b>10</b>	<b>2</b>	<b>10</b>	<b>31</b>	<b>21</b>	<b>5</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>69</b>	<b>78</b>	
Age not recorded	Bishwa Karma		Magar		Nauthar		Tibetan		Chettri		Thakali		Bahun		Nepali		Chantel		European		Total		Age Group Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
				1											2	3					2	4	6
<b>Totals</b>	<b>12</b>		<b>14</b>		<b>12</b>		<b>52</b>		<b>13</b>		<b>1</b>		<b>2</b>		<b>27</b>		<b>18</b>		<b>2</b>		<b>71</b>	<b>82</b>	<b>153</b>
<b>Group Total</b>	<b>12</b>		<b>13</b>		<b>12</b>		<b>52</b>		<b>13</b>		<b>1</b>		<b>2</b>		<b>22</b>		<b>18</b>		<b>2</b>				<b>147</b>

**Table 6.1 Table of Patients by Ethnic Group, Gender and Age Group**

For each of these patients I noted a set sequence of information: gender; age; ethnic group; domicile; religion; symptoms; diagnosis; disease classification; therapy; and the medicines used. The first group of items in this list aimed to ascertain who used the clinic. The exact figures for each ethnic group, and for a range of age groups can be seen in Table 6.1. The category 'Nepali' comprises those patients for whom I did not know their exact ethnic group. At the bottom of the table I have included the patients for whom I did not record any age. The table lists the ethnic groups in the order of their numerical presence in the valley: Bishwakarma being the highest and European the lowest. In the summer months, when I recorded this data, there were around 1000 Nepalese living in the valley, and 250 Tibetans. We can see from the table that all the ethnic groups present in the valley use the clinic. Taken together the Nepalese constitute sixty-six percent of the total number of patients that I recorded. The Tibetans, who form only twenty percent of the total population, constitute thirty-four percent of the total number recorded; this high proportion can be accounted for due to reasons of cultural affinity. The only other figures in the table that require explanation are the disproportionately high numbers of Chettri and Chantel patients. This can be explained by the fact that many of these patients did not live in Dhorpatan, but in various locations in the surrounding valleys. It was quite common for people to come to the clinic from villages that were located up to one day's walk from Dhorpatan.

The second group of data relates specifically to clinical interaction. My aim in recording the symptoms was two-fold: the prime aim was to understand how the symptoms were interpreted as indicators of predefined disease classifications by Amchi Gege and his students; in addition to this I was following Meyer's suggestion of using elementary symptoms as a possible means of making comparisons between the disease categories of different nosological systems. As he expresses it:

If elementary symptoms are indeed transcultural, this cannot apply to their classification as nosological entities. It is thus very difficult to establish direct equivalents between different nosological systems, except when the association of symptoms is so obvious that it is universally recognised (1995:13).

The symptoms that I recorded can be grouped into two types: the first type were the symptoms that the patient first said to Amchi Gege and his students, without any prompting on their behalf; the second group of symptoms were reported in response

No.	Disease Classification	Description	No. of cases
1	<i>tren</i>	Various types of tumour – in most cases the location was the stomach or the intestines	29
2	<i>drumbo</i>	Rheumatic condition	4
3	menstruation disorders	Various types	6
4	<i>méwal</i>	Itchy rash	1
5	<i>peken</i>	Various disorders caused by the phlegm humour effecting the throat and stomach	4
6	<i>lung</i>	General wind disorder	1
7	<i>tripa</i>	General bile disorder	2
8	<i>tra lung</i>	Disorder caused by a combination of blood and wind	1
9	<i>pé lung</i>	Combined phlegm and wind disorder	5
10	<i>pé tri</i>	Combined phlegm and bile disorder	3
11	<i>pé tshé</i>	Phlegm and fever mixed	2
12	<i>drangwa</i>	General cold disorders	4
13	<i>tshawa</i>	Various types of general fever disorder	8
14	<i>po né</i>	General stomach disorder	9
15	<i>so né</i>	Toothache	2
16	wound	Various types of cuts, bites and abrasions	4
17	<i>liglug</i>	Hydrocele (swollen scrotum) – [chap. 68 of the 3 <sup>rd</sup> treatise]	4
18	<i>peken mugpo</i>	Chronic digestive disorder	13
19	<i>dram tshé</i>	Fever caused by a physical blow like falling from a horse	3
20	<i>diarrhea</i>	General diarrhea condition of various causes	4
21	<i>kyabab</i>	First stage oedema	2
22	<i>mu chu</i>	Second stage oedema	1
23	<i>menbu</i>	Disorder effecting the neck glands	1
24	<i>nyen né</i>	Infectious fever	2
25	<i>champa</i>	Common cold	3
26	<i>zhang drum</i>	Haemorrhoids	2
27	<i>tsa karmo</i>	This patient had a trapped nerve in his neck	1
28	<i>gyu né</i>	Intestinal disorder	2
29	<i>lonka natsha</i>	Colon disorder	2
30	<i>drib</i>	Pollution causing disturbance in the humours (see ch. 7)	2
31	<i>sa drib</i>	Disorder caused by planetary influence (see ch. 7)	4
32	<i>kha lang</i>	Rash inside the mouth	1
33	<i>dzerpa</i>	Warts	1
34	<i>sin thor</i>	Acne	1
35	<i>sin né</i>	Disorder caused by germ-like organism	1
36	<i>khal né</i>	Male and female kidney disorders	4
37	<i>chu ser</i>	Disorder of the serum	3
38	<i>sha tra</i>	Skin disease	1
39	<i>poor hearing</i>		1
40	<i>tra né</i>	Blood disorder	3
41	<i>chin né</i>	Liver disease	1
42	<i>nöpa</i>	Disease caused by malevolent spirits	4

Table 6.2 Table of disease classifications diagnosed for patients recorded

to Amchi Gege's questions. The normal procedure during diagnosis in Tibetan medicine is that the doctor should ask questions to verify the nature of the condition. We have seen that these questions are given as the twenty-nine leaves of the third stem of the tree of diagnosis. But these twenty-nine leaves serve only as a summary; Amchi Gege could also formulate innumerable questions based on his knowledge of the symptoms of disease described in the third volume of the medical text.

For the diagnosis I recorded which form was used, who did it, and how Amchi Gege inducted the students into the practice. The most common forms of diagnosis were asking questions and taking the patient's pulse. Of the 153 patients that I recorded, urine diagnosis was carried out only seven times. For each patient I also recorded the name that had been applied to the disorder. In total, for my sample group I recorded forty-two disease classifications, each of these classifications can be seen in Table 6.2 along with the number of patients who had been diagnosed as suffering from the condition. Finally I recorded the therapeutic method that was applied, and the specific medicines that were used.

In the process of studying the third volume the students memorise and receive teachings on a huge range of diseases, symptoms, and medicinal compounds. Through engaging with this knowledge in clinical practice, certain elements will be appropriated and made a part of the student's sphere of practical competency. However as I have said of the 153 patients, there were only forty-disease classifications and most of these occurred very few times, from this we can conclude that a large amount of what they learn in the classroom will seldom or never be experienced in practice and as such this knowledge will remain at the propositional stage. In the next section I will describe the various ways that the students develop performative memory through clinical interaction.

### **6.3 Learning Through Clinical Interaction**

Now we have considered how the students learn medicine in the classroom and in the pharmacy, what remains is the third area of the schools activity: clinical practice. I am using the word 'clinical' here, not in its restricted biomedical sense, but in Kleinman's sense of the word as a cross-cultural category. As he explains it:

'Clinical', in the sense that I have discussed it, is not a Western category, but a category intrinsic to all societies. The problem with most ethnomedical studies is not that they impose an



**Plate 17** - Patients waiting outside Amchi Gege's room.



**Plate 18** - Amchi Gege and Nyima cleaning out an abscess.

alien clinical category on indigenous materials, but rather that they fail to apprehend a profound cross-cultural similarity in clinical interest and praxis' (1980:83).

For Kleinman this similarity in clinical interest lies in what he refers to as the core clinical functions of health care systems, these include: the cultural construction of illness; explaining and categorising illnesses; therapeutic methods; and managing therapeutic outcomes (1980:71). In Dhorpatan, these core clinical functions are carried out by Amchi Gege and his students during clinical interaction.

Meaning is generated in clinical practice through the use of specific cultural explanatory models. As I have discussed in chapter two, Kleinman identifies five principal questions that explanatory models seek to address: etiology, time and mode of onset of symptoms; pathophysiology; course of sickness; and treatment. Through Amchi Gege's guidance, the students acquire the skill to employ what they have learnt in the classroom as explanatory models to give meaning to what they experience in clinical practice.

The adjective 'clinical', used in the above sense, refers to medical practice whereby symptoms are interpreted and understood as representative of certain types of disorder, this will then dictate the therapeutic approach that is to be taken. Clinical activity is thus not confined to a specific space in the medical school, it occurs wherever Amchi Gege and his students attend to patients. For most of the time that I was in Dhorpatan, a new medical building was being constructed. This building had rooms designated for certain types of activity such as: the clinic, the classroom, religious activities, caring for inpatients, and drying and storing medicines. Even though this building had been completed about three months before I left Dhorpatan, Amchi Gege rarely used it to see patients or to teach his students. He continued to use his own room as the classroom and to consult with most of his patients in the small courtyard outside his door (see Plate 17).

It was quite common for patients to arrive in the middle of the students' lesson, in which case Amchi Gege would either let them wait until he had finished teaching, or if there was some degree of urgency he would disrupt the lesson. As I have mentioned earlier, for the students, this meant that a formal classroom-learning context, could quickly shift into a clinical session. This was the general pattern of learning in the school: the pharmacy, classroom and clinic, were not bounded zones of learning, there was a great deal of fluidity between them.

As my main objective in recording the details of the clinical interaction was to learn how the students were inducted into clinical practice, most of the time I asked the students to explain to me what occurred. The students who had been assisting Amchi Gege, always knew about the diagnosis, the disease category, and the medicines that had been given to the patient, even if they were merely reporting to me what Amchi Gege had said and done. As in most cases the students had been actively involved in the clinical interaction, I was able to ascertain their own understanding of the patient's condition.

On the few occasions when I asked Amchi Gege to explain to me about patients who he had seen that day, he gave me much more information than the students did. He went into detail about the diagnosis, and the disease classification he had identified. He explained to me that when carrying out diagnosis it should always be done in a certain manner: first, the doctor should observe the patient's body, whether there is anything unusual about its colour, if there are any marks, protuberances, rashes, and so on; second, the doctor should take the pulse; and third the doctor should ask questions to refine the diagnosis.

Amchi Gege was taking for granted here that as soon as a patient arrives, the first thing they will do is explain their condition, as they perceive it. For example, on one occasion, a patient arrived at the clinic when there were no students around, so Amchi Gege attended to him on his own. The patient was a forty-five-year-old Nepali man. First, he explained to Amchi Gege that he was suffering from pains in his chest. Amchi Gege looked at the patient's tongue, took his pulse, and asked him about his condition. He explained to me that: if the pain is on the right of the patient's chest, it could be a blood disorder; if it is on the left side, the cause could be an 'infection' (*nyene*); and if the pain moves into different locations in the chest, the cause could be the wind humour. The patient had said that the pain moved around. The diagnosis of wind as the principle cause of the disorder was confirmed by the patient's inflated pulse, and the appearance of his tongue, which was red, dry and rough.

Before moving on to consider examples of how the students learn through clinical interaction, I will first summarise the key features of the learning process which I discussed in chapter two. The model of learning that I have adopted to understand

how the students learn medicine, involves four modes of knowledge; these four modes of knowledge are summarised in Table 2.1. The first mode is propositional knowledge. This mode of knowledge has a discursive form. In chapter five I have discussed how the students acquire the propositional knowledge of Tibetan medicine through Amchi Gege's teachings on the main medical text.

The next three modes of knowledge are related to practice. By engaging with propositional knowledge in practice, the student begins to acquire competencies which involve the non-discursive mode of knowledge; by this means 'knowing that' is transformed into the 'knowing how' of practice. In chapter two I have also discussed the Dreyfus and Dreyfus model of learning which involves a scale of five stages in the development of expertise: novice, advanced beginner, competence, proficiency, and expert. The student progresses on this scale as knowledge is increasingly situated in practice; in this way the student acquires the tacit forms of knowledge, which underpin expertise. The innate mode of knowledge relates to the 'knowing subject', or 'authorial self' who brings coherence and meaning to what is experienced in clinical practice.

Through Amchi Gege's teachings in the classroom, all of the students had acquired a large range of explanatory models related to specific diseases. The task in clinical interaction is to relate these explanatory models to the symptoms which they encounter. At first, the knowledge they have acquired in the classroom is difficult to situate in practice, but with increasing experience a shift occurs, at which point knowledge is no longer simply known, it is enacted; the propositional knowledge acquired in the classroom is transformed into the performative memory of clinical practice. As expertise develops, knowledge is appropriated into the individual's sphere of competence and becomes a mode of being in the world. The transformation of propositional knowledge into the performative memory of clinical practice pertains to the two highest levels on the Dreyfus and Dreyfus scale: proficiency, and expert.

On most occasions when Amchi Gege saw patients, he had one or two of his students acting as his assistants. As Amchi Gege speaks very little Nepalese, he needs the students to act as translators. At first I thought that this would be a very difficult task, because it would involve translating between Nepalese and Tibetan

medical concepts; but this was not an issue as the Nepalese patients never described their condition in medical terms, they described only the specific ways in which they were suffering.

About half way through my stay at the school, Amchi Gege set up a rota system, which involved each student serving as his assistant for a period of two weeks. I mentioned earlier that the mechanism by which the students develop performative memory in clinical practice in Dhorpatan is what Lave refers to as 'legitimate peripheral participation'. Through this method the students develop expertise by being allowed to participate in varying degrees and with varying responsibilities in the practice of the master. In clinical interaction the students are inducted into medical practice by practising alongside Amchi Gege as supervised legitimate peripheral participants. As their expertise develops they are given more responsibilities and brought increasingly closer to the centre of medical practice.

Amchi Gege used the method of legitimate peripheral participation to induct the medical students into clinical practice in two different ways. The first way involved him carrying out the diagnosis in front of the student, he then told the student what the patient's conditions was, and asked him or her to verify his findings, this is the method he used during most clinical interactions. The second method involved the same procedure, but this time Amchi Gege said nothing about what he had perceived in the diagnosis, nor about how he had interpreted the condition; he allowed the student to first attempt to come to their own conclusions, and after this, if it was necessary, he corrected them.

I have already given one example of this method in chapter two in the section on the development of performative memory in clinical practice, where the students, Yundrung and Nyima, mistook 'old fever' for 'hiding fever'. Another example of this method, which involved the same two students, was the case of a 28-year-old female Tibetan patient. She said that she was suffering from fever, and pains in the left side of her chest. Nyima explained to me that about two weeks before, she had come to see Amchi Gege complaining of a similar condition. A few weeks prior to this her husband had died and Amchi Gege had concluded that her distraught emotional condition had caused a disturbance in the wind and bile humours. After taking her pulse, Nyima and Yundrung could not decide on the exact nature of the

condition. To them it seemed like fever, but it could also have been a disturbance in the bile humour. Amchi Gege confirmed the problem to be the latter.

In what follows I will give twenty examples of clinical interaction that I observed in Dhorpatan, from four areas of clinical activity: pulse diagnosis, urine diagnosis, and treatment. I will also give examples of how the students learnt medical practices related to *tren*, the most common disease amongst the group of patients that I recorded; this will enable an understanding of the ways in which Amchi Gege's teachings on the *tren* chapter of the *Bumshi*, which I discussed in chapter five, relate to instances of clinical practice involving this disease. In my discussion of each of these clinical interactions, I will attempt to interpret the event in terms of the various modes of knowledge and the Dreyfus and Dreyfus scale of developing expertise.

### **6.3.1 Learning the Practice of Pulse Diagnosis**

#### **Patient 1**

I will begin with one of Amchi Gege's female students, Tsering Lhamo. She had been studying medicine for five years and in that time had acquired much experience in clinical practice. Though she had achieved some mastery of pulse diagnosis, still on occasions, as the following three examples will show, she experienced difficulty understanding the pulse.

The first patient I shall discuss was a forty-eight-year-old Tibetan woman who complained of poor appetite, and fever. Amchi Gege first took the patient's pulse and explained the condition to Tsering Lhamo as a disorder caused by the combination of the phlegm and bile humours. He then asked her to verify for herself his diagnosis. She took the patient's pulse, which she said was 'deep'. Afterwards, she told me that the pulse was difficult to feel and she could not understand how Amchi Gege had concluded from it that the disorder was a disturbance in phlegm and bile.

Even though Amchi Gege had told her what the condition was, she still had difficulty in relating her perception of the pulse to this disorder. Tsering Lhamo knew in terms of propositional knowledge about the nature of the disease, but she could not fully situate this knowledge in clinical practice. Her pulse diagnosis was not clear, and appeared to involve much conscious deliberation, and very little intuitive, tacit understanding. We can conclude that Tsering Lhamo in this clinical

interaction has the attributes of an 'advanced beginner' on the Dreyfus and Dreyfus scale.

## **Patient 2**

This patient was a 50-year-old male Tibetan. He complained of recurrent headaches, stomach-ache and poor appetite. Amchi Gege first took the patient's pulse and told Tsering Lhamo that the patient's condition was *peken mugpo*, which is a chronic digestive disorder. He asked her to take the pulse and verify this for herself. As can be seen in Table 6.2, *Peken Mugpo* was the second most prevalent disease amongst the group of patients that I recorded. All of the students had received Amchi Gege's teachings on the chapter of the third volume which deals with this disease. In addition, because of the prevalence of the disorder in Dhorpatan, all the students knew of people who had been diagnosed with this disease.

The characteristic pulse for *peken mugpo* is that the pulse on the second finger is either absent or very faint compared to the pulse of the other two fingers. When I was discussing the disorder with Yungdrung, one of Amchi Gege's students, he directed me to feel his pulse, because he himself had recently suffered from it. He said that although he was then much better, the disorder could still be felt in his pulse. The pulse on the middle finger did feel vaguely faint compared to the pulse of the other two fingers. Tsering Lhamo told me that she could feel the pulse very clearly and had no problem in relating it to the disorder of *peken mugpo*. Although in this instance it appeared that Tsering Lhamo was able to situate her knowledge of *peken mugpo* into medical practice in an intuitive way with very little conscious deliberation, because she was first told by Amchi Gege what the disease was, we can conclude that in this interaction she has the attributes of 'competence' on the Dreyfus and Dreyfus scale.

## **Patient 3**

On most occasions when patients came to the clinic, Amchi Gege inducted his students into medical practice through the method of legitimate peripheral participation, but there were occasions when the students attended to patients on their own. If Amchi Gege was not around when patients arrived at the clinic, one of the more experienced students would attend to them. Usually the student would attempt

a diagnosis, and if they felt confident about the nature of the patient's condition, they would give the appropriate medicine; if they were uncertain, then they would tell the patient to come back and see Amchi Gege. Sometimes the sick person would be unable to come to the clinic, and a message would be sent to Amchi Gege about the sickness. He would then either go himself to visit the patient or he would send one of his students. The students would have to report back with information about the patient's symptoms, and an assessment of their condition. It was usually the more experienced students that were entrusted with this task: more often than not, Nyima. In this way, by giving the students more and more responsibility, they were brought gradually closer to centre of practice.

On one occasion whilst Amchi Gege was away, I had the opportunity to observe Tsering Lhamo attend to a patient alone. The patient was a ten-year-old Tibetan girl. She said that she had stomach-ache and no appetite. Tsering Lhamo took her pulse, which she found to be slow and weak. She concluded from the pulse and the symptoms that she was suffering from a cold disorder, and she gave the girl one medicinal powder to take (*sugmel chupa*).

From my observation of Tsering Lhamo attending to this patient, there seemed to be no doubt in her mind about the veracity of her diagnosis and that the medicine she had given was entirely appropriate. In this interaction she was able to situate her knowledge in practice with some ease and fluidity. Whether this would have been the case if Amchi Gege had been present is not certain, but in this instance it seemed that Tsering Lhamo was approaching the 'proficiency' stage on the Dreyfus and Dreyfus scale.

#### **Patient 4**

During this and the following clinical interactions, Tundup Gyaltzen served as Amchi Gege's assistant. He had been studying medicine for seven years and his knowledge and experience of pulse diagnosis were about the same as Tsering Lhamo's. This patient was a fifty-year-old Tibetan man who complained of headaches, a bloated stomach, and no appetite. Amchi Gege first took the patient's pulse and told Tundup that the condition was *peken mugpo*. He then asked Tundup to

take the pulse and verify this for himself. Tundup told me that he had no difficulty in discerning the characteristic pulse of the disorder.

The comments I made above for Tsering Lhamo, for patient two, are also pertinent here. Tundup was thoroughly conversant with the medical theory related to *peken mugpo* and had no difficulty situating this in practice. However, because Amchi Gege first told Tundup that the condition was *peken mugpo*, I will class his level of medical practice on the Dreyfus and Dreyfus scale as that of ‘competence’.

### **Patient 5**

This patient was a sixty-year-old Tibetan man. He complained of a swollen painful throat, stomach-ache, back pains and that his stool was dry. Amchi Gege took the patient’s pulse, which he said felt like two beats occurring at the same time (*chamdrel*). All the time, Tundup was listening and watching. He concluded from what the patient said, and the pulse diagnosis, that the disease was a form of ‘infectious’ fever (*nyene*). He then directed Tundup to take the patient’s pulse.

In the classroom, Tundup had already studied the characteristics of the *chamdrel* pulse during Amchi Gege’s teachings on the pulse chapter in fourth volume of the main medical text. Tundup had also received teachings on the *nyene* section of the third volume of the main medical text. Therefore, he could relate very well to what Amchi Gege was saying from a theoretical point of view. Certainly the patient’s symptoms taken in combination with the *chamdrel* pulse, indicated the condition of *nyene*.

When Tundup took the pulse he told both Amchi Gege and myself that he could clearly discern the *chamdrel* pulse. Thus it appeared that Tundup was able to situate his theoretical knowledge in practice. However, again because Amchi Gege first told Tundup about the pulse and the related disorder, I will classify Tundup’s level of skill on the Dreyfus and Dreyfus scale, in this interaction, as one of ‘competence’.

### **Patient 6**

The following three clinical interactions all involved the senior medical student, Nyima. As in all other areas of medical practice, Nyima displayed the highest level of skill in pulse diagnosis. He very rarely seemed to have any doubt about the

quality of a pulse. Pulse diagnosis had become almost second nature to him. He seldom made mistakes, but on the odd occasion it did happen, as in the example I gave in chapter two where he mistook 'old fever' for 'hiding fever'. In most areas of medical practice he was able to situate his knowledge with ease into medical practice, and his high level of skill suggested that he had a well developed intuitive and tacit knowledge of medicine. On the Dreyfus and Dreyfus scale, in many areas of medical practice he had reached the level of 'proficiency', this is certainly true in my estimation for the following three example of clinical interaction.

On one occasion a group of French people were passing through the valley. Out of curiosity, one of them asked Nyima and myself to take his pulse. We had no reason to believe that he was unhealthy in any way. I took his pulse first, and could not perceive anything unusual. Then Nyima attempted the diagnosis, and after a few minutes deep concentration he said that there seemed to be a problem with the pulse for his lungs. Afterwards, the French person told us that he suffered from asthma.

### **Patient 7**

On another occasion a thirty-eight-year-old man from the Chantel ethnic group came to see Amchi Gege. He said that for more than a year he had been suffering from an itchy rash all over his body. He had been to the hospital in Pokhara, but the medicine they had given him had not helped. First Amchi Gege took his pulse and told Nyima that the man was suffering from a cold disorder affecting the serum (*chuser*). He then directed Nyima to verify his diagnosis. Nyima said that all his pulses were slow, and he fully concurred with Amchi Gege's diagnosis.

### **Patient 8**

This patient was a forty-five-year old Nepali man. Amchi Gege was not present when he arrived at the clinic, and Nyima attended to him on his own. He complained of a poor appetite and a bloated stomach. Nyima took his pulse and concluded that the man was suffering from an early stage of *peken mugpo*; he gave him the appropriate medicines for this disorder. Nyima had no doubt about his diagnosis. He was able to situate his knowledge of this disease in practice with considerable ease and fluidity. Due to his high levels of skills in medical practice, in this clinical

interaction Nyima behaved not so much as a legitimate peripheral participant, but as a full member of the body of practice.

### **6.3.2 Learning the Practice of Urine Diagnosis**

The students had all studied the second chapter of the fourth volume of the medical text on urine diagnosis, they therefore knew very well about it from a theoretical point of view. In chapter five, I have described how the students acquired the propositional knowledge related to urine diagnosis in the classroom. Urine diagnosis was carried out only once, or occasionally twice a month, and as such the students had very little opportunity to situate this knowledge in practice and thereby develop practical expertise in this area. On numerous occasions I saw students attempt pulse diagnosis without the aid of Amchi Gege, but I never saw any of the students doing urine diagnosis alone. A large section of the chapter on urine diagnosis deals with the characteristics of the urine, which denote the action of a harmful spirit. This form of diagnosis is akin to divination and I will discuss it in detail in the divination section of chapter eight. Urine diagnosis was always done early in the morning. Whenever it occurred, Amchi Gege would call all his students to observe and learn about the procedure.

In each of the following examples Amchi Gege inducts his students into the practice of urine diagnosis in the same way: he demonstrates the techniques of urine diagnosis; he points out the characteristics of the urine; and he relates the characteristics of the urine to the patient's condition. When he identified a characteristic of the urine, he would try his best to ensure that all the students could clearly see what he was talking about. Occasionally he would ask the students questions about the urine that related to information they had been taught in the classroom. Most Tibetan medical knowledge can be found in the main medical texts or in the commentaries, but some knowledge remains strictly part of the oral tradition. With patients one and four below, we can see the way that during practice Amchi Gege imparts to his students knowledge that is not contained in the medical text.

## **Patient 1**

On one occasion, the wife of a fifty-eight-year-old Tibetan man brought a sample of his urine. She did not say very much about her husband's symptoms apart from that he was feeling generally unwell in an unspecified way. Amchi Gege called all the students to observe the urine. He first pointed out its orange colour. He then stirred the urine with a stick, generating much froth. He pointed out to the students that the urine looked 'dirty', and said that this was because it was not fresh. As we saw in chapter five, the urine must be observed at three times: when it is hot, when it is cooling down, and when it has cooled down. Amchi Gege explained, if the urine is a few hours old, it can be warmed to enable the doctor to observe its qualities during these three phases. This technique is not mentioned in the main medical text. After this was done, he concluded that the patient was suffering from a cold disorder.

## **Patient 2**

On this occasion one of the female students brought a sample of her uncle's urine. Amchi Gege called all his students to observe the diagnosis. On the day before, they had seen another sample of the patient's urine, which looked like water; the characteristic urine of a wind disorder. Amchi Gege had concluded that the wind humour had spread out of its own pathways into other areas of the patient's body. He had given a medicine to gather the humour. The patient's new urine sample had no pathological qualities; this proved that he had responded well to the medicine. Amchi Gege explained that the humour had been gathered in the patient's stomach and another medicine was needed to remedy this situation.

## **Patient 3**

The following example demonstrates the way in which Amchi Gege draws the student's attention to specific details in the qualities of the urine. Whilst observing the urine of a woman who was suffering from aches and pains all over her body, Amchi Gege pointed out to all the students that there was no sediment, and that the bubbles disappeared very quickly after the urine was stirred. He also indicated that the colour was yellow, denoting a fever condition. He concluded that the patient was

suffering from *lungtse* (rlung tshad), a disorder involving both the humours of bile and wind.

I remembered from Amchi Gege's lessons on urine diagnosis that with fever conditions there should be some sediment, and I questioned him about this. He reminded me of the section in the medical text, which speaks of wind descending on bile like an eagle scattering a flock of pigeons. This was the case with this disorder. Through the action of the wind humour, the bile humour had been scattered throughout the patient's body, this was signified by the absence of suspended material and the quickly vanishing bubbles.

#### **Patient 4**

On this occasion, a girl brought a sample of her mother's urine to Amchi Gege. She was also suffering from aches and pains all over her body. Amchi Gege pointed out to the students its strong yellow colour. Then he stirred the urine with a short stick and indicated that the bubbles, which had accumulated on the surface, stayed for a long time. He then directed the students' attention to the sediment, which was suspended high up in the urine. Finally he sprinkled a medicinal compound on the urine and observed how this affected the bubbles and the urine when it was stirred. This technique, which Amchi Gege also uses in 'The Angry Widow' section of chapter eight, is also not mentioned in the main medical text. When I asked him about it, he said that it was a 'secret' technique that was passed on to him by his teachers.

#### **6.3.3 Learning the Practice of Therapy**

By far the main therapeutic method used by Amchi Gege is to give the patients medicines. Measuring out the required amount of each of the medicines to be used was always the task of the student who was assisting Amchi Gege at that time. The student also had to explain to the patient how and when the medicine should be taken. By repeatedly carrying out this task, the students learn to associate medicines with specific disorders and the ways that they should be taken. We have seen that in certain instances, if Amchi Gege is not present, some of the more experienced medical students will assume the responsibility for this task. We can conclude from

this that with certain disorders, the more experienced students had acquired the level of 'competency' in the Dreyfus and Dreyfus scale. As other forms of therapy are seldom used in the school, the students have little opportunity to get experience of them. Whenever Amchi Gege did carry out some form of external therapy, he always asked a few of the students to attend and observe. The following two examples involve students learning external therapies.

### **Patient 1**

One morning I noticed one of Amchi Gege's students, Yungdrung Lhazon, preparing a moxibustion application. As I have said in chapter five, this form of treatment involves the burning of the herb gerbera on specific locations on the body. Amchi Gege had taught all his students how to roll the herb into the required cone shaped form, and Yungdrung was doing it evidently with some previously acquired expertise.

The moxibustion application was for a twenty-one-year-old male Tibetan who had slipped and dislocated his ankle whilst he had been out collecting wood. When Yungdrung had finished rolling the moxibustion application, Amchi Gege directed him to place it on a certain location on the patient's ankle, where it was fixed in position with a sticky substance made from garlic. Yungdrung then lit the cone causing it to smolder. He then gently blew on it until it had burnt down to the patient's skin. He did all this with the expertise of a person who was thoroughly conversant in the practice. After this, an ointment was applied on the location. I was told that the purpose of the application was to reduce the inflammation and speed up the healing process.

Yungdrung carried out most of this treatment on his own. Amchi Gege supervised the procedure but Yungdrung appeared to know exactly what he was doing. He was able fully to situate his knowledge in practice, and required very little instruction from Amchi Gege. For this reason I would situate Yungdrung's level of ability in this clinical interaction at the 'proficiency' level on the Dreyfus and Dreyfus scale.

## Patient 2

Another form of external therapy, which I witnessed Amchi Gege demonstrating to his students, was cleaning out an abscess with a small surgical knife (see Plate 18). The abscess, which was very inflamed, was on the patient's right index finger. All the students observed as first Amchi Gege made a small incision into the inflamed area, and then Nyima used a pair of tweezers to extract the abundant purulent matter that had accumulated inside. Eventually, buried deep in the abscess, he found what looked like a very small sharp piece of wood. The patient looked in great discomfort throughout the proceedings, as did most of the students. Afterwards, Amchi Gege washed the wound with iodine solution.

### 6.3.4 Learning About *Tren* Through Clinical Interaction

Table 6.2 shows the disease classification of *tren* to be by far the highest disease amongst the patients that I recorded. The unusually high figure of twenty-nine occurrences demands explanation. Unfortunately nobody was certain of the reason why this disease was in such abundance. Some people said it was due to the fertiliser that was used on the potatoes; other explanations I heard were that it was due to people having sexual intercourse during menstruation or shortly after the woman had given birth, or that it was because people worked too hard. Amchi Gege thought that it might be related to people's diets, but he was not certain about this. Whatever the cause, its abundance in Dhorpatan meant the students had plenty of opportunity to gain practical experience of diagnosing and treating it.

In chapter five we saw how Amchi Gege teaches about *tren* in the classroom. All the students had memorised and studied this chapter, but not all the students had developed the same level of practical competency. To demonstrate this I will give examples of clinical interaction, which involved three students attempting to diagnose patients with *tren*; in these instances each student exhibits a different level of practical competency.

As we saw from Amchi Gege's teachings, there are three types of *tren* classified according to location: outer, middle and internal *tren*. Most of the *tren* of the patients I recorded were of the middle variety, that is to say, the *tren* was situated not inside

an internal organ, but on the surface of it. All of the examples I give below were middle *tren*. Also in each case, the *tren* was located in the region of the patient's stomach. By this I mean the area above the navel and below the chest, not the organ of the stomach. The *tren* may have been on the surface of the stomach, but it also might have been on the surface of the intestines.

The text describes four methods of diagnosis for *tren*: pulse, urine, symptoms, and questions. I never witnessed Amchi Gege using the urine method to diagnose *tren*; the pulse and the symptoms were always sufficient. For most cases of *tren*, the pulse is faint and weak; this was the case with all of the following examples. As we will see, if the student had not developed high sensitivity in his or her pulse taking, very little could be discerned of the *tren* pulse.

Quite often the patients complained of a beating sensation in the area of the *tren*. Nothing is said about this in the main medical text, but in the clinic in Dhorpatan it was taken as one of the key symptoms. The text lists four methods of treatment for *tren*: medicines, external treatment, diet, and behaviour. I never witnessed Amchi Gege using any form of external treatment with patients who had been diagnosed with *tren*; the principal treatment was a series of medicinal compounds, which the patient had to take over a long period of time.

## **Patient 1**

In the following two examples, Chunsom, one of Amchi Gege's female students, served as his assistant. She had studied medicine for seven years and had acquired a high level of competency in medical theory, but still needed to perfect her abilities in medical practice. The patient was a forty-year-old Nepali woman. She said that for three years she had suffered from a growth in the region of her stomach, and that she could feel pain and a pulsating sensation in the location of the growth. She added that whenever she did hard work her condition became worse.

These symptoms were partly elicited by Amchi Gege's questions and partly from her own account of her condition. She had come to the clinic a few weeks before and Amchi Gege had given her some medicines to take. She said that this had helped, but a few days before, her condition had resurged after she had been chopping wood. Amchi Gege felt the growth, which he said was about eight centimetres long. After

taking her pulse, he asked Chunsom to try the diagnosis. She explained to me that the pulse did not convey anything to her. Chunsom was then asked to measure out more of the same medicines the patient had been given before.

In this interaction Chunsom seemed not to fully understand what Amchi Gege was doing. With this patient she had some difficulty situating her knowledge about *tren* in clinical practice. If she had carried out the diagnosis on her own, she would have most likely understood the condition to be *tren* from the symptoms, especially the beating sensation, which many patients with *tren* complained about in Dhorpatan, but she could not understand anything about the condition from the patient's pulse. Following from this we can see that on the Dreyfus and Dreyfus scale, Chunsom, in this interaction has the attributes of an 'advanced beginner'.

## **Patient 2**

This patient was a fifty-year-old Nepali woman. She explained that she had suffered from a growth in her stomach for twenty-five years, which had progressively worsened. She said that often she could feel a pulsating sensation in the region of the growth, and sometimes immense pain. Amchi Gege first pointed out to Chunsom that the skin on her stomach was covered in discoloured blemishes. He then felt the growth. He said that the condition was so old that the *tren* was now almost as big as her stomach. After taking her pulse he directed Chunsom to first feel the growth and then to take her pulse. She told me that the pulse was very difficult to discern, she thought 'maybe it was deep'. She was then instructed to measure out three medicines and explain to the patient how they should be taken.

As with patient one above, with this patient Chunsom understood the nature of the problem from a theoretical view. She also had no difficulty when it came to measuring out and administering the medicines. The main problem for Chunsom was situating her knowledge in practice; in this case relating the symptoms to the specific form of *tren* the patient was suffering from. Generally speaking she had acquired a reasonable level of competency in clinical practice. On numerous occasions I had observed her read a patient's pulse with confidence, but in this interaction, again she has the attributes of an 'advanced beginner'.

### **Patient 3**

In the next two examples Tundup was Amchi Gege's assistant. This patient was a seventy-three-year-old Nepali man. He said that for the last seven years he had suffered from: poor appetite, difficulty breathing, fever, and pains in his stomach. Amchi Gege took his pulse and felt his stomach. When he had finished, he directed Tundup to do the same. Tundup told me that he could feel a large growth in the man's stomach, and he said that his pulse was very weak. He was then instructed to measure out and give three medicines to the patient.

In this interaction Tundup closely followed Amchi Gege's instructions and assessment. He didn't appear to have any problem in understanding the patient's symptoms, nor did he appear to have any difficulty in feeling the pulse, but as this was all done under the direction supervision of Amchi Gege I will categorise his level of ability in this interaction as 'competence' on the Dreyfus and Dreyfus scale.

### **Patient 4**

This patient was a twenty-three-year-old Nepali girl. She had exactly the same symptoms as patient three above, except she did not have a fever. The same procedure ensued whereby Amchi Gege felt the girl's stomach and took her pulse and then directed Tundup to do the same. Tundup said that he could feel a small growth in her stomach and that her pulse was weak. Amchi Gege explained that the girl was suffering from the same condition as the old Nepali man, only her condition was in a much earlier phase; he then instructed Tundup to give her the same medicines.

Both Tundup and Chunsom had been studying medicine for the same amount of time. From discussions I had with them, and from my observations of their skills in clinical practice, I would estimate that they had both achieved the same level of ability in medical theory and practice. Though, in these four examples I have given of them attempting to diagnose patients with *tren* disorders, Tundup demonstrated a higher level of skill.

## Patient 5

The student who showed the highest level of competence in dealing with *tren* was Nyima. I will give two examples of him diagnosing and treating patients suffering from *tren*. The first patient was a sixteen-year-old Nepali boy who had been brought by his father to the clinic. He said that although right at that moment he was feeling quite well, for the past three years he had been suffering from recurring health problems, these included: a beating sensation in the region of his stomach; diarrhea; poor appetite; and occasionally, difficulty to move. Amchi Gege began by feeling the boy's stomach and then he took his pulse; he asked Nyima to do the same. Nyima told me that he could feel a hard growth in the boy's stomach about seven centimetres long, and that all his pulses were weak, but those on his left hand were weaker. This is exactly what Amchi Gege had felt. Nyima, following Amchi Gege's instructions, gave the boy three medicines.

## Patient 6

The second patient arrived at 6.30 am, when Amchi Gege was in the middle of his regular morning *puja*, and as such Nyima attended to him on his own. The patient was a twenty-five-year-old Nepali man. This was his third visit to the clinic with the same disorder. On his first visit he had been diagnosed with a *tren* in the region of his stomach just above his navel. At that time he felt so weak that he was unable to work. After a month of taking the medicines that Amchi Gege had given him, he had noticed a marked improvement in his condition, and was again able to resume work. He had returned because he had run out of the medicines. Nyima felt the growth, which he said was a little smaller, and was not pulsating as strongly as before. He also took his pulse, which he said was still weak. He measured out and gave the patient more of the same medicines.

Although Nyima had not spent as much time at the medical school as some of the other students, he had studied with his father in his home at Jharkhot in Mustang, and with Sangye Tenzin, the Abbot of Menri Yungdrung Bön monastery at Dolanji near Simla. He had acquired a high level of competency in both medical theory and through his extensive experience of clinical practice much of this had reached the

level of performative memory. He was the closest amongst the students to becoming a fully trained Tibetan doctor.

During their lessons in the classroom, the students learn about a large number of diseases and their related symptoms. They also learn the range of subtle qualities of the pulse and urine, which represent different pathological conditions in the human organism. In the classroom this knowledge is presented as a series of propositions. For example, the twelve general pulses are described in the text as: strong (*dragpa*), prominent (*gyépa*), fast (*gyopa*), twisting (*dribwa*), hard (*trangpa*), and taut (*drimpa*); weak (*zhen*), deep (*ching*), impaired (*gü*), slow (*bul*), loose (*lhöd*), and empty (*tong*). It is one thing to have memorised this section of the text and to have received Amchi Gege's commentary to it, but it is a different order of knowledge to be able to relate these words to medical practice. Some of the words appear straightforward, such as 'slow' and 'fast', but it is not exactly clear what the difference is between a 'hard' and a 'taut' pulse, or what exactly is meant by 'loose'. This can only be understood through experience. Whenever students described what they felt from a patient's pulse, either they would say that they could not understand anything, or they would use one of the categories from the text.

On a few occasions, students said to me that they had learnt a great deal by acting as Amchi Gege's assistants. As Yungdrung explained to me, in the middle of his two week practical induction, 'This is very good work, I have studied much in the medical text, but some things I can't understand, now I can see patients and listen to what Amchi Gege says, and then I can go back to the text and finally understand it'. What Yungdrung is articulating here is his own awareness of a transformation in his medical knowledge; his understanding of the theories and practices presented in the medical text, was gradually being transformed through clinical interaction into the performative memory of medical practice.

As I have mentioned, the development of performative memory during clinical interaction occurs when theoretical knowledge is appropriated and made a part of the student's sphere of practical competency. For the students in the medical school in Dhorpatan, the propositional knowledge that they have acquired consists of two layers: that which they have memorised, and the knowledge they have acquired from

Amchi Gege's explanations. In chapter three on the role of memorisation in the medical education I have discussed the way that it provides the basis for associative elements in various locations in the text to be brought together simultaneously to generate meaning in clinical interaction. In fact this associative pattern is built into the structure of the text. All the topics of the medical teaching are summarised by the tree metaphor given in the first volume of the medical text. As the students go deeper in their studies of the medical text each subject is elaborated upon in increasing detail. In their studies of the third volume all the elements of the medical teachings are brought together in the explanations on specific disease. As their experience of clinical practice increases, more and more propositional elements are brought to the performative level. Though it seems likely that not all of what they learn in the school will reach this level. The development of performative memory requires considerable practical experience and many of the diseases that the students learn about in the text, may seldom or never be encountered in clinical practice.

All the students had acquired a good theoretical knowledge of medicine, some of them had also developed high levels of competence in certain areas of clinical and pharmaceutical practice, but with the exception of Nyima they still all had a long way to go in developing the performative memory of medical practice. Nyima, on the other hand, was well on his way to becoming a fully trained medical practitioner. He seldom showed any signs of difficulty in situating what he knew in clinical practice. Much of what he had learned in the classroom had become a part of his practical sphere of competency.

## Chapter 7 - The Relationship Between Tibetan Religion and Medicine

In the last chapter I have given twenty examples of the students learning medicine through clinical interaction. All of these disorders could be understood to a large extent without taken into consideration Tibetan religious notions. However, many of the clinical interactions that took place in Dhorpatan whilst I was there were directly related to Tibetan religion and cosmology. In chapter eight I will discuss these illness episodes and the ways in which the students were involved in them. Before doing this, in this chapter I will first discuss the relationship between Tibetan medicine and Tibetan religious notions. In the domain where Tibetan medicine overlaps with Tibetan religion, it was Geshe Tenzin Dargye who assumed the central role, and the medical students served as his assistants.

Dunn (1976:134) gives four causative factors that lead to health or disease: exogenous, endogenous, behaviour, and human population. He further subdivides the category of exogenous factors into: biotic and non-biotic. For the endogenous factors he gives: genetic. This accords well with the biomedical view of disease causation, but a cross-cultural study of medical systems shows considerable divergence in what is classed under these various headings. For example the endogenous factors of Asian medical systems relate primarily to the proportions and flows of humours; and exogenous factors, could include a range of factors, such as astrological influence and disruptions caused by harmful spirits. Under behaviour, Dunn lists psychological, social and cultural factors; where biomedicine might downplay these components of disease causation, in other cultures these are deeply related to health concerns. For instance the Ayurvedic, Chinese, and Tibetan medical systems view health as arising from the harmonious interrelationship of physiological, psychological, social and environmental factors. It is breakdowns in this interrelationship that is the cause of disease.

The aim of what follows is to present the exogenous factors of Tibetan disease causation, which includes a range of phenomena such as seasonal change, adverse environmental conditions, astrological influence, and harmful spirits. I will outline the basic elements of Tibetan cosmology and the kinds of ritual practices that

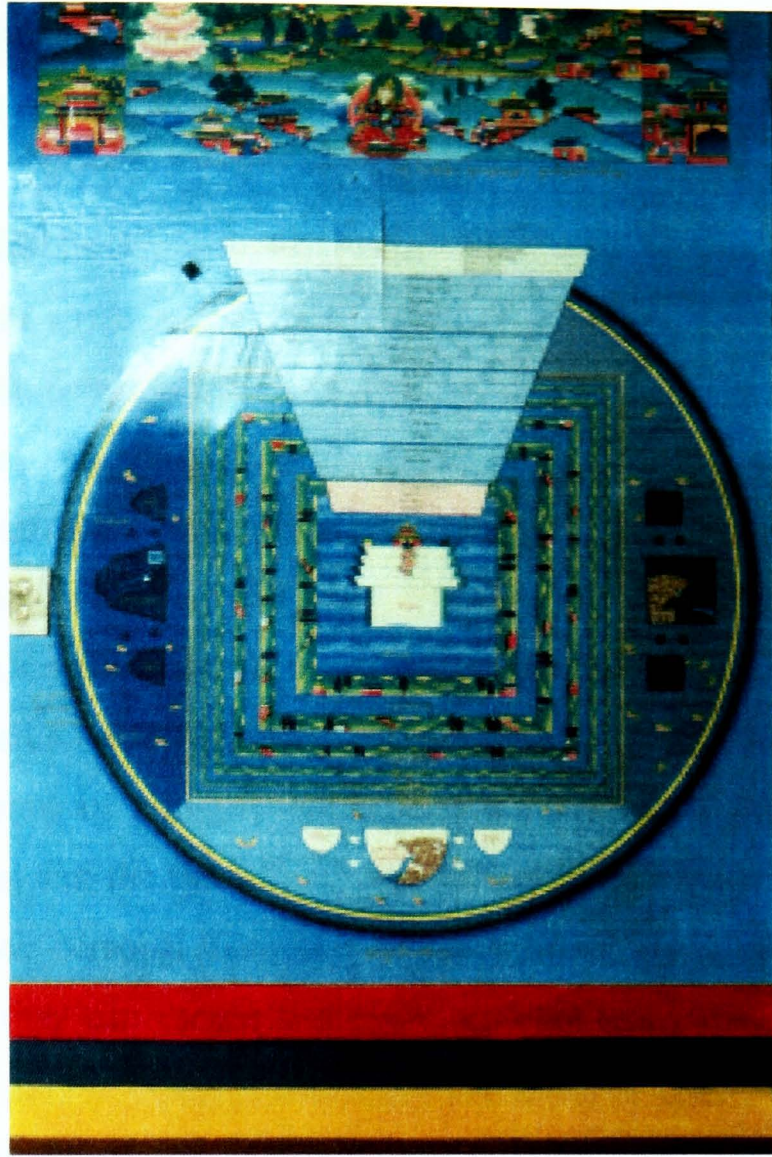
Tibetans carry out to maintain harmony in their environment and cultivate prosperity in their lives.

## 7.1 Tibetan Cosmology

As I have mentioned, the Tibetan medical text is classed as a Tantra and as such there is much in Tibetan cosmology that is of direct relevance to medicine. Tibetan notions about the nature of the universe and the beings that inhabit it have a number of different sources. For Tibetan Buddhists these sources are principally Hinayana, Mahayana and Tantric Buddhist texts that were brought to Tibet from India. The Bönpo also have equivalent texts, which they claim were translated from the language of the Central Asian kingdom of Zhang Zhung. Another significant source is Tibetan folk tradition.

Tibetans have two main overlapping cosmological systems. The first is found in the Abhidharma text of the Hinayana Buddhist tradition. The Bönpo also have a version of this text. According to this account, the universe is described as one of an infinite number of world systems (Brauen 1997 Sadakata 1997), which came into existence through the karma of earlier living beings. Our world system is set upon a golden earth disk in the centre of which is a four-cornered mountain known as Mount Meru. Around this are seven mountain ranges, each half the size of the one closer to Mount Meru. Some depictions of these mountain ranges show them as concentric circles, but in the text they are described as situated in concentric squares. Between them is the 'inner ocean'. Beyond these mountain ranges is the 'great outer sea' with twelve continents: one large continent in each of the four cardinal points flanked by two smaller subcontinents. The world system is encircled by a range of iron mountains situated around the perimeter of the golden earth disc.

Humans live on the southern continent known in Tibetan as *dzambuling* (skt. *jambudvīpa*). As the southern side of Mount Meru is made of lapis lazuli, the sky above *dzambuling* appears blue. On the top of Mount Meru, which is shaped like a truncated pyramid, is the city of *Sudarsana* (Skt. 'beautiful to see'); this is the abode of a group of thirty-three gods. Ascending above Mount Meru there are twenty-five heavens: four of the desire realm, seventeen of the form realm, and four of the formless realm. Each ascending heaven has a higher degree of purity than the one



**Plate 19** - The world system of Mount Meru and the 12 continents.



**Plate 20** - The wheel of existence.

below it. In contrast to this, for beings that have accumulated a high level of negative karma, below the southern continent of *dzambuling*, there are eight hot and eight cold hells.

A common religious practice in Tibetan Buddhism and the Bön religion for accumulating karmic merit is for the practitioner to build up this mandala universe using an ornamental metal plate and rings and piles of rice. Each time it is made, it is visualised as perfect and complete, and offered to the three jewels (*kon chog sum*): the Buddha, the dharma and the spiritual community (Kongtrul 1986).

The second main Tibetan cosmological scheme complements the above model; it focuses specifically on the transmigratory nature of life (skt. *samsara*). This second scheme depicts the universe as a wheel of existence (*sipé khorlo*) with six sectors representing six forms of samsaric existence: the three higher realms, of the gods, asuras, and humans; and the three lower realms, of animals, hungry ghosts and hells. Beings, through their personal store of karma, are constantly born in one or other of these realms until they can escape this cycle of death and rebirth through realising Buddhahood.

Traditional paintings of the wheel of existence usually include twelve symbols equally spaced around the outer circumference, which represent the Buddhist philosophical scheme of the twelve links of the chain of interdependent origination. This explains the successive stages of how beings become ensnared in the cycle of death and rebirth. In the centre of the diagram there is a drawing of a pig, snake and cock, which represent respectively, ignorance, aggression, and desire; the three mental poisons that are at the root of *samsaric* existence. According to Tibetan medical theory, the three mental poisons are the root cause of the three humours in the body, and consequently they are the fundamental cause of all forms of disease. In place of these three animals, at the centre of the Bönpo version of the wheel of existence, is a monstrous beast with the body of a cow, the tail of a snake, and three heads: that of a pig, cock and serpent. As with the Buddhist version, the symbolism relates to the three mental poisons (Kvaerne 1995:143). These two cosmological schemes are widespread in Tibetan culture. Plates 19 and 20 show the mandala world system and the wheel of life that are painted on either side of the main door of the temple at Triten Norbutse Yundrung Bönpo Monastery in Kathmandu.

Having given some idea of the structure of the universe according to Tibetan conceptions, I shall now turn to the different classes of beings that are said to inhabit it, and the nature of their relationship with humans. Some beings are considered inherently ill disposed to humans, some are always helpful, but most can veer in either direction depending on the circumstances. For this reason it is important that measures are taken to maintain, as much as possible, a positive relationship with beings living in the natural environment. In Dhorpatan, as in other locations where Tibetans live and have retained their traditional culture, spirit beings are an everyday reality. According to Tibetans living in Dhorpatan, the spirits living in the area of the valley are particularly strong and of a capricious and truculent nature. On numerous occasions during my stay in Dhorpatan diseases were diagnosed as caused by the ill intent of spirits. For this reason hardly a day went by without a Tibetan coming to Geshe Tenzin Dargye and asking him for a blessing and some form of protective amulet.

Tibetan religion recognises a huge range of divinities and spirits, many of them referred to by the same Tibetan word, *lha*. These can be best understood by grouping them into four classes (Samuel 1993:166): the Tantric deities known as *yidam*, the gods of the Buddhist heavens (*jigten lé depé lha*), the gods of this world (*jigten pé lha*), and malevolent spirits (*dre*). An important distinction to be made here is between beings that are still part of *samsara*, and beings that have passed beyond it, such as the gods of the Buddhist heavens, and the Tantric *yidams*. In what follows I will give a brief description of these four classes of beings.

### **7.1.1 The Gods of the Bönpo and Tibetan Buddhist Heavens (jigten lé depé lha)**

The Gods of the Bönpo and Tibetan Buddhist heavens are those deities that through meritorious acts have passed beyond *samsaric* existence; they have realised the enlightened nature, which is inherent to all beings. Some of the higher worldly deities are said to be on the verge of achieving enlightenment and passing into the heaven realms; for instance *Pehar* (Nebesky-Wojkowitz 1956). These gods reside in the various heavens that exist above Mount Meru. Some of them act as high-level religious protectors. In this class we can also include divine Bodhisattvas such as: *Chenresi* (skt. *Avalokiteśvara*) and *Jampel* (skt. *Mañjuśrī*) in the Buddhist tradition.

and the corresponding *Kunzang Gyalwa Gyatso* and *Mawé Sengé* in the Bön tradition. Though not strictly speaking, ‘gods’ (*lha*), Tibetans approach them like divinities.

### **7.1.2 The Tantric Deities (Yidam)**

The deities of the Tantric texts are expressions of enlightened consciousness. Within Tibetan Buddhism and the Bön religion there are numerous Tantric lineages. Each Tantric deity has one, or sometimes a cycle of texts associated with it. The texts explain the attributes of the principal deity, the subsidiary deities connected with it, its *mandala*, and the rituals associated with it. The principal Tantric deities are referred to as *yidam*. This is the shortened version of *yi kyi damtshig*, which means ‘the sacred bondage of the mind’ (Trungpa 1982:228). The idea is that the *yidam* is the means by which the practitioner can experience their own enlightened nature. In Tantric practice, the practitioner assumes the form of the *yidam*, and by so doing, through the power of the ritual, his or her consciousness is transformed into that of the Tantric deity; by this means the lama acquires the power of the deity and is able to control the activities of the gods of this world, and malevolent spirits.

It is common for Tibetans to have a special relationship with one particular *yidam*, due to them receiving the appropriate empowerment (*wang*) from a lama, or it may be that the *yidam* has been passed down through their family line. Geshe Tenzin Dargye’s family has a special relationship with the Bönpo *yidam*, *Walchen Gekhö*. It was this deity that he most often resorted to when he was carrying out healing rituals. The main *yidam* of the Bönpo temple next to the medical school at Dhorpatan is *Takla Mebar*.

### **7.1.3 The Gods of this World (jigten pé lha)**

There are abundant classes of gods of this world found in Bönpo and Buddhist texts. Most of them are associated with locations in the natural environment such as the sky, mountains, mountain passes, rocks, caves, rivers and lakes. The more powerful deities usually have a retinue of helpers. The relationship between the main deity and the entourage is likened in the texts to a court with the main deity as chief, with generals and ministers and a range of lesser attendants in service. Tibetans

sometimes make use of another cosmological scheme which divides the Universe into three levels, according to the specific abodes of various classes of beings: in the heavens or the sky there is the white *lha*; in the intermediate realm there is the red *tsen* and yellow *nyen*; and under the earth there is the blue *lu* (Tucci 1980:167, Stein 1972:204).

A well-known Nyingmapa classification is the 'eight classes of deities' (*lha sin degyé*). There are various renditions of this classification. Samuel (1993:162) following Cornu (1990) gives ten deities whose names often appear in this list. The *lu* often have a serpentine appearance, they live in rivers, lakes, or streams, but can also be found on the land in caves and trees and so on. The *lu* have been identified with the Indian *nagas*. The *lu* can be helpful or harmful towards humans; they are particularly vengeful if their habitat is damaged. *Nyen* live in the atmosphere and in various locations on the land, such as in forests and trees; if they are disturbed they quickly seek retribution. A whole class of virulent infectious diseases, *nyené*, is attributed to them. The *tsen* class live in rocks. They are noted for their red colour, and their martial nature. The *gyalpo*, are a powerful class of deities who often act as protectors. The leader of the *gyalpo* is *Pehar*. They are white and carry armour and are often associated with mountains. The *dud* are black malevolent spirits. The *mamo* are fierce female deities. The *sa* are deities of the planets who cause various types of disease, particularly epilepsy. Finally there is the *nodjin*, the deities who reside over the wealth of the soil, and the *lha* who generally have a positive attitude towards humans.

This eightfold classification is only one of numerous classifications. One Nyingma text cited by Nebesky-Wojkowitz (1956) lists thirty classes of deities. A few important classes of deities are missing from the above eightfold classification. There is also the *sadag*, the 'owners of the land'; these deities are intimately related to Tibetan astrology. In Dhorpatan, I was told that rivers are the blood of the *sadag*, stones are the bones, and the earth is the *sadag*'s body. If harm is done to any of these environments, the *sadag* will seek retribution. One important group of local deities is the *gowé lha* (Nebesky-Wojkowitz 1956). This is a collection of five deities that are associated with an individual from birth: the *sog lha*, 'the god of life' who resides in heart, the *po lha*; 'the male god' who resides in the right armpit; the *mo*

*lha*, ‘the female god’ who resides in the left armpit; the *dra lha*, ‘the enemy god’ (that is to say the god that provides protection against enemies), who resides at the right shoulder, and the *yul lha* ‘the god of the village’, who resides at the crown of the head. The *yul lha* is also an important local god in its own right, being the protective deity of a given locality.

The worldly gods, as well as having the potential to cause harm, can also be bound to serve as religious protectors (*chö kyong*, ‘protectors of Buddhism’, *Bön kyong* ‘protectors of Bön’, *srung ma*, ‘guardians’). Tantric deities and the gods of the Buddhist heavens can also serve in this capacity, but an important distinction must be made between their motivation and that of the worldly protectors. The higher class of protectors are known as ‘the divinities that have passed beyond samsaric existence’ (*jigten lé depé srung ma*) (Nebesky-Wojkowitz 1956), and as enlightened beings their motivation is aligned with that of the Buddha. A famous group of Buddhist protectors of this class is the *drag she gye*, ‘the eight fierce destroyers’.<sup>1</sup> The most important protector of this class in the Bönpo tradition is *Sipai Gyalmo* who has three faces and six arms and rides a black mule. She also manifests in a form with two arms and one face as the fierce protector *Yeshe Walmo*. Protectors belonging to the lower group are known as worldly protectors (*Jigten pé srung ma*), these are deities that are still within *samsaric* existence who have been bound by oath (*damtshig*) by a lama to protect the Buddhist or the Bönpo teachings.

#### 7.1.4 Malevolent Spirits (*dre* or *dön*)

The fourth general group of spirits are referred to by the generic name *dre* or *dön*. This term covers a wide range of malevolent spirits that are always trying to cause harm and create obstacles for people. Stories about *dre* abound in Dhorpatan. I will recount some of these stories in the next section. Geshe Tenzin Dargye told me that there are many *dre* in the vicinity of the valley, and he is often called upon to perform rituals to counteract the harmful effects of their activity.

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<sup>1</sup> *Palden Lhamo, Gonpo, Namthö sré, Shinjé, Cham sing, Tshang pa karmo, Tamdrin, shinjé shé*. These protectors all belong to the higher class except *Tshang pa karmo* who belongs to the lower class, and the last two deities who are *yidams*. See Nebesky-Wojkowitz (1956) for a discussion of their appearance and attributes.

Some *dre* are spirits of the dead that, because of some unfulfilled task, such as an existing vendetta, remain attached to the place where they lived. Geshe Tenzin Dargye said that in such a case it is the consciousness (*namshé*) of the person, which lingers after the death of the body. He told me that about two years before, he and another Bönpo lama were called to a village near Jomson to try and help a sick woman. They recognised the sickness as spirit possession, and in response they tied blessed cords around the third finger of each of her hands. The reason for this is these are the channels spirits often use to enter and take possession of somebody; by blocking them with blessing cords they effectively trapped the spirit inside the sick woman's body. They then proceeded to question the spirit about its motives. It turned out that the spirit causing the harm was a person from a nearby house who had died three years before in a hospital in Kathmandu. They found out that the cause of the problem was the dead person's relatives had not performed the correct ritual after the woman's death. The two lamas then taught the dead woman how to do the ritual. After this they removed the blessed cords and the sick woman returned to consciousness, having no recollection of what had happened. Such a spirit is known as a *shindre*. Another type of *dre* that I was told about by Geshe Tenzin Dhargye is the *songdre*. This is a person, usually a woman, who has an inherent power to cause harm, This power is passed on through the family line. A short account of both these classes of *dre* can be found in Tucci (1980:187).

### **7.1.5 Harmful Spirits as Pathogenic Agent**

As can be seen from the descriptions given above, many deities are of a temperamental nature and have the potential to cause harm if they are disturbed. In numerous locations in the medical texts diseases are attributed to various classes of spirits. Often the only way to treat these diseases is by resorting to ritual. The first chapter of the fourth volume of the *Bum Shi*, which deals with pulse diagnosis, has a section, which details pulses indicative of the action of malevolent spirits. It begins by explaining the qualities of the pulse, which indicate harm by malevolent spirits to the five solid organs (*dön nga*)<sup>2</sup>, and it lists the types of spirits involved. It then goes on to describe the qualities of the pulse of various specific diseases that are caused by

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<sup>2</sup> Heart, liver, lungs, spleen, and kidneys.

the action of spirits. Some of the spirits named in the text are: the *kordag*, *gyalpo*, *lutsen*, *jangmen*, *mu*, *lu*, *sadag*, and *nyen*, along with numerous others. The following chapter on urine diagnosis also has a section on the qualities of urine, which denote the action of malevolent spirits. It contains a long list of classes of spirits that are known to cause disease. In the third volume of the medical text, which details Tibetan nosology, spirits often appear in the list of contributory causes of specific diseases. Section eleven of the third volume has five chapters that are entirely devoted to diseases caused by harmful spirits.<sup>3</sup>

There are also whole groups of infectious diseases, which are attributed to the action of spirits. I have already mentioned the class of diseases known as *nyené* after the *nyen* class of spirits that cause them. Das (1995) gives the Tibetan name and a short description for fifteen of these diseases. Nyima, the eldest medical student in the school, told me that the Khyungtrul Rinpoche's commentary to the main medical text lists eighteen. Usually, what prompts the *nyen* to act in this way is human activity that causes damage to the environment, such as quarrying work or cutting down trees. Another class of infectious diseases caused by spirits is *rim*: this includes flu (*cham rim*), and typhoid fever (*rim mi zepa*). Amchi Gege told me that in the past, that is to say during the time of Tönpa Shenrab, none of the *nyené* class of diseases existed. He said that Tönpa Shenrab, through the power of his deep insight (*ngö shé*) knew that these diseases would arrive in the future. He said that even in his grandfather's time these diseases were hardly encountered in Tibet. According to Amchi Gege's teachers this situation changed after World War I.

Tibetan medical theory holds that the primary cause of disease is disruption in the function of three humours and the seven bodily constituents. In cases of diseases that are due to the action of harmful spirits, they are listed in the medical text not as the main pathogenic cause but as secondary causes. For instance, in the first volume of the medical text, which summarises Tibetan medical theory and practice using the metaphor of a tree, the primary causes of disease are listed as the three humours, and harmful spirits are listed as one of the four main contributory factors.<sup>4</sup> The same pattern is also found with specific types of disease. For example chapter seven of the

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<sup>3</sup> Parts of this section have been translated and commented on by Clifford (1984).

<sup>4</sup> The others are: seasonal influence, diet, and behaviour.

third volume of the medical text dealing with types of tumour (*tren*) gives dysfunction of the three humours as the primary cause along with a few other factors, and again harmful spirits are found amongst the list of nine contributory factors.

Spirits are not just something that are spoken about in Tibetan religious texts. For the people in Dhorpatan they are an everyday reality. There was hardly a week went by when I did not hear of their presence in the valley in some form or other. As many diseases that occurred in Dhorpatan were viewed as an outcome of their activity, an understanding of the nature and of how people relate to them is of direct relevance to medicine. As I said earlier, 'medicine' in a Tibetan cultural context has a wider semantic scope than in a biomedical context. It overlaps to a great extent with Tibetan religious notions, and the students if they are to be good medical practitioners must also develop competence in this area. Even if the students do not know how to perform the rituals that are necessary to counteract the activity of harmful spirits, they should at least be able recognise the disease and know what type of ritual should be performed. In fact, all of Amchi Gege's male students have a very good knowledge of Tibetan ritual. In the context of health, there are two types of ritual that are performed by Tibetans in Dhorpatan: ritual that is carried out to maintain a positive relationship with the local deities and spirits; and ritual that is performed to bring about health when disease arises as a consequence of a disruption in this relationship. In what follows I will discuss both of these forms of ritual behaviour. Before doing this, I will try to evoke an impression of how spirits were experienced by people in the valley, by recounting some of the stories that were told to me.

## **7.2 Dhorpatan Spirit Stories**

There are two main routes that people take to walk to and from Dhorpatan: one passes through the valleys between Dhorpatan and the small town of Tansen to the south; the other route passes through the valleys between Dhorpatan and Baglung to the east. Both routes take about four days. On a few occasions I had to leave Dhorpatan for short periods of time, usually to organise extensions for my visa in Kathmandu. After one such occasion, I was walking back up to Dhorpatan along the Baglung route, accompanied by a Sherpa friend. We had ended our day's walk in the

village of Dharpang in the Myagdi Khola valley, and had taken a small room in a lodge at the top of the main street of the village. After nightfall, shortly after we had finished our evening meal, I went for a stroll up the street. As I was returning to the lodge, I saw what at first appeared to be a bright star. Then I realised that what I was looking at was not a star but a large bright light situated about 80ft above the river. The light was moving in what seemed from my perspective to be in the same direction as the river. After about five seconds three or four small lights split away from it for a few seconds and then merged back into the main light. Shortly after this it seemed to change direction and then disappear.

I was left somewhat bewildered. Tibetans in Dhorpatan had recounted similar experiences to me, but this was the first time that I had seen anything like this myself. In the following two days walk to Dhorpatan, I didn't discuss the experience with anybody, but I often thought about it. One thought that arose was of Evans-Pritchard's (1976:11) description of a bright white light that he saw late one night whilst he was staying in an Azande village. The light he saw was moving behind his servant's hut in the direction of the homestead of a man called Tupoi. Later that same morning an old relative of Tupoi living in the same homestead died. The Azande had no doubt that what Evans-Pritchard had seen was witchcraft. Evans-Pritchard did not know what the light was but thought it might have been someone carrying a grass torch. I don't know what it was that I saw above the river at Dharpang that night, but when I told Tibetans in Dhorpatan about my experience, there was no doubt in their mind about what it was.

On the night that I arrived in Dhorpatan after that journey, a group of people who live in the medical school compound congregated in the room in the Labrang where Geshe Tenzin Dargye and I stayed. I told everyone about the light that I had seen, and almost immediately there was a consensus amongst all in the room that what I had seen was a *dre mé*. There was nothing remarkable about seeing it. All the Tibetans in the room had either personally experienced them, or knew of someone who had. In fact their existence was taken to be so commonplace that the conversation quickly moved on to something else.

The Tibetan word, *dre mé*, literally means 'spirit fire'; this derives from their fire-like, luminous appearance. As we have seen, the word *dre* is a generic term for 'a

demon' or 'an evil spirit'. The word *dre mé* was used in Dhorpatan not to refer to one class of spirits, but to a series of different kinds of spirit-related occurrences. Geshe Tenzin Dargye explained to me that different kinds of spirits can appear in this way, he said that quite often they appear as blue lights. He had seen *dre mé* on several occasions in different areas in the Himalayas. He said that it is rare to get close to them; sometimes when one does get close to them their form can be discerned to be that of a woman. He also said that people who have died and who have got stuck in the *bardo*<sup>5</sup> can take the form of a *dre mé*, in which case they are known as *shindre*.

Most Tibetans and Nepalese who live in the valley have a firm conviction in the reality of spirits. For them, the environment in which they live is replete with such entities, and the health of the community and the individual depends on maintaining an harmonious relationship with these beings. Many people claim to have seen spirits or witnessed their presence in some form or other.

Only a small number of Tibetans within the community, invariably amongst the few who have received a Western-style education, are sceptical of such claims. For instance, one night I was with the settlement officer, and another two Tibetans, in the settlement officer's house. His house is situated in the Namdru Tang settlement at the western extremity of the valley. In this area, the valley opens forming a large plain. The plain runs into another valley leading down into the lower hills to the south. At this point, as they are obstructed by high hills everywhere else, clouds frequently issue into the valley skirting above the tops of the homesteads. Often on a nighttime, jackals can be heard howling in the surrounding forest. In this location of the valley, the strong and powerful presence of the natural environment is especially striking.

We were drinking a few beers and generally chatting about things, when the conversation swayed towards the subject of spirits. One of the Tibetans, who had arrived in Dhorpatan from Tibet as a young child with his family, and had been brought up there, remarked about the abundance of spirits in the valley, and how often people encountered *dre mé*. The settlement officer jovially replied that this was nonsense, he had been there a year and had never seen anything; the notion of *dre mé* was just an old Tibetan superstition with no basis in reality. The gauntlet was quickly

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<sup>5</sup> The intermediate realm that the consciousness passes into after death, from which in due course it will either achieve liberation or be reborn into one of the six realms of existence.

taken up and the person who had made the first comment said that there was no doubt that they existed, many people had experienced them. He said that we could experience them at that time. He knew a valley nearby, where *dre mé* were often seen, and if we were to go we would be sure to see one or even more. The settlement officer remained unconvinced, but wasn't prepared to go up the valley to corroborate his opinion.

On several occasions during the time that I was in Dhorpatan I heard that people had encountered spirits of the class of *dre*. Early one morning shortly after everyone staying in the gompa compound had awoken, I was aware of some commotion. It turned out that the night before, one of the monks had got up about one in the morning and left the monks' residence to go to the toilet. In the field, just beyond the new medical building, he had seen what to him looked like a fire. He also noticed that there were a number of dogs near the fire, barking at it. In the morning he had gone to the area where he thought he had seen the fire but could see no trace of it. The following night, again he left the monks' residence to go to the toilet, this time about midnight. As on the night before he saw the 'fire' in the same field. This time he called Sonam, one of Amchi Gege's monk medical students. What they saw, as they described it, was a ball of fire, hovering some distance above the field. At a certain point it split into three fires, which stayed separate for a while and then merged back together. It stayed hovering for some time and then quickly flew off into the forest.

Early the following morning when we were all discussing what had happened, there was no doubt for the Tibetans that this was a *dre mé*. Tenzin Dargye said that if it came again people should not go near it, as it could be dangerous. By that time I had heard numerous stories about spirits in Dhorpatan. I asked Tenzin Dargye why it was that whenever somebody encountered a spirit, there was always talk of danger; wasn't it possible that the meeting could be of no consequence, or even propitious? He replied that classes of spirits like the *sadag*, *lu*, and *nyen*, were not inherently malevolent or benevolent, they could sway in either direction. He told me about one spirit of the class *lu* that lived in a juniper tree in the garden of his family house near Jomsom. The *lu* was generally well disposed to his family, but to preserve this beneficial relationship, the juniper tree and the area around had to be treated with great respect. Sometimes his family would recite prayers and make offerings to the

*lu*. He added that many types of spirits could be either helpful or harmful, but *dre* were different, they are always inclined to harm.

On another occasion, earlier in the evening the same two monks thought they could see a *dre mé* some considerable distance away on the other side of the river. Several people gathered, including myself to watch the spectacle. We all watched bemused as the light danced and flickered and seemed to change colour. As time went on it became increasingly evident that what we were watching was the light of a fire in a Nepalese homestead. This time, to everyone's disappointment, it was a real fire.

Although the Tibetans in Dhorpatan were quick to interpret strange phenomena or untoward events in terms of the activity of spirits, this was not always the case. One young Tibetan told me that he had once seen a large light shoot across the valley. Some Americans had told him about UFOs, and he thought that what he had seen could have been one of them. After he told me this, he explained to me about another bizarre and unfortunate event that had just happened in the valley. I had just come back from one of my visa renewing sorties, and the event had occurred while I was away. He said that a Nepalese woman had gone up into the mountains with her child to collect firewood. When she returned to her father's house, she put the basket down and to everyone's horror it contained not firewood, but the body of her child who she had hacked to death. He said that when the police arrived she suddenly became aware of what had happened, and became hysterical having no memory of killing her son. In her hysteria, she frantically demanded that people kill her the way that her son had been killed. He accounted for her behaviour by attributing it to spirit possession. Later I discussed the event with Geshe Tenzin Dargyey, and asked him to explain how the alleged spirit possession had occurred. He replied, that in his opinion there had been no spirit possession, what had happened was a case of 'mind crack' as he put it, using the English phrase.

Often nothing arises as a consequence of an encounter with a *dre*. But as I have said, they are looked upon as being of a malevolent nature and as having the potential to cause harm. Towards the end of my stay in Dhorpatan, Sonam, one of Amchi Gege's monk medical students was afflicted by a *dre mé*, which he had encountered near his house. He said that, as he was walking down a path, the spirit

shot past him in front of where he was walking. It appeared as a big white light, and as it moved it had a tail like a shooting star. It stopped at the other side of the river, and hovered there for a while and then disappeared. Shortly afterwards, Sonam started to feel ill, and by the next day he had a strong fever. Within a few days a large boil appeared on his neck. Boils (*nyen bur*), are traditionally viewed as resulting from the retributive activity of the *nyen* class of spirits, though the affliction is not confined to them alone. He received medicines from Amchi Gege, and the monks carried out appropriate rituals at his house. He was away from the medical school for about two weeks as a result of the illness. He remained certain that the cause was the *dre mé*, which had passed in front of him that night.

As we have seen, *dre mé* are just one class of spirits amongst many that exist in Tibetan cosmology. The question is not whether such beings exist or not, rather given the fact that they do exist, the issue is how best to preserve a harmonious relationship with them. Yungdrung, another of Amchi Gege's monk students told me that, when he was about ten, he was out playing with some friends at a place where a spring emerges from under a large rock at the bottom of a hill. This place is acknowledged as being the dwelling place of *lu* and is surrounded by Tibetan prayer flags. As young children this was of little concern for Yungdrung and his friends. They found a frog in the water, and took it out because it seemed very colourful. After playing with it for a while they killed it. The next day Yundrung could hardly move his legs at all. The lama who was there at the time discovered that by killing the frog he had offended the *lu* that lived in the spring. Frogs are thought to have a close association with this class of spirits. Yundrung told me that the lama performed the appropriate ritual and shortly afterwards he could walk again.

On another occasion, Yungdrung told me about an event that had happened the previous year when a spirit had almost killed a Tibetan man. At that time Yungdrung was staying in his house at Khangpa Chugsum. The house of the Tibetan man is nearby. That night the man was sitting alone when a Tibetan woman walked into his house. He said she was very beautiful and she was wearing his wife's clothes. She approached him and grabbed him by the throat and said that she was going to kill him. He could remember nothing else because at this point he became unconscious. As a monk and a medical student, Yungdrung was called to help, but as he explained

to me he had very little experience of how to deal with such events and did not really know what to do. First he did some mantras and blew on the afflicted man, but this seemed to have little effect. Then he took some pieces of hair that he had from a powerful lama and burnt them with some incense and wafted the smoke towards the man. At this point, the man tried to move away from the smoke and Yungdrung had to struggle with him to allow some smoke to go into his face. Finally, when the man breathed the smoke, he let out a cry and suddenly became conscious again.

Many people in Dhorpatan have stories to tell similar to Yundrung's. One day I was discussing spirits with a young Tibetan woman. She told me that about ten years before, her uncle had had a terrifying experience with a spirit whilst crossing a bridge near the school at Bagata. She told me that ever since then she has felt uncomfortable crossing the bridge. He had been out all day and was on his way home when he reached the bridge at about seven in the evening. As he was crossing the bridge a black mass appeared before him totally obscuring his foreground vision. Then something grabbed his arm and he heard a voice say, 'What did you do with the money I lent you this morning?' He hadn't borrowed any money from anyone and in a state of terror he automatically started reciting the mantra of the main protector of the Bön religion *Sipai Gyalmo*. As he did this, the path ahead of him became visible and he managed to make his way home. The next day he became ill, and rituals had to be performed to help him return to health.

The Nepalese who live in the valley perceive the environment in a very similar way. They also have many tales to tell about spirits, some associated with specific locations in the valley, others living in the surrounding forest and mountains. One person that I spoke to told me that before the Tibetans arrived, in the location where the gompa and medical school are now situated, a one-legged spirit had been seen on a few occasions; for this reason the Nepalese call the Gompa compound *ek kutta*, 'one leg'. He also said that further down the valley on the edge of the forest on the other side of the river from Chendung, on a few occasion people had seen a spirit in the form of a naked women with her hair hanging down to the ground. I also heard that in the areas near the school at Bagata many people, both Nepalese and Tibetan, had encountered a small stout immensely hairy spirit. At the far western end of the valley there is a large hill, which is considered to be the residence of a local goddess.

Every year the Nepalese gather at the shrine at the foot of the hill to carry out a large ritual in her honour, involving the sacrifice of hundreds of goats. The ritual is referred to as the Uttara Ganga Puja, after the name of the river that runs through the valley, which is turned red with the flow of sacrificial blood.

When problems arise as a result of the activity of spirits, the Nepalese have their own traditional shamanic healers whose aid is sought. In the area of Dhorpatan they are known as *jhānkri*.<sup>6</sup> When a sickness is deemed to have been caused by some kind of spirit, a *jhānkri* is called to the house. In full ceremonial costume, aided by his drumming and dancing he will go into trance, in which state he is able to communicate with spirits and find out the cause of the disease and how it can be remedied.

One day I heard that a young boy in a nearby Nepalese settlement was suffering from an unusual illness and a *jhānkri* was on his way to treat him. The boy was twelve years of age, and had been ill for five days. He had a fever and had almost completely lost the capacity to move his legs. I went with Tenzin Dhargye. By the time we had arrived the event was well underway. We could hear the *jhānkri* drumming and singing in the house, and we waited outside with a group of people to see what would happen. After some time two Nepalese men emerged up the path from the back of the house. Each man was clasping on to a stick in front of him with both hands. The sticks were held vertically and one end bounced up and down on the ground erratically as if it had a life of its own. The *jhānkri* was walking behind them singing and playing his drum. He had ascertained that the cause of the boy's sickness was a *naga* (the same class of spirits that the Tibetans refer to as *lu*).

Through his spirit helpers the *jhānkri* was using the sticks to find the exact location of the *naga*. The men carrying the sticks wandered far and wide in the large field next to the settlement. One of them kept coming back to a small area just next to the boy's house. Eventually, in this location, with a dramatic gesture he stuck the stick in the ground in the middle of a large bush. Immediately the *jhānkri* went to the bush, crouched down and started drumming and singing. Within a few minutes he was fully possessed by the *naga* who was then questioned by the *jhānkri*'s assistant.

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<sup>6</sup> On the subject of *jhānkri* in this region of Nepal see Maskarinec 1989, 1990, 1993, and Sales 1991. On the subject of *jhānkri* and in other areas of Nepal see Hitchcock & Jones 1976, Miller 1997, MacDonald 1983.

The *naga* told the father of the child, and the thirty or so people present that this is where he lived and the boy had come and used the place as a toilet. It said that if a *puja* was not promptly done, involving the sacrifice of three chickens, the child would be dead within ten days. At this point the father, now in great distress, apologised profusely to the *naga*, saying that it would never happen again, and promising to provide the three chickens for the sacrifice. The *jhānkri* then quickly climbed about thirty feet up the steep sided hill and clambered into a small nook in the rock. The *naga* who still possessed the *jhānkri* said ‘I live here’, and then in an instant the consciousness of the *jhānkri* returned.

He climbed down, looking somewhat shaken. As we walked back to the house he was evidently fully aware of everything that happened. He knew Tenzin Dargye was the head lama in Dhorpatan and he greeted him. Amongst many of the Nepalese, Tenzin Dargye had acquired a strong reputation for his ability to deal with this kind of disease. The *jhānkri* asked him if he thought the boy would get better. He replied that he did not know. He said first you do your *puja* and if he doesn’t get better I will try. In the end he did not need to as within a few days the boy was feeling well and had fully regained the use of his legs.

I have tried to give an impression of the prevalence of ideas about spirits amongst the people living in Dhorpatan. Before the students enter the medical school they are already well versed in notions about spirits and the ways in which they can cause disease. Later I will discuss a series of patients who came to the clinic whose illnesses were interpreted in this way. This class of disease, known as *nōpa*, occurred on several occasions whilst I was in Dhorpatan. Tibetans try to prevent the occurrence of this kind of disease by constantly carrying out rituals with the aim of maintaining a harmonious relationship with the local deities and spirits. The following section presents an overview of this kind of ritual behaviour.

### **7.3 Setting the Ground for Prosperity**

As we have seen, Tibetans in Dhorpatan, as in other Tibetan communities that have retained traditional cultural forms, share their world with a host of gods and spirits, many of which, in their view, have the potential to cause harm. These beings are commonly associated with locations in the natural environment such as mountain

passes, rivers, springs, caves, trees, rocks, and so on. Harmony, health and prosperity within the community are considered to derive from the maintenance of the correct relationship to the environment and the beings that inhabit it. This entails behaving with respect towards the environment and the periodic performance of rituals connected with the gods and spirits of this world, the religious protectors, and the enlightened beings and Tantric deities.

From a Buddhist and a Bönpo perspective, the prescribed attitude that should be taken towards worldly deities is one of respect, not devotion. The rubric is that one should take refuge only in the three jewels of the Buddha, Dharma, and the spiritual community. Yet from a practical point of view, Tibetans direct much attention to the maintenance of the correct relationship with the local deities and spirits. This is so, because if this relationship is in any way disturbed, all manner of harmful consequences, including disease, may ensue. Thus Samuel (1993) has characterised the religious motivation of Tibetans, and this is applicable to followers of Buddhism and the Bönpo religion, as having a three-fold nature:<sup>7</sup> the bodhi orientation involves activity dedicated to achieving enlightenment; the karma orientation involves activity that aims to accumulate positive karmic merit; and the pragmatic orientation relates to success and prosperity in this world through maintaining a positive relationship with the environment and the local deities and spirits.

Some rituals are done only by monks and lamas, but there are many that are also done by lay people. Before arriving in Dhorpatan from the Baglung direction, apart from the likelihood of encountering Tibetans on the path, the first visible sign of the Tibetan community is on the top of the Jaljala pass, four to five hours walk from the settlement. Here there is a small pile of stones, mostly painted white, with different coloured prayer flags hanging from it, and from ropes tied between it and a nearby tree. The path leading up to the pass is a four hour-long steep climb through dense forest, which, so it is believed, is a popular hiding place for thieves. The forest finishes at the top and the path continues along a spacious open valley. Arriving there is both a physical and psychological relief. Every time I arrived there, Tibetans threw a stone, or tied a new prayer flag on to the structure shouting out, *'ki ki so so lha gyal*

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<sup>7</sup> This is a reworking of Spiro's (1971) three forms of Buddhism: kammatic Buddhism, nibbanic Buddhism, and apotropaic Buddhism.

*lo*, 'the gods are victorious', or sometimes just the syllable 'so' several times in loud succession.

These cairns are known as *lhatho*, and are set up on mountain passes in honour of the mountain deities. Sometimes the structure also includes the horns of animals such as ram, ibex, or yak. Stein (1972:206) interprets the '*ki ki so so lha gyal lo*' phrase as a battle cry, which relates to the martial nature of the mountain gods, and to the strategic importance of the mountain pass. He points to the fact that other strategic crossing places such as bridges and fords are also often covered in prayer flags.

In the valley of Dhorpatan, the Tibetan settlement can be clearly distinguished from the Nepalese homesteads by the prayer flags, hanging from the roofs of the Tibetan houses and from flag poles scattered around the houses. Prayer flags also adorn a point at the eastern end of the settlement marking the point where a stream emerges from under a rock; this is the abode of the *lu*, which I discussed earlier in connection with Yungdrung becoming ill after killing a frog. Along the main pathway leading to the different parts of the settlement are *mani* stones, with mantras carved on them. In the Buddhist areas it is the mantra, *Om Mani Padme Hum*, of *Chenresi*, the Bodhisattva of compassion; in the Bönpo areas it is the mantra *Om Matri Muye Sale Du*. By circumambulating these *mani* stones in the right direction,<sup>8</sup> people generate positive karmic merit. In the gompa compound there is a building with a large prayer wheel (*mani khorlo*), which people set in motion for the same purpose. Some of the older generation Tibetans also use hand held prayer wheels (*mani lag khor*).

Already within the first few months of my stay in Dhorpatan I witnessed a range of ritual activity that related to the activity of local deities and spirits in the valley, particularly to diseases that were thought to have been caused by them. In response to my questions on the nature of these rituals, Geshe Tenzin Dhargye, who was directing most of this activity, set his explanation in a traditional Bönpo framework. He explained to me that all Bönpo knowledge is classified into nine ways (*thegpa gu*) (see appendix A) and what he had been doing was mostly part of the first way, the 'Way of the Shen of the Cha' (*cha shen thegpa*). This encompasses four types of

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<sup>8</sup> Buddhist circumambulate sacred objects in a clockwise direction; Bönpo do it anticlockwise.

activity: divination (*mo*), astrological calculation (*tsi*), ransom rituals (*to*), and medicine (*men*), which is sometimes listed as medical diagnosis (*ché*).

Popular ritual practice has a number of related aims: to bring about prosperity and auspiciousness (*tashi, delé*), long life (*tshering*), health (*né mé*), and wealth (*long chö*) (Tucci 1980:172). Generally, ‘auspiciousness’ is signified by the Tibetan word *tashi*, though, as in the title of the first of the nine ways the word *cha* can also be used. Geshe Tenzin Dhargye explained to me that *cha* is the potential for prosperity that can be invoked in rituals to bring about actual prosperity (*yang*). Thus in his view, *yang* and *cha*, though both referring to prosperity, one refers to a potential whilst the other refers to a tangible expression. I asked him whether *yang* was the same as accrued positive karma (*sonam*). He said that *yang* and *cha* are similar to positive karma, but they are not the same.

Tempa Yundrung, the junior *Lopon* of Triten Norbutse monastery in Kathmandu, explained to me that the reason why the first way, is called the way of *cha*, is because it deals with the methods used to find out the causes of problems that we have in this life, and the techniques that are used to eradicate them. He said that the rituals connected with it are based on the principle that everything is interconnected, that everything in the external world is reflected in the microcosm of the human body. The five elements in the outer world have their counterpart in the human constitution; they permeate the whole of the physical constitution, but also have a particular association with the five mental poisons, the five solid organs, the five orifices, and so on. He said that this is explained in detail in the Tantric teachings of the higher ways. It follows from this that the actions people make in the external world are inextricably related to their physical and psychological well-being.

In the Bön texts, *cha* is related to two other concepts: *wangthang* and *lungta*. *Wangthang* refers to a person’s charisma and personal power; it relates to the ability to perform in some capacity to the highest order, for this reason Norbu translates it as ‘ascendancy-capacity’ (Norbu 1995:62). *Lungta* is the name given to prayer flags that are usually found in abundance on the roofs of Tibetan houses and on the tops of surrounding hills. In the centre of the prayer flag there is a picture of a horse carrying a jewel on its back. Around the horse are four animals, one in each of the four corners: a tiger, a lion, a dragon, and an eagle. The first syllable of the Tibetan word



**Plate 21** - Geshe Tenzin Dargye, Nyima and another Tibetan from the community setting up a *lungta* flag on a nearby hill top.



**Plate 22** - Geshe Tenzin Dargye making offerings at the culmination of the Jamma ritual.

*lungta* is commonly spelt in two ways, giving either *rlung rta*, 'wind horse' or *klung rta*, 'river horse'. Both spellings are pronounced in the same way. Karmay opts for the *rlung rta* spelling, as the ideal horse (*ta chog*), due to its speed, is traditionally associated with the wind (1993). In his discussion he connects the four animals with the four great *nyen*, the four divinities of the *rLung rta*, and the four elements. Norbu prefers the *klung rta* spelling. The reason he gives is that in ancient texts *klung* had the meaning of 'space', which is now represented by the word *klong*. In his view the four animals represent the four elements of earth, water, air and fire; the horse represents the fifth element of space. In his view, as everything depends on the five elements, the symbolism relates to the speedy transformation of negative circumstances into beneficial ones.

Both authors concur that the symbolism is concerned with prosperity and well-being. *Lungta* also come in the form of small squares of thin paper with the symbols printed on them. The ritual of the *lungta* is concerned with increasing ones good fortune, and can be done at any time, but is usually done when embarking upon a new venture. On one occasion I went up into the hills looking for medicinal plants with Geshe Tenzin Dargye and Nyima. When we reached the highest point he planted a large stick firmly in the ground and fastened a *lungta* prayer flag on the top of it. We were all given a handful of barley grains and after he had finished the prayer to the local divinities, we threw the grains in the air in a gesture of offering (see Plate 21). With the small *lungta*, the same ritual is done and the papers are thrown into the wind usually in great quantities. The mechanism that underpins the efficacy of this ritual can be understood according to Tenpa Yundrung's explanation about the relationship between outer and inner elements. He said that by throwing the *lungta* papers into the wind, or by setting up *lungta* prayer flags, this in turn affects the inner winds and brings about good fortune.

The interrelationship between the outer and inner elements also forms the basis of Tibetan medical theory. The five elements of earth, water, fire, air, and space are the fundamental components of everything that exists. Disease arises when these elements are in a state of disequilibrium (Tsarong 1981). Cures are effected by counteracting imbalances in the body by using medicines that have the opposite potency to the disease; for instance hot diseases are treated by cold medicines. The

interrelationship between the outer environment and the human constitution can also be seen in the way the body responds to seasonal change; each of the three humours and the five elements rises and declines at different times of the year. For this reason, as I have discussed in chapter five, chapter one of the fourth volume of the medical text, which deals with pulse diagnosis, contains a section that deals with the rising of the five elements at different times of the year and the affect this has on the quality of the pulse.

Geshe Tenzin Dargye told me that the main Bönpo ritual that is used to accumulate *cha* and *yang* is the *cha khug yang khug*, which is connected with the deity *Nor gyi dzamla lha*. This can be done at any time that seems appropriate. He explained that one occasion when it is often performed is during marriages. The ritual is carried out on behalf of the bride's family. The reason for this is that the bride will usually go and live with the husband's family. In effect this means that her own family will lose a daughter and this could be harmful to their *cha*. Some of their *cha* could go with their daughter, having a positive effect for her husband's family, but a possible negative effect for them; the ritual is done to strengthen their *cha*.

He gave another related example. If somebody has a special horse, this will attract other horses to the owner. But if this special horse is lost in some way or other, so will the *yang* that it embodies. Some Tibetans in Dhorpatan have up to forty horses. They use these horses for carrying out trade between the mountain communities. Some people carry out trade between Tibet and Nepal. One of the Tibetans who does this has a horse that is renowned for its strength and beauty. At a certain point when I was in Dhorpatan, I got news that he had just arrived back from a trading journey to Tibet. I heard that when he was in Tibet a rich nomad had taken a fancy to his horse and offered him twenty yaks for it. Even with such a generous offer, he refused to part with the horse. In his view this horse was his wealth god (*norlha*), and to part with it would be tantamount to losing his capacity to accumulate wealth.

Some other activities that are done to set up and maintain the conditions for prosperity are: decorating *chorten*;<sup>9</sup> repainting sacred buildings, or images, carving

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<sup>9</sup> The Tibetan equivalent of the Sanskrit *stupa*; these are structures that represent Buddhahood: they often contain sacred writings or relics of accomplished lamas.

mantras into rocks; setting animals free (*tshethar*) that otherwise would be slaughtered; and the recitation of sacred texts, either by oneself or by sponsoring others to do it.

Examples of most of the above can be found in Dhorpatan. In the part of the settlement where I stayed, there was an old goat that wandered around freely. This had been set free by a Tibetan living nearby in an act to bring good fortune to his family. At a certain point during my stay, everyday for about two months an old Tibetan man could be seen sitting outside the medical school carving the Bön mantra *Om Matri Muye Sale Du* on flat pieces of stone; this had been sponsored by Amchi Gege. Geshe Tenzin Dargye and the other monks, including Amchi Gege's three monk students, were frequently called upon to go to houses and recite religious texts. Depending on what was to be recited this could take up to a week and sometimes longer.

Most of the Tibetan houses have an altar with religious statues on it, and pictures of deities hanging on the wall above it. Here, water is offered in small dishes every morning; butter lamps are also frequently burned in front of the images. Another common practice carried out by monks and lay people alike is the *sang* offering. This is usually done early in the morning but can be done at any time. It entails the burning of aromatic plants; juniper is usually used as it grows in abundance in the high Himalayan valleys, and creates large clouds of smoke. As the drifting aromatic smoke wafts into the air, a prayer is recited offering it to the local deities. This has the effect of clearing obstacles and maintaining a harmonious relationship in the environment.

Along with the general ritual activity that is carried out in an intermittent fashion throughout the year by monks and lay people with the aim to maintain a positive relationship with the local deities and spirits, every year the monks and lamas carry out three large rituals for the benefit of the community. The first ritual is dedicated to the three classes of beings: the *sadag*, *lu* and *nyen*.<sup>10</sup> I was told that the best time to perform this ritual is in the spring, as this is the time when these beings awake. The ritual I observed was carried out at the beginning of June and lasted for a week.

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<sup>10</sup> A short description of a similar Bon ritual dedicated to the *sadag*, *lu* and *nyen* has been given by Norbu (1995:131).

Before the ritual began there were several days of preparations, which involved making the butter lamps, drawing the mandala<sup>11</sup> with coloured sand, and making the appropriate *tormas*.<sup>12</sup> During the ritual, different types of objects are placed as offerings on specific locations of the mandala, this includes: sweet smelling herbs, branches of juniper, various types of *torma*, *gyangbu*,<sup>13</sup> *pho dong* and *mo dong*,<sup>14</sup> and *namkha*<sup>15</sup> and *dadar*<sup>16</sup> (see Plate 25). During the ritual, the *lu*, *sadak*, and *nyen* are called to the mandala to receive the offerings. At the close of the ritual, the mandala is dismantled and the offerings are gathered together in four big metal dishes and placed some distance from the temple in each of the cardinal directions next to an object representing the element of that direction, such as next to a stream for water, or a stone for earth. In this way the spirits are appeased and a positive bond is struck between them and the human community.

The next ritual occurred around the middle of August and again lasted for a week. Whenever I asked Geshe Tenzin Dhargye about this ritual, he always referred to it as the ‘gompa puja’. The generic Tibetan term for ritual is *shabten*, but most often he used the Sanskrit term *puja*. This ritual is the annual ritual of the Bönpo temple (*lhakhang*) that is situated next to the medical school; it focuses on the Bönpo protectors, *Nyipangse*, *Midü*, *Gyalpo Sheltrab*, *Tong Gyung*, and the class of the *tsen*.

The third ritual, which Geshe Tenzin Dhargye referred to it as the ‘people’s puja’ commenced a few days after the end of the ritual of the Bönpo protectors. The ritual involved the reading of two sets of texts: the *bum*, the sixteen volumes of the Bönpo prajnaparamita sutras, and the *Ziji*, the long biography of Tönpa Shenrab. After the monks had done this they performed a lengthy ritual dedicated to the Bönpo goddess

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<sup>11</sup> The mandala is a concentric diagram representing the palace or environment of a Tantric deity, and the deity’s emanations and attributes.

<sup>12</sup> An offering cake made from barley. *Tormas* come in many different shapes and colours, corresponding to types of ritual and deity.

<sup>13</sup> A wooden stick with three strings tied on it; I was told the strings represent, life (*srog*), body (*lü*) and ascendancy-capacity (*wangthang*).

<sup>14</sup> Wooden sticks with pictures of men (*pho*) or women (*mo*) on them, some *gyangbu* also show pictures of animals; they are offered to the local deities and spirits as representatives of the real thing.

<sup>14</sup> Sticks, with coloured threads wrapped around them in intricate patterns. There are many different types of *namkha*. The types used here symbolise the five elements: red thread, fire; white thread, air; green thread, water; yellow thread, earth; and blue thread, sky.

<sup>15</sup> Sticks, with coloured threads wrapped around them in intricate patterns. There are many different types of *namkha*. The types used here symbolise the five elements: red thread, fire; white thread, air; green thread, water; yellow thread, earth; and blue thread, sky (see plates 23 and 24).

<sup>16</sup> Ritual arrow used in rites of prosperity.

*Sherab Jamma*. The merit that is accumulated from the reading of the texts is dedicated to the benefit of the community for the coming year. *Sherab Jamma* is invoked as a guardian deity to bring prosperity and eliminate obstacles (see Plates 22 and 13).

The four principal peaceful deities of the Bön religion are the 'four transcendent lords' (*der she tso zhi*) which includes a mother goddess; and three male deities: the god (*lha*), the procreator (*si pa*) and the teacher (*tönpa*). In the present age these are respectively: *Satrig Ersang*, *Shenlha Okar*, *Sangpo Bumtri*, *Shenrab Miwo*. *Sherab Jamma* is a form of the great goddess *Satrig Ersang*. Her name means 'the Loving Lady of Wisdom' (Kvaerne 1995:24-28). Though she is primarily a peaceful deity the Bönpo consider her to be extremely powerful. The principal wrathful protector of the Bon religion, *Sipai Gyalmo*, is considered to be an emanation of her.

The ritual culminated in her *torma* being carried beyond the gompa compound and cast into a fire of burning juniper branches. Most of the Tibetan people of the settlement came to witness this, along with many Nepalese, and there was a strong contrast between the solemnity of the ritual and the party atmosphere amongst the people who were watching it. Though most of the valley of Dhorpatan lies above 3000m it is still engulfed by the monsoon rains before the clouds dissipate in face of the indomitable Dhaulagiri mountain range situated a short distance to the north. At this time of the year, the monsoon rains are beginning to thin out, but it is still unusual to have a day without rain. Geshe Tenzin Dargye said that after he had finished the same ritual on the previous year, the rains stopped, which he attributed to the power of the ritual. The same thing happened after the ritual I observed. Within a few hours of the culmination of the ritual, the skies cleared and the rain stopped; however they did ensue again incessantly on the following day.

We have seen that the Tibetans and Nepalese who live in the valley of Dhorpatan believe that they share their environment with a host of local spirits and deities, and that the health and prosperity of the community depends on maintaining a positive relationship with them. Numerous rituals are carried out throughout the year with the aim of preserving this positive relationship. In their studies of the main medical text the students learn about how to identify disorders that arise due to breakdowns in this relationship. It is unlikely that medicinal compounds alone will cure such diseases; it

is necessary to perform the appropriate ritual. In the next chapter I discuss some of the rituals that I observed in Dhorpatan that were resorted to when such diseases were diagnosed. I will focus specifically on the way that students in the medical school were involved in these incidents.

## Chapter 8 - The Use of Ritual in Healing

In chapter five we have seen how the students learn about Tibetan medicine in the classroom, and in chapter six I have discussed how the students develop performative memory by engaging in medical practice. All of the disorders that we saw in the twenty clinical interactions I gave in chapter six, were diagnosed in terms of Tibetan medical theory as deriving from endogenous and behavioural pathogenic factors; as such, the therapeutic course of action involved either administering medicines or external therapies such as moxibustion. However, during my stay at the medical school in Dhorpatan, I witnessed a significant number of patients whose disorders were attributed to exogenous pathogenic factors. It is to these factors, and specifically to diseases caused by harmful spirits that I will now turn.

When the cause of a disease is known to be harmful spirits then medicines alone will not suffice to bring about a cure, the spirit causing the harm must be addressed directly through ritual. In Dhorpatan, the person who was in charge of all this activity was Geshe Tenzin Dargye. As a senior monk, Amchi Gege knew how to perform the rituals, but once he had diagnosed a patient with a disorder caused by harmful spirits, he would pass the patient on to Geshe Tenzin Dargye. All of Amchi Gege's students knew about the ritual techniques pertinent to healing and every time that Geshe Tenzin Dargye performed such a ritual, he was always helped by a number of the medical students.

Healing rituals are not described in detail in the main medical text, but with certain diseases they are mentioned as a therapeutic method. However, as we will see in the following section on the disease known as *sa drib*, detailed descriptions of healing rituals can be found in medical commentaries. In the classroom the students learn about the various types of disease that are caused by harmful spirits, and how to diagnose these diseases. Learning about the ritual techniques that are used to cure these diseases is also very much a part of their induction into medical practice.

In what follows I will begin by discussing various types of diseases that are caused by spirits. I will then move on to discuss forms of diagnoses and divination that are employed when a patient is thought to be suffering from such a condition. The chapter concludes by discussing three illness episodes involving patients who

had been diagnosed as suffering from a disorder caused by harmful spirits. I also discuss the rituals that were employed in these episodes.

## 8.1 Nöpa

During my stay in Dhorpatan there were many instances of *nöpa*, indeed a large portion of Geshe Tenzin Dargye's time was taken up doing rituals to either prevent or cure it. Generally *nöpa* arises as a consequence of human activity that causes harm in the environment, such as polluting streams or ponds, cutting down trees, or carrying out quarry work. Spirits also take offence at action, which they consider to be polluting, such as food spilling out of a pot onto the hearth, or human corpses being disposed of in ways that offend them. For example, Amchi Gege told me that when he was young and living in Khyungpo, in the Kham district of east Tibet, he heard of a village where there were many cases of *nöpa*. A lama was sent to ascertain the cause of the problem, which turned out to be the people of the village burying their dead in an area of land, without consulting the *sadag*, the spirit that lived in this land. Traditionally when a person dies, a lama or a monk or some other specialist will consult the astrological texts (*tsi*) to ascertain the appropriate way to dispose of the body.<sup>1</sup> This had not been done in the village, and in an act of retribution the *sadag* had caused the disease. In response, the spirit had to be appeased through ritual, and from then on people disposed of their dead with more care.

Tibetans living in Dhorpatan take measures to avoid causing offence to the local spirits and deities. As we have seen, they commonly carry out rituals such as the *lungta*, and the *sang*, offering to appease them. Offerings are also made at the outset of a new undertaking, such as a business venture, or constructing a building. The Nepalese are also careful not to disturb the spirits in the surrounding environment. For example, when I was in Dhorpatan, close to the medical school there was a quarry, where a group of Nepalese from the Bishwakarma ethnic group worked every day cutting slate to be used as roofing tiles. Just next to the place where they were working, they had set up a little shrine where every morning they made offerings and said prayers before commencing work, in order to appease the local spirits.

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<sup>1</sup> The are four methods, which correspond to the four elements: burial (earth), cut up and placed in a river (water), cremated (fire), fed to vultures (air).

Dhorpatan has a reputation amongst Tibetans as a place where *nöpa* frequently occurs. Geshe Tenzin Dargye told me that this reputation stems from when the Tibetans first arrived in the 1960s, as at this time the valley was densely forested and there were many strong unruly spirits in the vicinity. In time their power to cause harm was curtailed by various Tibetan lamas, but particularly by one powerful Bönpo lama, Tsultrim Nyima. But *nöpa* had by no means been completely eradicated, and Tibetans and Nepalese often came to Geshe Tenzin Dargye for blessings to protect themselves against it. This usually involved him wafting them with incense and sprinkling them with blessed water while he recited prayers and mantras. Sometimes he would also give them blessed cords (*srung dud*) or amulets made from folded paper inscribed with mantras and wrapped with different coloured threads (*srung khor*).

Geshe Tenzin Dargye's account of the valley of Dhorpatan as a place of wild unruly spirits, until they were subdued by the ritual power of Tibetan lamas, is a common Tibetan theme. The environment is something wild and potentially dangerous, which needs to be tamed by the power of religion. The best known accounts in this genre are the numerous tales of the eighth century Tantric adept, Padmasambhava, who was instrumental in establishing the Vajrayana form of Buddhism in Tibet, travelling through the countryside subduing local spirits and binding them by oath (*dam cha, dam tshig*) to uphold the Buddhist doctrine. Samuel (1993:167) views the taming of the environment theme as part of the mythological history of Tibet. One account he gives is found in the *Mani Kabum* text, which describes the land of central Tibet as the body of a wild demoness (*sinmo*) that was subdued by being pinned down by a series of three concentric temples; in the centre, situated on the heart of the demoness is the famous *Jo khang* temple in Lhasa. The Bönpo have similar accounts. When Tönpa Shenrab came to Tibet he found the people not ready for the higher teachings, and so he imparted to them at this time only the knowledge of the lower ways concerned with controlling the local spirits (Karmay 1972).

In the early years of the settlement, the Bönpo lama, Tsultrim Nyima, carried out much of the work of taming the environment of Dhorpatan. Although he passed away almost thirty years ago, he is still spoken of with reverence by people in the

Bönpo community, both in Dhorpatan and beyond. One local spirit that he subdued has a shrine in the centre of the valley. The shrine belongs to the Nauthar ethnic group. I was told that during the early years of the settlement the spirit frequently caused problems for people. In response to this, Tsultrim Nyima ritually controlled its activity, and as a result, for many years it was unable to cause harm. Recently, people have recommenced giving offerings in the shrine, and consequently the spirit has re-established itself; it is now frequently suspected of causing *nöpa*.

On one occasion Geshe Tenzin Dargye and one of Amchi Gege's monk students were on their way back from carrying out a ritual at the Namdru Tang. When they reached Khangpa Shiwa, the closest Tibetan camp to the Nauthar shrine, they were called to the house of a Tibetan man who had suddenly been taken ill. When they arrived, the man was having difficulty breathing and was unable to speak. The illness had assailed him quickly. Before he had lost the ability to speak he had complained of pains in his chest. Geshe Tenzin Dargye started to invoke his *yidam*, *Walchen Gekhö*. As he was doing this, the man cried out and jerked about violently. Then Geshe Tenzin Dargye attempted to tie a blessed cord around the third finger of one of the man's hands, and he told Amchi Gege's student to do the same with the other hand. This would effectively trap the spirit inside the man's body, and it could be then forced to reveal its identity. But this was no easy matter, as the man's hands were tightly clenched into fists. Geshe Tenzin Dargye managed to pry one of his hands open, but as he did, the spirit possessing the man promptly left. The student confessed to me afterwards that he was unable to act efficiently in the situation because he was afraid. The man quickly came back to consciousness and had no recollection of what had passed. He was questioned about what had happened to him before he became unconscious. He explained that the last thing he remembered was walking near the Nauthar shrine. Geshe Tenzin Dargye took this as evidence that the spirit connected with the shrine had caused the affliction. A few days later he came to the clinic and Amchi Gege gave him medicines, and Geshe Tenzin Dargye tied blessed cords around his third fingers, which he was told to wear for a few days.

Earlier I mentioned the *dre mé*, that Amchi Gege's student Sonam experienced as ball of light that passed in front of him and hovered at the other side of the river from where he was standing. Shortly after this, Sonam became ill. At first no connection

was made between his illness and the *dre mé*. It was only after Geshe Tenzin Dargye had done a divination about the nature of the illness that they knew it was the *dré me*. As Sonam encountered it near the Nauthar shrine, again this spirit was the prime suspect.

During the period of my stay in Dhorpatan, Geshe Tenzin Dargye treated a large number of young children who were thought to be afflicted by *nöpa*. One Tibetan woman came to the clinic complaining that her young son could not sleep at night, and claimed to keep seeing a black figure. Geshe Tenzin Dargye did a divination, which identified the problem as a dead woman coming from the north east, who was harming the child's life-force (*sog*). He did the appropriate ritual, the boy's name was changed<sup>2</sup> (*ming gyur*), and his family set free one of their chickens (*tshethar*). Geshe Tenzin Dargye's ritual healings of child *nöpa* were not confined to the Tibetan community. At one point after Geshe Tenzin Dargye had cured a Nepali baby of what seemed to be an intractable case of *nöpa*, his reputation spread and a stream of Nepali woman came in the ensuing months, bringing with them their sick children to be healed.

Sometimes the spirits that were identified as the cause of an incident of *nöpa* were not local, but were connected with the area of Tibet that the family originally came from. For instance, one morning, Tsering Lhamo, one of Amchi Gege's female students, came to Geshe Tenzin Dargye and asked him to do a divination because her brother was suffering from insomnia, and recurring bouts of fear for no apparent reason. The divination said that the cause of the problem was a particular type of female demon (*drémo*) with a pig's head. When Tsering Lhamo's father heard about this, he remembered that in his village in Tibet there had been such a demoness with a pig's head that had caused much *nöpa*.

On another occasion, a Tibetan man came to the medical school concerned that his wife had fallen from her horse and gashed her head. As his wife was very competent at riding horses, he suspected that some insidious influence had been at play. He asked Amchi Gege to do a divination, which he did, and received the reply that the fall had been caused by the *tseñ* spirits. Amchi Gege then directed him to Geshe Tenzin Dargye to verify this. The result of his divination also pointed to the

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<sup>2</sup> A traditional Tibetan practice to avoid harmful influence.

*tsen*. He asked the man whether he had ever had any relationship with the *tsen*, to which he replied no, but he thought that the relationship could go back to when his family lived in Tibet.

## 8.2 Drib<sup>3</sup>

A concept that I came across time and time again amongst Tibetans in Dhorptan was *drib*, which is a form of pollution associated with certain kinds of activities. When *drib* accumulates sufficiently in a person it can bring about illness. Geshe Tenzin Dargye explained that *drib* arises from carrying out impure activities or coming into contact with something that is thought to be impure. He gave the following activities as examples: working with dead bodies; breaking social taboos such as incest; eating garlic or onions if one has a connection with certain *yidams*; using dead people's possessions; and mixing with low caste people such as blacksmiths, cobblers and musicians. He also explained that a major source of *drib* is carrying out sinful activity (*digpa*) or associating with sinful people.

Notions about *drib* are widespread amongst the older generation of Tibetans in Dhorptan. For example, one morning a Tibetan woman came to ask Geshe Tenzin Dargye to ask his advice about a problem she had with her eyes. The problem had persisted for two years and consisted of soreness and impaired vision. She said that it had started shortly after the death of a Tibetan man who she had been close to. In the period prior to his death she had been in constant contact with him, offering him assistance whenever he needed it. She thought that she was suffering from *drib* arising from this contact.

*Drib* can also come about as a consequence of offending the local deities and spirits by carrying out inappropriate behaviour in their dwelling places such as shouting or lighting fires in the mountains (Tucci 1980:173). Much of the ritual activity, which I described in the previous section, which is dedicated to preserving harmony between the human community and the spirits that inhabit the natural environment, can also be viewed as a means to prevent *drib* (Samuel 1993:161). *Drib* can accumulate in a person, and a person who has a high level of *drib* may contaminate others. Geshe Tenzin Dhargye told me that vultures will not eat a human

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<sup>3</sup> For further information on *drib* see: Daniels (1994), Lichter and Epstein (1983), and Schlicklgruber (1989).

corpse if it is defiled with *drib*. He was also of the firm conviction that *drib* can be fatal. He said that he knew of a lama that had come into contact with many human corpses, and as a consequence of the *drib* he had accumulated in the process, he had become fatally ill. According to Tibetan medical theory, *drib* may lead to a range of pathological conditions, but it can be cured if the appropriate therapy is administered, which may involve a mixture of medicines, ritual and behaviour modification.

Towards the beginning of my stay in Dhorpatan, Amchi Gege went to visit an old Tibetan woman. He took one of his monk students, Yundrung, along with him. She had been sick for seven years and had received repeated medical treatments. Some months before, her condition had worsened and she was unable to speak or walk. At that time Amchi Gege gave her some medicines and a moxibustion<sup>4</sup> treatment, which improved her condition, but in the ensuing months she had regressed. Amchi Gege had diagnosed her condition a long time before as *drib*. Nyima, the senior medical student, told me that the pulse indicative of *drib*, is similar to the ‘blood’ (*tra*) pulse<sup>5</sup>. Now she had completely lost all movement down one side of her body. I never saw the woman, but from what I heard about her symptoms, it seemed like apoplexy. However, they were of no doubt that she was suffering from a condition called *sa drib*.

On a few occasions when I was in Dhorpatan I heard about or directly witnessed patients whose illness had been diagnosed as *sa drib*. Each time the symptoms seemed to denote what in biomedical terms would be called apoplexy or epilepsy. Curious about the evident disjuncture between the two medical systems I asked Amchi Gege to teach me what Tibetan medicine has to say about the disease. *Sa drib* is dealt with in chapter eighty of the third volume of the main medical text. I was taught all of this chapter of the text and the relevant sections of Khyungtrell Rinpoche’s commentary. What follows is a brief synopsis.

The chapter on *sa drib* is one of the five chapters of the tenth section of the third volume, which deal with diseases arising from the action of harmful spirits. The chapter focuses on diseases associated with the planetary spirit called *sa* (Sanskrit:

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<sup>4</sup> A treatment similar to acupuncture, which involves the burning of a herb on specific locations of the body.

<sup>5</sup> This pulse indicates a pathological condition of the blood; the pulse is swollen (*bur*) and twisting (*dri*).

Rāhu). The subject is covered under five topics: the time when the disease occurs; the types of the disease; the symptoms; protection against the disease; and treatment and measures to be taken to prevent the return of the disease.

*Sa drib* can only occur on eight specific days in the Tibetan month. These are the days when the planetary spirit *sa* has influence. There are five kinds of the disease corresponding to the five elements of: water, earth, fire, air, and space. There are two sets of symptoms. The first are general symptoms that are present in all cases of the disease: the eyes look very clear as if the person is healthy; there is paralysis of the left or right side of the body; and the mouth is twisted to one side. The second set of symptoms corresponds to the five types of disease according to the five elements. For instance if the *sa* spirit affects the fire element in the body: the person's right side is paralysed; the left side of their tongue protrudes longer than the right side; they have a strong fever; and the nails have a yellow appearance like they have been burnt in a fire. If it is the water element that is affected: the left side of the body is paralysed; the right side of the tongue protrudes longer than the left side; when touched the left side of the body feels cold and the right feels hot; and the ligaments of the body tighten. In the section on protection against the disease, Amchi Gege gave a number of mantras, and following Khyungtreng Rinpoche's commentary he explained how to make various kinds of amulets (*srung wa*). The section on treatment mostly deals with rituals that should be performed to counteract the influence of the *sa* spirit, but it also gives information about medicines, and advice on diet and behaviour.

Amchi Gege explained that the main cause of *sa drib* is negative karma, accrued in the present life or in previous lives. This may be the case for *sa drib* but from conversations I had with Geshe Tenzin Dhargye, negative karma is not the only cause of *drib*. As we have seen, there are two ways in which it can arise: non-virtuous actions, and coming in contact with something that is classified as impure. The first of these causes is directly related to karma, but the second is usually not. The Tibetan people in Dhorpatan said that the old woman, who had been diagnosed with *sa drib*, had committed many bad deeds in Tibet. Her husband was a notorious Tibetan bandit who had robbed many people, and she had assisted him in his exploits. Yundrung told me that night, after he and Amchi Gege had visited the

woman, that while he was there she was semi-conscious and muttering things to herself. One thing he heard her say repeatedly was ‘they are coming’, ‘they are coming’.

Yungdrung also told me that he had taken her pulse, which he said was the death pulse (*chi dö*). This is when the pulse makes a pattern of beats then stops and then repeats the same pattern. The next day Geshe Tenzin Dhargye and Yungdrung went to her house and performed the appropriate ritual for her condition. She seemed to get a little better after this, but her improvement was short lived. A few days later Yundrung was sent to see how she was getting on. He told me that her body had become bloated with fluid, and when he tried to take her pulse it made an indent in her skin. He said that her pulse seemed then to be that of a blood condition, but this could also be interpreted as *drib*. Some of her friends had taken a sample of her urine, which they were about to bring to Amchi Gege, when they had dropped it. They had noticed that the urine was a reddish colour. Yungdrung relayed all this information to Amchi Gege, who thought she was now suffering from *kya bab*, which in biomedical terms is most likely oedema. *Kya bab* is the first stage of a condition where the body swells with serous fluid; there are two more stages listed in the third volume of the medical text. Within a week the woman had died, having gone through all three stages.

### 8.3 Divination (*mo*)

Every time somebody was suspected of suffering from *nöpa*, Geshe Tenzin Dargye was invariably asked to do a divination to verify the cause of the affliction. The diagnosis would always begin with the patient’s pulse. The first chapter of the fourth volume of the *Bumshi* on pulse diagnosis gives various characteristics of the pulse, which indicate the action of harmful spirits: the beat is irregular, the pulse stops at sporadic intervals, it is taut (*thenpa*) like a rope, the pulse feels like two beats (*chamdrel*) occurring simultaneously. These qualities may be present on their own or in combination. If the pulse appeared to denote *nöpa*, then divination would always be done to confirm the nature of the disease.

There are numerous forms of divination listed in Tibetan texts. In the nine-fold classification of Bönpo teachings, divination forms part of the first way, the ‘Way of

the Shen of the Cha' (*cha shen thegpa*). Tibetan Buddhists also have many forms of divination. One form that Nebesky-Wojkowitz (1956:454) mentions is scapulimancy (*sogmar*). This involves laying the shoulder blade of a sheep in a fire and interpreting the cracks that appear in it. The Bönpo have a method of divination, which involves interpreting knots in ropes (*juthig*), but it seems very few lamas have much practical knowledge of this now. Nebesky-Wojkowitz also mentions a form of divination known in ancient Tibet of interpreting bird song. A few years before, whilst I was staying at Menri Yungdrung Bön monastery at Dolanji, near Simla, I remember commenting to the Abbot of the monastery, Sangye Tenzin, about the beautiful sound of all the birds singing around the monastery. He replied in a jocular manner, 'but can you understand what they are saying? There is one Bönpo text which explains how to do this.'

Another common method of divination in Tibetan culture is through oracular pronouncements made by men or women possessed by a spirit. Such people are known as *lha pa*, *lha mo* or *pawo* (Day 1989, Nebesky-Wojkowitz 1956:398-443, Prince Peter 1978, Berglie 1976). The possessing agent may be a god, goddess, or a being from one of the many spirit classes. The person possessed can be a monk or a layperson. Perhaps the most famous Tibetan oracle of this nature is the Nechung oracle. Nechung is the name of a small Nyingmapa monastery near Drepung monastery located a short distance west of Lhasa. This monastery housed the oracle of the chief protector of Tibet *Pehar*. The Dalai Lama and the Tibetan government consulted the oracle on state matters. In 1959 the oracle moved with the Dalai Lama to Dharamsala in Himachel Pradesh where he continues to be consulted.

The two most common forms of divination used by lamas and monks are divination using dice (*sho mo*) and divination using rosary beads (*trenng mo*). The number generated from throwing the dice corresponds to an entry in a book, which gives the relevant response to the question. *Trenng mo* is the method that Geshe Tenzin Dargye most often used to verify cases of *nöpa*. He told me that there are three main systems of doing this form of divination in the Bönpo religion: one that is governed by the main Bönpo protector *Sipai Gyalmo*; another that relies on *Mawé Sengé*, the Bönpo deity that corresponds to the Buddhist Mañjuśri; and a third system, which draws on the Bönpo protector *Gyalchen Dragpa Sengé*. Geshe Tenzin

Dargye uses the latter system. When he needs to consult the oracle, he begins by burning incense, reciting a prayer to *Gyalchen Dragpa Sengé*, and then he formulates the question clearly in his mind. Once he has done this, he places his fingers randomly on his rosary and counts groups of nine beads with each hand, until he is left with a number of beads between one and nine. He then consults the text under the relevant heading such as: travel, business, child illness, theft, and so on.

He confided in me that he had never wanted to do divination. Before coming to Dhorpatan he had been advised to take it up, which he did, but very reluctantly. His reason was that when people know that you can do divination they are always coming with questions, and sometimes the answers to those questions are not what people want to hear. Indeed every week at least two or three people came to him and asked for divination to be done.

Sometimes the question concerned the prospects of a new business venture. One Tibetan man had the possibility of doing some trekking work with an American group who were shortly to arrive in Kathmandu. Although he would have been happy to earn some money, he was uncertain about going because his mother was not well. The divination replied that if he went, the prospects were neither good nor bad, but by having a ritual performed the circumstances could be swung to his advantage. Another man came to ask about a business project that he wanted to set up in Kathmandu. The outcome of the divination was not favourable and the man left somewhat dismayed.

Most often the questions that people asked referred to illnesses. One morning a Tibetan woman came and asked for a divination. She said that her son had suffered from a painful swollen area behind one of his ears. She had consulted doctors in Kathmandu and Pokhara, and eventually surgery had been carried out. The divination identified the cause of the problem as the *drémo* spirit class. On another occasion one of Amchi Gege's female medical students asked Geshe Tenzin Dargye to do a divination about the sickness of one of her friends. The response was that the *tсен* class of spirits had caused the condition. He told me that her family had been doing rituals to the *tсен* for protection, and then they had stopped, and the *tсен* do not take kindly to this.

Geshe Tenzin Dhargye's qualms about the problems of doing divination are clearly indicated in the following account. One Tibetan boy aged 18 had been taken seriously ill with some kind of intestinal disorder. He was well known in the settlement. He was in the hospital in Kathmandu and the doctors had decided to operate on him. His mother was very upset. She came to Geshe Tenzin Dhargye, offered him a bag of potatoes, and asked him to do a divination about her son's condition. He did the divination, and he told her that the sickness was serious, but if prayers and ritual were performed her son should be well. That evening prayers were done and I could hear the bell of the large prayer wheel in the gompa compound ringing all night. A few days afterwards, we received news that the boy had died. For some days this cast a dark shadow over everybody. Geshe Tenzin Dhargye told me that he had done divination several times and it had repeatedly given a negative response and he had not known what to say to the boy's mother.

#### **8.4 Divination through the Patient's Urine**

The second chapter of the fourth volume on urine diagnosis is divided into eight sections. I have discussed the first seven sections in chapter five. The eighth section deals with the qualities of the urine, which denote the action of harmful spirits. Unlike in the earlier sections of the chapter, the techniques explained here relate strongly to Tibetan cosmological notions; the practices that are described take Tibetan medical diagnosis clearly into the domain of divination.

When Amchi Gege explained this section to me he gave abundant details about types of spirits that cause disease, and how this is reflected in the urine. Most of this information is not provided in the main medical text but in commentaries to it such as Sangye Gyamtso's *Blue Beryl (Vaidurya Ngönpo)* or Khyuntrel Rinpoche's *Khyuntrel Menpe*, which was the text Amchi Gege used as a basis for his lessons on the subject. The following description is based entirely on Khyuntrel Rinpoche's commentary.

The patient's urine is collected in a flat-bottomed round bowl. A male patient urinates into the bowl in a west direction, as this is the direction of the wood

element<sup>6</sup>, which is male; the bowl is then turned 180 degrees so that the point where he urinated is in the west. A female patient does the opposite, she urinates in the east direction, as this is associated with the iron element; again the pot is turned 180 degrees. The bowl is placed very carefully on the ground, and four thin sticks are placed across the brim dividing the surface of the urine into nine sections of equal size. The nine sections are shown in the medical text as sections of the shell of a turtle. The head of the turtle is south and the tail is north. Male urine is shown by the front of the turtle and female urine is shown by the back. For this reason the categories found in the east and west columns are reversed for male and female. The nine sections correspond to various locations or categories associated with the afflicting class of spirits; this information can be found in Figure 8.1.

<b>Male Urine</b>			<b>Female Urine</b>		
south			south		
e	Gods ( <i>lha</i> )	Paternal Ancestors ( <i>Pha ma</i> )	Cemeteries ( <i>dur</i> )	w	
a	People ( <i>mi</i> )	Self ( <i>rang</i> )	Home ( <i>khang</i> )	e	
s				s	
t	Spirits ( <i>dön</i> )	One's children, nephews nieces ( <i>bu tsha</i> )	Land ( <i>shing</i> )	t	
north			north		

**Figure 8.1** The locations of spirits causing disease reflected in the patient's urine

The main items that should be observed in ascertaining the cause of the disease are: the shape and location of the material suspended in the urine (*kuya*); the shape and location of the surface film (*drima*) and if there are any cracks (*sub*) in it; and the location of the bubbles. If any of these items are found located in one of the nine

<sup>6</sup> Chinese and Tibetan astrology use the same five elements: wood, fire, earth, metal and water. Tibetan texts that are of an Indian origin use the earth, water, fire, wind, and space classification.

sections this indicates that the disease has been caused by a particular class of harmful spirit. For each section the text gives various classes of spirits and the type of ritual that should be done to remedy the condition.

Specific kinds of design in the suspended material and the surface film also give information about the spirit that is causing the affliction. Khyuntrul Rinpoche's commentary gives eight specific designs found in the suspended material and twenty-three for the surface film, which signify the action of classes of spirits. For example, if the shape of a scorpion can be discerned in the surface film, this denotes the action of the spirit classes *lu* and *dü*, if it is a deer antler then it is the *gyalpo* and the *yamshü*, if it is a fish, conch shell, turtle, frog or spider, then the cause of the affliction is the *sadag*. The text goes on to describe another type of turtle, again with nine sections, but this time the sections are ascribed to: the self (*rang*); the patient's parents (*pa ma*) relatives (*nyen*); the god of the locality (*yul lha*); religious protectors (*srung ma*); the *yidam*; the *senmo* class of female spirits; the *drébo* class of male spirits; and the class of the *gyalpo*. The text begins by describing designs for each section, which indicate auspicious conditions (*sang*), it then moves on to describe designs for each section, which signify a possible fatal outcome. Designs are then described for each section that indicate harmful spirits affecting one of the three humours of wind, bile and phlegm.

Other divinatory techniques are described in the text that call upon the power of the Medicine Buddha, or the doctor's *yidam* to reveal the spirit, which is causing harm. In one section the doctor first prays to his *yidam* and then with eyes closed he spits into the urine. Whichever of the nine sections the spit falls into, reveals the cause of the disease. In another section the doctor again begins by praying to his *yidam*, or the medicine Buddha, then with eyes closed he drops one grain into each of the nine sections. One of these grains is coloured black, and the section that this grain falls into reveals the cause of the affliction.

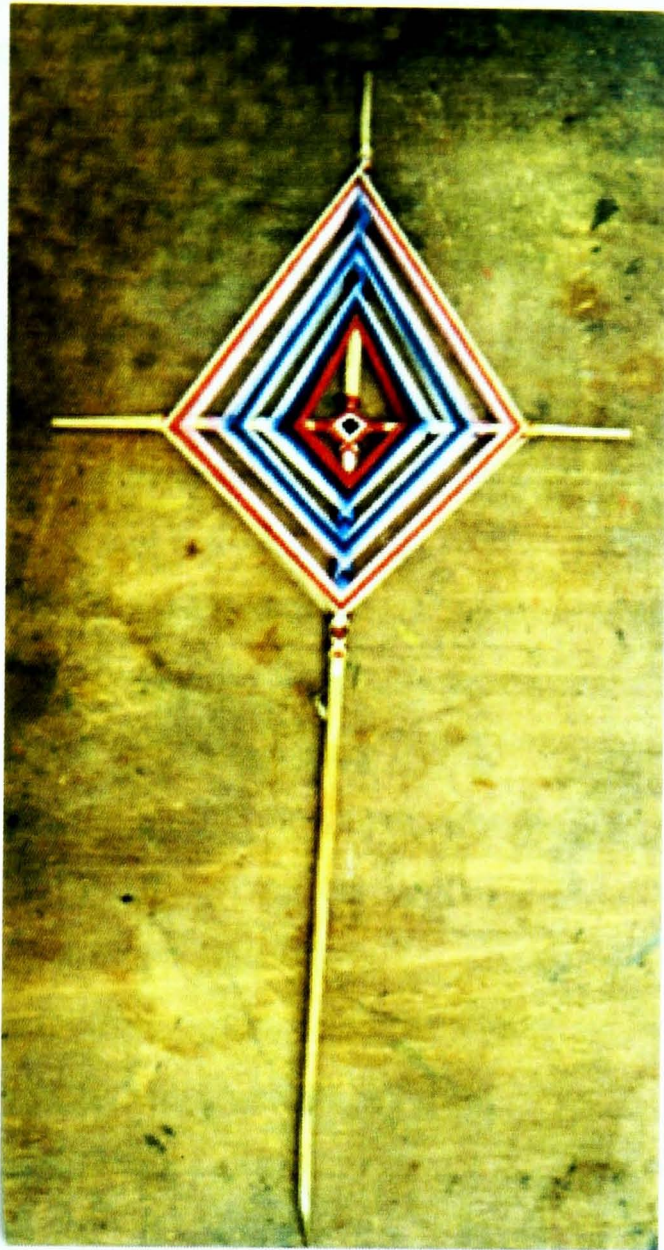
Although *nöpa* frequently occurred whilst I was in Dhorpatan, urine diagnosis was seldom used to ascertain the cause of the disease; usually this was done by the pulse and divination. I only witnessed one patient whose disease was diagnosed as *nöpa* by the urine method. The patient was a Tibetan man in his late fifties. He came to the clinic early in the morning. He explained that he was feeling generally unwell

and sometimes he would lose the capacity to speak and move. I was told that this was the third time he had come in recent weeks complaining of these symptoms. Amchi Gege took his pulse followed by his student Nyima, which they found to be prominent and beating in an erratic manner. His condition was diagnosed as a mixture of *drib* and *nöpa*. He was given three types of medicinal powders to take.

A few days later as his condition had not altered, Amchi Gege decided to do a urine diagnosis to ascertain the type of spirit that was causing the condition. The examination occurred early in the morning. I was called to see the fresh urine, which was already in a porcelain bowl and placed on the ground next to the Amchi Gege's room. All the students were gathered around it. Amchi Gege explained to me that the man had urinated into the bowl in a west direction. He said that this method of diagnosis is resorted to if the spirit is hiding the cause of the affliction. First, Amchi Gege and his students recited prayers to the medical lineage and to the medicine Buddha. Four thin sticks were then placed across the brim of the bowl, dividing the surface of the urine into nine sections as prescribed in the text. Amchi Gege then recited more prayers and after some time, starting in the east direction he dropped one grain into each of the sections. The grain that had been marked black fell into the north section, which identified the *nöjin* class of spirits as the cause of the sickness. Amchi Gege pointed out small bubbles in the urine that in his view looked like fish eyes; he explained that this is another symptom of *nöpa*. Then after painstaking scrutiny on behalf of all present, one of the students discerned a scorpion shape in the bubbles; some agreed, but after a little time the general consensus disavowed it. Shortly after this, another student noticed a frog shape in the surface film. After some time this was accepted by most of the others, including Amchi Gege. The text explains this to indicate the harmful influence of the *sadag* class of spirits. Within the next few days the appropriate rituals were performed.

## 8.5 Ransom Rituals and Rites of Exorcism and Destruction

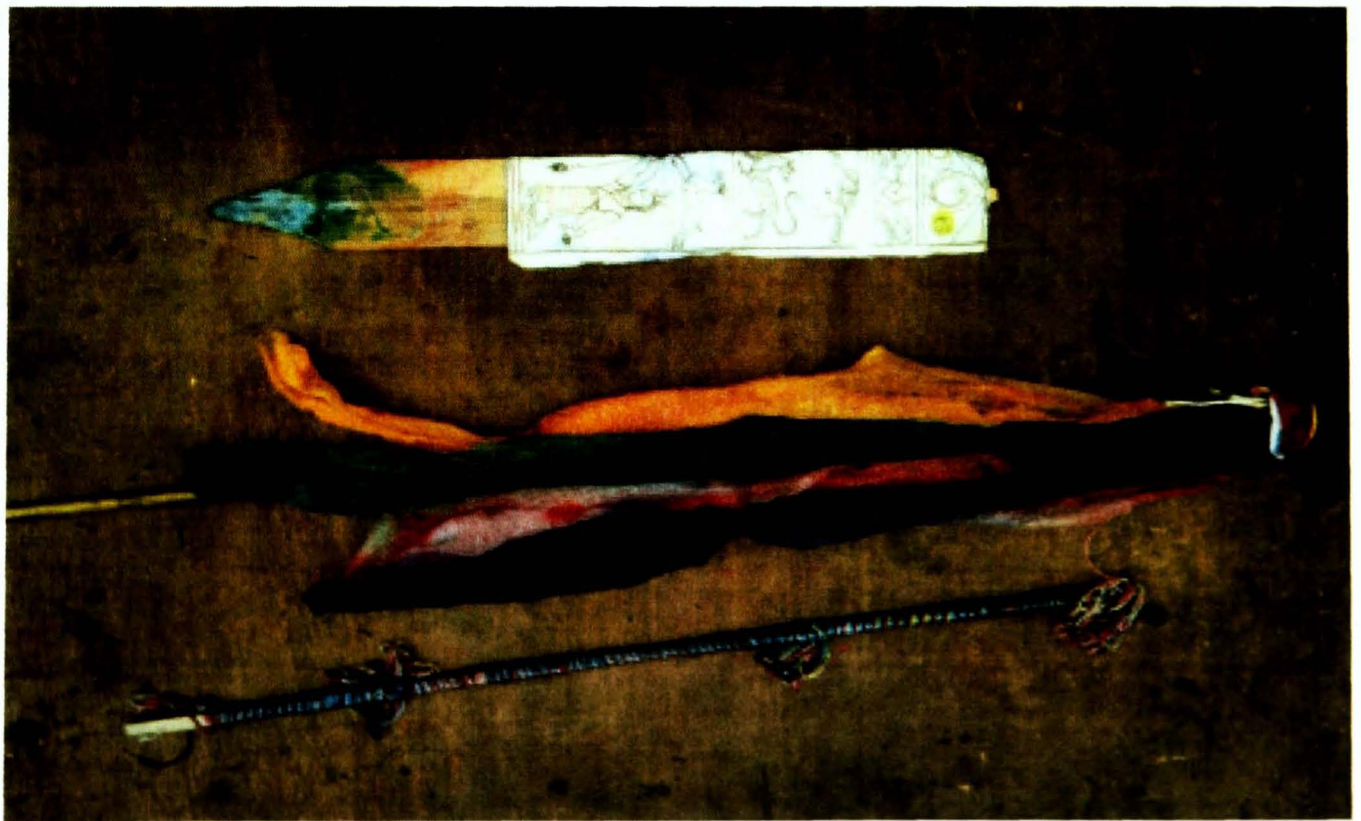
Tenpa Yungdrung the junior Lupon of Triten Norbutse Yungdrung Bön monastery in Kathmandu told me that when a problem arises as a result of the activity of *dön* (malicious spirits), such as a sickness, ritual must be used. He said that milder forms of treatment described in the first way of Bön will be attempted



**Plate 23** - *Namkha*



**Plate 24** - *Namkha* offering at the periphery of the gompa compound.



**Plate 25** - Three ritual objects: *mo dong* (top), *dadar* (middle), *gyangbu* (bottom).

first. If the problem persists, then the more severe types of ritual described in the second way of Bön will be used; these are the rites of ransom and exorcism. He explained that in these rites the spirit causing harm is given offerings in a gesture of making peace. The Tibetan medical precept that one starts with milder forms of therapies and moves on to progressively more severe treatments only if occasion should demand it is equally applicable to ritual intervention. If the *lü* rite does not work then the powerful rituals of destruction that are explained in the third way are carried out. In these rituals the *yidams* and protectors are invoked to capture the spirit and prevent it from causing harm.

There are many different kinds of rites of ransom, all referred to by the Tibetan word *lü*.<sup>7</sup> These consist of various ritual techniques of offering ransoms to appease harmful spirits and thereby clear disturbances and create favourable circumstances. There are ransom rites to protect the life of animals, to bring back a person's soul (*la lü*), or life force (*sog lü*), ransoms done to prevent death (*chi lu*), and to cure sickness caused by harmful spirits. *Lü* is both the collective name given to all ransom rituals, and the name given to the effigy that is offered in the rituals (see Plates 26 and 27). In this second sense the word means the 'substitute' that is meant to take the place of the afflicted person or animal. I often heard the Tibetan word *tshab*, meaning 'representative', used interchangeably in this context, but this word does not have the ritual connotations of *lü* (Norbu 1995:77).

The most common form of ransom rituals are referred to as *dö* rites. During these rituals a representative (*ngar mi*) of the afflicted person or animal is made from barley dough (*tsampa*), this is surrounded by other offerings such as pieces of the person's clothes, bits of their hair, barley grains, and ritual objects such as *gyangbu*, *pho dong* and *mo dong*, and *namkha*. These are offered to the spirit or deity with the hope that it will be satisfied and cease its harmful activity. In Dhorpatan sometimes only *namkha* were offered to the spirits. They could be found lying on the ground in various locations on the periphery of the settlement and at crossroads (see Plates 23 and 24).

Ritual is very much a part of Tibetan medicine and Amchi Gege teaches all his students to recognise the kinds of disease that require ritual intervention. In the

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<sup>7</sup> These rituals have been discussed by Tucci (1980), Snellgrove (1967), Nebesky-Wojkowitz (1956) Norbu (1995) Beyer (1973), and Karmay (1998).

section of Khyungtreng Rinpoche's commentary on *sa drib*, which I mentioned earlier, the rituals that are required are explained in intricate detail. Amchi Gege teaches all his students the appropriate rituals that need to be performed for specific diseases. Although there is no rule that his male students should be monks, he certainly prefers this. In any case, all of his male students had been trained in the techniques of Tibetan ritual; the three monk students and Nyima are very competent in this sphere of activity.

Incidents of *nöpa* sometimes lasted two to three weeks. After Amchi Gege had seen the patient, and Geshe Tenzin Dargye through divination had confirmed the sickness to be *nöpa*, the patient would undergo a course of treatment involving ritual and medication. Geshe Tenzin Dargye would usually carry out the ritual, assisted by Amchi Gege, his three monk students, and the eldest student Nyima. In what follows I describe three accounts of *nöpa* that occurred during my stay. They clearly show the importance of divination, the use of ritual in the healing process, and the ways in which the students were involved throughout the proceedings.

## 8.6 The Angry Widow

The first I knew about this case of *nöpa* was when I saw Geshe Tenzin Dargye sitting in the courtyard outside his residence consulting his astrological text (*tsi*) for an old man from Khangpa Gyepa. Afterwards he told me that the problem concerned the old man's daughter who had fallen ill that morning in a sudden and mysterious way. Earlier in the morning his daughter had been feeling quite well. She was a forty-two-year-old strong healthy Tibetan woman, with two children, and no history of medical problems. Shortly after breakfast she complained of a pain behind her left ear and in her throat. From that moment her condition quickly worsened, she became feverish, and the pain in her throat made it impossible for her to swallow. Her father, suspecting that this was the action of some kind of spirit, came immediately to the medical school in search of help.

*Tsi* is the Tibetan word for enumeration or counting, and by logical extension it is used to refer to the various types of astrology to be found in Tibetan culture.<sup>8</sup> The *tsi* texts should be consulted on important occasions, such as for births, marriages,

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<sup>8</sup> For a description of the system of Tibetan astrology see Cornu (1990).

deaths, embarking on a journey, building a house, commencing a new business venture. *Tsi* can also be consulted to find out the cause of certain kinds of illnesses and for advice on methods of treatment. On this occasion Geshe Tenzin Dargye did a divination with the text to determine the source of the problem. The *tsi* reading had confirmed the old man's suspicion, giving the cause of the illness as *nöpa*, caused by either a widow, or the spirit of a dead person. At this stage the exact cause was not clear.

Around midday Amchi Gege sent Yungdrung, one of his monk medical students, to attempt a diagnosis. Yungdrung had heard that the problem was possibly *nöpa*, but he did not know anything of Geshe Tenzin Dargye's *tsi* reading. When he arrived back, to my surprise, he told me that the problem was indeed one of *nöpa*, which had been caused by an old Nepali widow. He said that the afflicted woman had been feeling fine in the morning and had made and served breakfast to her family. Afterwards she went to a nearby stream to wash the dirty pots. At the same time, some distance downstream, the old Nepali widow was collecting drinking water. The dirt from the Tibetan woman's dishes flowed down to her; this caused her great irritation and she came and vented her disapproval. The Tibetan woman's illness started shortly after this. He took her pulse, which he described as 'slow like a *peken* pulse'.

The term that had been used for widow in the *tsi* text was *yug sa ma*. The word is associated with impurity and has pejorative overtones. Geshe Tenzin Dargye explained that the pejorative sense of the word derives from the notion that widows have the potential to cause *nöpa*, but this rarely happens. The Tibetan word *khyoga drongpi kyeman* also means 'widow', but does not have derogatory connotations. As I have mentioned, the appropriate therapeutic response to instances of *nöpa* involves various types of ritual. After lunch, Geshe Tenzin Dargye with Yundrung as his assistant went to visit the sick woman and work out what should be done. The first thing he did was give her an amulet (*srung khor*) to protect her against malevolent spirits. He decided to return later in the afternoon and perform one of the *liü* ransom rites.

At around six in the evening Geshe Tenzin Dargye and Yungdrung returned to the house to carry out the ritual. This time I accompanied them. When we arrived, the



**Plate 26** - Geshe Tenzin Dargye making a *lū* offering.



**Plate 27** - Geshe Tenzin Dargye and Yungdrung making the *lū* for the woman suffering from *nōpa* thought to be caused by the angry widow.

woman was lying down in a smoke filled room, clearly in great discomfort, groaning and occasionally spitting into a cloth. Immediately work commenced on making the *lū* (see Plate 27). Various medicinal substances had been mixed into the barley flour that are known to be pleasing to the *lu* class of spirits. Small fragments of the sick woman's clothes and bits of her hair had also been mixed into the barley dough. Geshe Tenzin Dargye made the figure, while Yungdrung made *tormas* to be offered along with it. When the figure was finished it was a reasonably good likeness of a female human form. The right hand of the figure was held upwards and the left down. This I was told was meant to be a gesture of 'please accept this because the real one is not coming'. The figure was then placed on a metal tray, with the *tormas* surrounding it. A butter lamp made of *tsampa* was placed in front of the figure. The *tormas* were then daubed with a red paint made from the root of the *tsö* plant;<sup>9</sup> this is also thought to be especially pleasing to the spirits. Next, various types of food were scattered around the figure and the whole thing was wrapped by a new white ceremonial scarf (*khata*)<sup>10</sup> and a red woollen scarf belonging to the sick woman.

By this time it was almost sunset. I was told that the offering would be made at dusk, as this is a suitable time for such an activity according to Tibetan tradition. At this point something strange and unexpected occurred. The widow who was suspected of causing the illness came to the door of the house. She said that she had come for her 'wages'. Geshe Tenzin Dargye told her that she had to wait a little time, as everything was not yet ready. The widow left, and the ritual began with the reciting of the *lū* text. The chanting went on for about thirty minutes as darkness gradually descended outside. At certain points rice was scattered around the room as an offering, and now and then, dense clouds of incense were wafted around the sick woman. During the chanting, Tsultrim, one of Amchi Gege's lay students, turned up and joined in with the ritual. The chanting reached a climax with Geshe Tenzin Dargye leaning over the sick woman and after a short time reciting mantras, he blew on her and gently touched the ritual text on her head. The *lū* was taken outside and

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<sup>9</sup> *Rubia Cordifolia*.

<sup>10</sup> The *Khata* is a ubiquitous Tibetan cultural object. It is exchanged between people as a token of respect. Whenever Tibetans approach a lama, the custom is to give a *khata* and the lama will then return it with a blessing. Calkowski (1986) draws an interesting parallel between anthropological understandings of the nature of the gift and the *Khata*.

left at the side of a bridge at the nearby stream where everything had begun in the morning.

After the ritual, food was served and considerable effort was made to get the sick woman to eat. With some difficulty she managed to take Amchi Gege's medicine and eat a little Tibetan stew (*thugpa*), grimacing in discomfort as she did it. Yungdrung took her pulse and said it had changed since the morning, now she had a fever pulse. He also noted that her 'second tongue' (uvula) as he put it, was swollen. Shortly after finishing eating we left and set off back to the gumpa. As we passed the bridge, we looked at the place where the *lū* had been placed. To our surprise all that remained on the plate was the sick woman's red scarf. Whatever happened to the offerings is anybody's guess, but Yungdrung and Geshe Tenzin Dargye were of a single mind about it; for them there was no doubt that the widow had taken everything.

The next day the sick woman's father came to the gumpa and informed us that her condition had only slightly improved. That evening Amchi Gege offered another *lū* on her behalf. The following day Amchi Gege was teaching me about the *la* pulse. At the end of the lesson he said that I was lucky because a few of the monks were just about to begin a ritual for the sick woman. It was now thought that her soul (*la*) had been abducted by some spirit. Some of the monks and Nyima, the senior medical student, were going to perform a special ritual known as *la lū*, the purpose of which is to bring back the sick woman's *la*. The various elements of this ritual are identical to the ritual I will describe in the next account of *nöpa*.

The next morning the mother of the sick woman brought a sample of her urine. She said that the sickness had changed. The pain in the woman's throat was now accompanied by an itching sensation and something like a boil was beginning to appear. All the students gathered around the urine. Yungdrung remarked that the colour was the reddish colour of Tibetan tea; this indicated the presence of a fever condition. Amchi Gege stirred the urine and watched the transformations as the urine settled. Then following his instructions Nyima brought two medicine powders, which were poured separately into the urine. As each powder was added, Amchi Gege stirred the urine and observed the effects. A third medicine was brought which when added made the bubbles produced by Amchi Gege's stirring disappear quickly; from

this information he ascertained which medicine should be prescribed. Amchi Gege told me afterwards that he had noticed a rainbow-like iridescence on the bubbles floating on the surface of the urine. This he said denotes the possible presence of poison. He added that this effect sometimes occurs if the patient has taken biomedical drugs.

Two days later the sick woman's father brought another sample of her urine. All the students gathered around it as Amchi Gege explained what they should be looking for. He reminded them to pay particular attention to the colour, the suspended material, the steam and the smell. He stirred the urine and told the students that the medical text likens the urine to a forest and the bubbles to flowers growing inside it. The colour of the urine was a little lighter in shade than last time, thus a fever condition still prevailed but it seemed to be abating. Amchi Gege brought attention to the faint cloud of suspended material that was floating towards the upper region of the urine. The location of the suspended material was related to the illness being centred in the woman's throat. As before, Amchi Gege added medicines and observed the effects in the urine as he stirred. Within a few weeks the woman had returned to full health.

### **8.7 The ritual of the *La Lü*– a case of soul loss**

This case of *nöpa* occurred within a week of my arrival in Dhorpatan in September 1996. In the early afternoon Geshe Tenzin Dhargye asked me if I would like to see a special ritual that was at that moment being performed in the temple, for a sick Nepalese man. The Magar group, which the man belonged to, have their own ritual specialists known as *jhānkri*, who deal with illnesses caused by spirits. But as with so many other Nepalese I was to observe in the valley, he was very much open to the Tibetan medical approach.

When we arrived the ritual was already well underway. The sick man was sat cross-legged on the floor in the middle of the temple. In front of him was a large metal bowl about a metre in diameter and thirty centimetres deep. The bowl was full to just below the brim with a milky coloured liquid with various plant substances floating in it. Geshe Tenzin Dargye told me that this liquid was a mixture of water milk and medicines. Amchi Gege had supplied the medicines, which were the 'six

good medicines' (*zang drug*) that are often used together in ritual and medicinal compounds.<sup>11</sup> Just to his side, one of the elder monks was sat chanting from a ritual text whilst simultaneously beating a large round drum hanging from the ceiling.

On inquiring about the man's condition, I was informed that about a week before he had been taken ill and had come to the clinic to consult Amchi Gege. He had complained of sickness that kept moving into different locations in his body. This is one possible symptom of *nöpa*. Amchi Gege's reading of his pulse confirmed this to be the correct diagnosis. Some time after this initial diagnosis, Geshe Tenzin Dargye elicited the cause of the affliction to be the spirit of a man who had recently died within the patient's community. As we have seen, when somebody dies and their consciousness remains firmly attached to the places and events of their previous life, they remain behind as a spirit known as a *shindre*. This particular spirit had seized the man's soul (*la*).

At a certain point during the recitation of the *la lü* text, Geshe Tenzin Dhargye set an object floating on the liquid in the bowl. The object was made of *tsampa* dough, and consisted of a human-like figure standing in a boat. The figure had been constructed so that its arms were held out directly in front of it. One hand was holding a small *khata* scarf, the other, a small piece of turquoise on a piece of string. Geshe Tenzin Dargye then set the liquid spinning by stirring it with a stick. The figure floating in the water span round and round, for what seemed like a very long time. Throughout all this the chanting continued unremittingly.

The figure had been set spinning to divine whether or not the man's *la* had been returned during the ritual. When the figure settled motionless the key feature that had to be observed was the position of the hands. If they settled pointing directly at the sick man or to his right, this would indicate that the *la* had returned and that the adverse action of the *shindre* had stopped. If the figure settled with the hands pointing in any other direction, this would indicate that the problem persisted. In this instance, the arms of the figure settled to the man's right.

To confirm that the *shindre* had stopped causing harm, another divination was then done. Two stones were placed in the liquid, a white one and black one, and in the same manner as before it was set spinning. While the appropriate section of the

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<sup>11</sup> The six medicines of *bzang drug* are: *chu gang* (bamboo pith), *gur gum* (saffron), *li shi* (cloves), *dza ti* (nutmeg), *ka ko la* (black cardamon) and *sug mel* (green cardamon).

ritual text was chanted, Geshe Tenzin Dargye fished out one of the stones. If he had taken the black one, this would have boded ill for the outcome of the ritual, but in this instance he had taken the white one. A few days after, I asked about the man and I was told that he was well.

A number of studies have been done on the *la lü* ritual. Two early studies were done by Lessing (1951) and Bawden (1962); these were primarily textual accounts of the ritual. More recent accounts have been given by Mumford (1989), and Namkhai Norbu (1995). Mumford's description is of particular interest as it gives an ethnographic account of the ritual he observed performed by Tibetan Lamas in the Gyasumdo region of Nepal. The ritual he describes is structurally very similar to the ritual that I observed in Dhorpatan. All of these accounts, with the exception of Lessing's are based on *Nyingmapa* Buddhist versions of the ritual text. Lessing used a *Gelugpa* text, but Karmay (1998:310) points out that this is also based on a *Nyingmapa* original. The large collection of *terma* texts known as the Rinchen Terdzö collected by the lama Kongtrul Yonten Gyatsho (1818-1899) includes a number of texts on the ritual.<sup>12</sup>

The study of the ritual that I will discuss is that given by Karmay (1998). It is of direct relevance here as it is based on his observations in 1983 of the same Bönpo ritual carried out at Menri Yundrung Bön monastery in Dolanji, Himachel Pradesh. The account he gives is a blend of textual analysis and ethnographic description. The text used in Dolanji and in Dhorpatan is called 'swastika of life' (*tshe yi yungdrung*); it is a nineteenth century text composed by the Bönpo lama, Nyima Tenzin. Karmay points out that although the text is of relatively recent origin it is based on a much older Bönpo tradition. The *Nyingmapa* texts are considerably older, but Karmay points to textual evidence within them that suggests an earlier Bönpo influence. Lessing believed the ritual he studied to be based on a Sanskrit original, and thereby originating in India. Karmay denies this by pointing to the fact that the *la lü* ritual texts do not form a part of the Tibetan Buddhist *Tanjur*.

The main deity of the ritual is the Bönpo master, Tsewang Rigzin. According to Bönpo tradition he is the son of the celebrated eighth century Bönpo lama, Drenpa Namkha; amongst his many accomplishments he is said to have mastered the long

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<sup>12</sup> See Karmay (1998:321) for the titles of four of these texts.

life practices. The lama begins by visualising himself in the form of Tsewang Rigzin and supplicating his power to achieve the purpose of the ritual. In a discussion about the ritual with Tenpa Yungdrung, I was told that the ritual draws on both the higher and lower ways of Bön. *Dzogchen* and Tantric practices found in the five higher ways of the 'the bon of the fruit' (*drebu'i bön*), are used to give power to the rituals of the lower ways (*gyu'i bön*).

Karmay identifies eight stages in the procedure of the ritual. The ritual begins with a long invocation of Tsewang Rigzin. The lama then visualises himself in his form and summons the demons that are responsible for the abduction of the *la*. The ritual text refers to the chief demon as *tshe dü*, 'the demon of life'. Various types of offerings are given to the demon and its entourage, in return it is asked to give back the *la*. At this point an effigy of the sick person made of *tsampa* dough, is taken outside and offered to the demon. In the ritual described above, this had occurred just before I arrived. Initially, the demon is asked in a more or less pleasant way to accept the offerings and the ransom and return the *la*. The ritual text then takes a more vigorous turn and declares that if this is not done, the lama as Tsewang Rigzin, will emanate thousands of wrathful deities and reduce the demon to dust. In the second stage of the ritual, the lama calls on the combined power of the Buddha Tönpa Shenrab, the Bönpo *yidams*, *khadroma*<sup>13</sup> and Tsewang Rigzin, to bring the *la* into the *tsampa* figure floating on the liquid. This figure is known as the 'figure of the soul' (*la zug*); its head should be that of the emblem of the man's clan, if this is unknown then the text says the head should be that of a deer. The liquid upon which it floats is known as the 'lake of the soul' (*la tsho*). The third stage of the ritual involves invoking the five aspects of Tsewang Rigzin; these correspond to the five Buddha families of Tantric philosophy and practice. The aim of this invocation is threefold: to bring the *la* into the figure and into the turquoise which it holds in its left hand, and to bring life into the 'arrow of life' (*tshe da*) which it holds in its right hand.

The next stage involves various forms of divination to determine whether the *la* has returned. The lama calls on the same divinities to reveal through the divination the status of the *la*. The 'lake of the soul' is stirred anti-clockwise, and the 'figure of

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<sup>13</sup> A class of female deities (Skt. *Dakini*).

the soul' is set spinning. The text says that the figure can be set in motion up to nine times until receiving a positive outcome. The divination of fishing out the white stone can be repeated only three times. A third divination occurred in the ritual that Karmay observed which was absent from the Dhorpatan ritual. A game of dice was enacted which represented symbolically a battle between gods and demons. The dice of the demons was black and the dice of the gods was white. The dice were thrown at the same time and the highest score won. Both the ritual I observed, and the ritual Karmay observed, had positive outcomes, and they culminated in the *la* being symbolically returned by the lama tying the 'turquoise of the soul' around the sick person's neck.

### 8.8 Lu Nöpa

One afternoon I was sitting in the Gompa compound when a Nepalese girl ran past me in great distress. She was shouting something to the Nepalese men who were working on the new medical school building. One of the men put down his tools and left with the girl. Shortly afterwards, Geshe Tenzin Dargye told me that the girl's sister had been suddenly beset by a strange illness. The man she had left with was a *jhānkri*, a local healer. The following day Geshe Tenzin Dargye said that he had been searching for me because he had done another *dö* ritual. He had been to the house of the sick Nepali woman. He said that she was sat in the house, not conscious of anything that was happening around her, and shaking all the time. The day before, the *jhānkri* had done a ritual, during which two chickens had been sacrificed. Geshe Tenzin Dargye explained about the sacrifice with evident distaste. The *jhānkri*'s ritual had not improved the condition of the girl and her family had asked Geshe Tenzin Dargye for help.

On the following day, two of Amchi Gege's monk medical students told me that they had been to see the sick Nepalese woman. They gave the same description of her condition as Geshe Tenzin Dargye, but added that her eyes were turned back so that the cornea could not be seen. They were totally convinced that she was suffering from *nöpa*. As I heard more about the condition of the woman, I began to think that she might be suffering from epilepsy.

The following day I accompanied Geshe Tenzin Dhargye to visit her. She was sat in the corner of the house, seemingly oblivious to what was happening in the room, with her head nodding up and down to a steady rhythm. She looked to be in her early twenties. Geshe Tenzin Dargye lit some incense and began reciting a prayer. As he did so he occasionally threw barley grains around the room and wafted the incense into the woman's face. I asked her family if she had ever suffered from something like this before. They said this was the first time. It had all begun five days before when she had been up in the hills with their buffaloes. She had been in a place where there is a small lake. Geshe Tenzin Dhargye thought it was possible she had washed in the lake and thereby offended the *lu* spirits who reside there. He had asked one of her relatives to go up to the lake and burn some juniper and set up a prayer flag and apologise to the *lu*. This had not yet been done, but they said it would be done quickly.

The next day another *jhānkri* was brought from a nearby village. He was reputed to have more power than the first *jhānkri*. I didn't see the ritual he performed, but within a few days the woman was well again. Around this time I met her father at the *gompa* compound. He was very happy about his daughter's recovery and had brought a bag of meat as a gift for the 'doctor lama'. I asked him which treatment or ritual did he think had brought about the cure. He replied that he did not attribute it to any one particular cause, but to the combination of everything together.

For the students in the medical school in Dhorpatan, Tibetan religion is not a separate knowledge domain from medicine. In their lessons with Amchi Gege, in each of the three main areas of medical activity - the classroom, the pharmacy, and clinical interaction - the students learn elements of Tibetan religion that are directly related to medical practice. Because of the intimate relationship between Tibetan religion and Tibetan medicine, Amchi Gege prefers his male students to be monks. Tundup, Sonam, and Yundrung all became monks on entering the medical school, but gave it up towards the end of my stay. In almost every healing ritual that I saw Geshe Tenzin Dargye perform, a number of the medical students served as his assistants. For instance in the Angry Widow illness episode, which I discussed earlier, Yundrung served as Geshe Tenzin Dargye's principal assistant, and about

half way through the ritual Tsultrim turned up and joined them in reciting the ritual text. A few days later, when it was thought that the patient's *la* had been abducted, Nyima, the senior medical student, was one of the principal participants in the *la lü* ritual that was performed to bring it back.

Although all the medical students know in varying degrees about Tibetan healing rituals, in the context of the medical teachings it is only necessary that the students learn how to identify whether a disease has been caused by a harmful spirit. It is then the function of a monk or a lama to perform the appropriate ritual. With Amchi Gege's three monk students, and Nyima, who as I have mentioned in chapter one, comes from a *nagpa* lineage, they were legitimate peripheral participants in the healing practices of Geshe Tenzin Dargye.

## Conclusion

Throughout the thesis I have focused on two principal themes: learning processes that I observed in the Tibetan medical school, and the nature and status of Tibetan medical knowledge. These two themes are related in the sense that any form of learning must be considered alongside the social, political, and cultural context in which it occurs. Although these two main themes are addressed in various ways throughout the thesis, certain chapters focus specifically on one of them. In chapter one I have given relevant background information about the research location and the medical school. Learning processes are the main subject of chapters two, three, five and six; the nature and status of Tibetan medical knowledge is the principal focus of chapters four, seven and eight.

The model of learning, which I have adopted to understand the learning processes in the medical school, emphasises the situated nature of learning. I draw on the scheme developed by Dreyfus and Dreyfus (1986), which identifies five stages of progress from novice to expert. As a novice, the student learns context free object facts and rules of behaviour. Progress is made through the next two stages of advanced beginner and competence as more and more knowledge is situated in practice. At the two higher stages of proficiency and expertise, knowledge becomes second nature; it is fluid and intuitive. It follows from this that the learning process should not be confined to the acquisition of propositional forms of knowledge. As increasing knowledge is situated in practice the students acquire non-discursive forms of knowledge that are essential to expertise. In order to move on to the higher levels of competency, the decontextual, propositional knowledge that the student has acquired must be transformed into the performative memory of skilled practice. At this level knowledge is not simply something that is consciously known, rather it is something that is enacted; for this reason I have referred to it as 'knowledge as a mode of being'.

As we have seen, there are three aspects to the method of learning in the school in Dhorpatan: first the students memorise the main medical text, then they receive explanations on it from Amchi Gege; alongside this the students are inducted into medical practice by engaging in pharmaceutical and clinical activity. In chapter two, I have outlined in detail the model of learning, which I have adopted to understand

the learning process. In chapter five, I have used this model to show how the students learn about medicine in the classroom; this is the main arena where they acquire the propositional, decontextual knowledge of medicine. In chapters six and eight I have shown how the students engage with this knowledge in pharmaceutical and clinical contexts and thereby develop the performative memory of medical practice.

In chapter seven I have discussed the relevance of Tibetan religious notions to Tibetan medicine. I presented the various kinds of rituals that were performed with the aim of cultivating prosperity and maintaining a balance between the human community and the natural environment. In chapter eight, I have discussed various disorders which occurred in Dhorpatan that were diagnosed as caused by harmful spirits, and the healing rituals that were performed to cure these afflictions. Although Amchi Gege was thoroughly conversant in these rituals it was Geshe Tenzin Dargye who directed all these healing activities. In the course of their studies the students learn to identify diseases that have been caused by harmful spirits, and they all assisted Geshe Tenzin Dargye in carrying out the healing rituals. By participating in the rituals, Amchi Gege's three monk students and the senior medical student, Nyima were being actively inducted into this area of medical practice by Geshe Tenzin Dargye.

In my discussion of memorisation in the medical school, I have concluded that it should not be equated with rote learning. Carruthers's comments on the role of memory in European medieval culture, which I have discussed in chapter three, are of relevance here; in medieval culture memorising was not considered to be a form of rote learning, rather it was a necessary stage in the development of creativity and originality. In the same way, in the medical school in Dhorpatan, memorising the main medical text contributes to the development of performative memory. One of the key mechanisms involved here has also been identified by Carruthers (1990:62). The idea in medieval culture was that if what is memorised is done according to a clear coherent structure, there will be no problem in bringing back to the conscious mind what has been previously set aside, along with associated forms of knowledge. We have seen that the medical text, with its verse form, tree metaphor, and abundance of lists was deliberately structured in this way to serve the purposes of memory,

in a similar manner to European medieval texts. This is equally true of Buddhist and Hindu texts, which still rely heavily on oral transmission.

Another key component in the process was identified to me by Tenpa Yundrung, the junior Lupon of Tritsen Norbutse Bönpo monastery. He explained to me that ideally memorising should not be a passive form of rote learning; the students should develop the 'single minded concentration' or 'mindfulness' to forge the material indelibly into their mind. It is by cultivating 'mindfulness' that the student is then able to retrieve relevant associated medical knowledge during instances of clinical practice.

In the school in Dhorpatan, the students are engaged in medical practice from the outset of their studies. As I have mentioned, patients can turn up at any time, and a formal classroom teaching session can quickly be transformed into clinical interaction. Usually Amchi Gege had one or two of his students assisting him when he consulted patients. For this reason Amchi Gege had structured the way he teaches in a way that quickly provides the students with knowledge that is useful for medical practice. He begins by teaching the first volume of the medical text which gives the students a general overview of the medical teaching, and then he moves on to the first five chapters of the fourth volume on pulse and urine diagnosis, and medicinal decoctions, powders and pills. After this he moves on to the third volume of the medical text on Tibetan nosology. In the school the students have ample opportunity to gain practical experience of medicine. In certain areas of medical practice, I would estimate that most of the students have acquired the third stage of 'competence' on the Dreyfus scale. In a few areas of medical practice, Nyima, the senior medical student, had almost certainly reached the fourth stage of 'proficiency'.

I have said that memorisation in the school is not a form of rote learning. But as I have mentioned in chapter two, Tenpa Yungdrung told me that in the past it was common for monks to memorise texts and have very little knowledge of their contents, even in the present day this sometimes still occurs. However the ideal has always been that monks should memorise and understand. In chapter three, we saw in Fuller's study of *agamic* education in Brahmanical schools in South India, the reformists likened education in the schools to the kind of training that a lawyer or a doctor needs to undertake, but Fuller points out that this is not the case. Education in

the Brahmanical schools is not about ‘acquiring the kind of formal, substantive knowledge that doctors or lawyers have to apply to a range of different cases’ (1997:17). The main aim of the *agamic* education is to enable the students correctly to recite the relevant passages during the ritual. However, as the ultimate aim of the education in the medical school in Dhorpatan is that students will be medical practitioners, they do need formal and substantive knowledge of medicine, as they will be confronted with a range of different cases in clinical practice.

This is not to say that everything that the students memorise and are taught by Amchi will reach the level of performative memory. The development of performative memory requires considerable practical experience and as we saw in chapter six, the students had only experienced in clinical practice a small selection of the diseases that they had learnt about in the classroom. It is likely that they will never encounter some of the diseases that are discussed in the third volume of the medical text. The same reasoning applies to the external therapies of cauterisation, and bloodletting; as these were rarely resorted to in Dhorpatan, the students had little opportunity to develop the necessary performative memory.

In chapter four, I have discussed the two images of medicine that recur throughout the literature of medical anthropology. One, which includes amongst a range of traditions, Tibetan, Chinese, Ayurvedic and Yunani medicine, presents the body and the mind as a unified integrated system that is interrelated with other systems in the environment and the universe. Disease occurs when the interrelationship within and between these systems breaks down; treatment involves restoring balance and harmony. This is contrasted with biomedicine, which presents the body as a complex mechanism. Disease arises as a consequence of lesions and breakdown in biological systems. Treatment is mechanical and impersonal and focuses on dysfunctions in biological substrata.

The first approach relates to what I have called the synthetic mode of knowledge, the second approach is what I have termed the analytic mode of knowledge. In chapter four I have also discussed various other typologies that have been used to explain these two modes of knowledge, there have been various rendered as: scribal culture and print culture (Eisenstein 1969, 1981, and 1983), non-literate and literate culture (Goody 1977), and cognitive traditionalism and cognitive modernism (1982).

We saw that the way Tibetan medical knowledge is viewed and the manner in which it is passed on in the school in Dhorpatan has many similarities with the attributes that Goody lists for non-literate cultures and Horton for cognitive traditionalism. Tibetan medical education emphasises memorisation of the main text, alongside the personal transmission of teachings on it by a fully qualified practitioner. The medical teachings are thus preserved in an unadulterated form by means of the medical lineage. For the Bönpos, the main Tibetan medical text is considered to derive from the enlightened insight of Tönpa Shenrab, and for the Tibetan Buddhists from the Medicine Buddha; it is therefore looked upon as sacred, complete, and beyond dispute. The text has spawned a large number of commentaries over the centuries. We have seen that this two-fold pattern of knowledge of canonical texts and scholarly commentaries is an expression of a wider cultural pattern: the same division exists in the Islamic tradition between the Quran and the Sharia commentaries, in Hinduism between *shastrik* and *laukik* knowledge, which relates to the older Vedic distinction between knowledge classified as *sruti* and *smṛti*, and in Indian Buddhism between the *sutras* and the *sastras*, which has its counterpart in the Tibetan *Kanjur* and *Tanjur* collections.

Though it appears that specific cultural forms of the synthetic mode of knowledge are bounded self-contained units and can be sharply contrasted with the analytic mode of knowledge, in practice there is considerable overlap. In chapter three, I have discussed that memorial culture in Europe and India existed a long time after the introduction of writing. In fact, as we have seen from Parry's discussion of Brahman priests in Benares, and with the transmission of Tibetan medical knowledge, literacy far from contributing to a process of cognitive modernism has been co-opted by exponents of the oral tradition to enable a process of cognitive conservatism.

Amchi Gege, although firmly valuing the importance of memorising the text and the personal transmission of medical knowledge, has made some concessions in the programme at his school to modern forms of education, such as the structured daily timetable, course syllabus, and regular assessments and written exams. The students also continuously criticised the way that they were being taught; on the whole they couldn't see the point of having to memorise all of the main text, and they thought

that the constant chores they had to carry out for Amchi Gege considerably distracted from their medical studies.

The long-standing tradition in medical anthropology of contrasting medical traditions, which I have typified as involving the attributes the synthetic mode of knowledge, with biomedicine, masks important similarities. Although students of biomedicine do not have to memorise whole texts, they do have to memorise long lists of drugs, symptoms, and disease classifications. Furthermore personal transmission and lineage are by no means absent from biomedical education.

I was last in Dhorpatan in August 1998. Since that time only one of Amchi Gege's students has completed the course. Nyima, the senior medical student took his final exam in the summer of 2000 and is presently trying to establish a clinic in his village of Jharkhot, in lower Mustang. The other students are now close to completing the course. Amchi Gege has recently taken on one more female student.

## Appendix A - The Bön and Buddhist Religions of Tibet

The two religions have coexisted in Tibet since at least the tenth century AD. Although, following common usage I have referred to them as Buddhism and Bön, as we will see, the use of the word 'Buddhism' here is misleading. Adopting the more appropriate Tibetan designations, the distinction is between the vast majority of Tibetans who are *Chöpa*, followers of the religion of *Chö*, and a substantial minority who are Bönpo, followers of the religion of Bön<sup>1</sup>. Both Snellgrove (1967:1) and later Kvaerne (1972:23) have pointed out that there is no word for Buddhism in Tibetan. The closest approximation is the word *nangpa*, which means 'insiders', but as Kvaerne has indicated, this word designates both the *Chöpa* and the Bönpo.

Of the 120,000 Tibetan refugees who came to Nepal and India, about 1000 are followers of the Bön religion. The first Bönpo refugee settlement was established in 1967 at Dolanji near Simla in the Shiwalik hills. This is the location of the new Menri monastery and the seat of the thirty-third abbot Sangye Tenzin. Cech (1987) has carried out a detailed study of the history, and social and cultural identity of this settlement. In the early years the Bönpo had no political representation in Dharamsala. This changed in 1977 when the Bön religion was officially recognised as a sect of Tibetan religion<sup>2</sup>, and the Bönpo were allowed one representative in the Assembly of the Tibetan People's Deputies. A further embracive gesture was made by the Tibetan administration in 1978 when abbot Sangye Tenzin officially received the title of 'throne bearer' (*tridzin*) from the Dalai Lama; this title is traditionally bestowed on the heads of the four Buddhist sects (Cech 1987).

About a third of the Tibetans in Dhorpatan are Bönpo and the rest are *Chöpa*. Although there is no doubt that these two groups feel themselves to be part of separate religious communities, in terms of doctrine and practice both religions have much in common: both are based on the doctrine that life is marked by impermanence and suffering, and that through the force of karma, beings are bound into a constant cycle of death and rebirth into one of the six realms of existence, until through religious practice and virtuous actions they can achieve liberation.

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<sup>1</sup> In keeping with the main body of the thesis I have not put the Tibetan words Bön or Bönpo in italics.

<sup>2</sup> Although this is a positive development, the Bönpo consider themselves to be a separate religion and not merely a fifth sect of Tibetan Buddhism.

Furthermore, both religions use the same word *Sangyé*<sup>3</sup> to refer to the one who has accomplished this state of emancipation, and both religions are based on the teachings of such an individual; for the followers of *Chö* it is the Buddha Sakyamuni; and for the followers of Bön it is the Buddha Tönpa Shenrab. The Tibetan words *Chö* and *Bön* refer at the same time to the teachings of these two respective Buddhas, and to the unchanging nature of reality, which these teachings express; thus they have the same semantic scope as the Sanskrit term, *dharma*. Due to the manifest similarities between the two religions a number of authors have brought into question the common practice of translating the term *Chö* as Buddhism, and leaving the term 'Bön' untranslated, as though it is an entirely different religion (Martin 1994; Kvaerne 1972). Some scholars have gone as far as to argue that Bön is in fact not a separate religion but an unorthodox form of Buddhism (Snellgrove 1967, 1987; Kvaerne 1972).

A good deal of confusion about the word *Bön* stems from the way that it has been used to signify a diverse range of meanings. Kvaerne (1995:9) gives three common meanings that are associated with it in the writings of western scholars: among one group of writings, the word 'Bön' is used to denote the religion that existed in Tibet prior to the arrival of Buddhism in the eighth and ninth centuries; a second group of writings associates the word with Tibetan folk tradition, and forms of pre-Buddhist shamanic practice; the third way that the term is used is to refer to an organised religion known in full as Yungdrung Bön, which developed in Tibet in the tenth and eleventh centuries alongside various forms of Buddhism that were imported from India at this time. When I use the word 'Bön' in the context of the people in Dhorpatan it is this third signification that I wish to convey.

There are three different accounts of the development of the two religions: one version is found in Bönpo texts, another version is found in *Chöpa* texts, and western scholars present a third perspective. For the *Chöpa*, the Bönpo religion is little more than a plagiarised version of their own religion; the Bönpo make the same counterclaim. There is a long tradition of *Chöpa* polemical writings on the Bönpo religion going back to the thirteenth century AD<sup>4</sup>. A good example of the approach taken in this polemical literature is the eighteenth century *gelugpa* scholar Thubten

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<sup>3</sup> The Tibetan word means one who has been completely purified, and is used to refer to a Buddha.

<sup>4</sup> See Martin (1991) for a detailed study of this polemical tradition.

Losang Chokyi Nyima's 'Crystal Mirror of the doctrinal System', which presents the Bön tradition to have passed through three phases<sup>5</sup>: the first phase, 'original Bön' (*döl bon*) consisted of an unsophisticated primitive popular religion with no literature; the second phase, 'deviating Bön' (*khyar bon*), involved a new focus on funerary rites and a development in doctrine through contact with other religious practitioners and centres; the third phase 'transformed bön' (*gyur bon*) was the period when Buddhist texts were transformed and made to appear as Bön texts. The most intense activity of the third phase would have been during the tenth and eleventh centuries AD, resulting in the Bön tradition in its present shape.

The Bönpo themselves would readily acknowledge that events occurring in Tibet in the tenth and eleventh centuries marked a major changing point in their religion, but they firmly believe that their religion predates *chö* by a long period of time. According to the chronology of the Bönpo lama, Nyima Tenzin (b1813), Tönpa Shenrab was born in 16016 BC (Kvaerne 1971). In the Bönpo canon there are three versions of his life story: the short version is the *Dodü* which comprises of twenty-one chapters in one volume; the medium length version is the *Zermig*<sup>6</sup>, which has eighteen chapters in two volumes; and the long version is the *Ziji*<sup>7</sup>, which has sixty-one chapters in twelve volumes.

Tönpa Shenrab taught the doctrines of Bön primarily in Olmolungring. He visited Tibet only briefly, in quest of his seven prized horses that had been stolen by the demon Khyaba Lagring; at this time he taught only the lower ways of Bön, finding the people not ready for the higher teachings. The Bönpo canon contains a huge volume of literature, which is said to be the word of Tönpa Shenrab. Like the scriptures attributed to Sakyamuni, Tönpa Shenrab's teachings were collected by his close disciples shortly after his death. He entrusted to each of his sons certain aspects of the Bönpo doctrine. The most important in the context of this study is his second son, Tribu Trishi, to whom Tönpa Shenrab passed on all his medical knowledge.

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<sup>5</sup> These three phases have been discussed by Tucci (1980:224), Kvaerne (1972:29), and Martin (1994).

<sup>6</sup> The first seven chapters have been translated by A H Francke (1924, 1926, 1927, 1928, 1930, 1950). The text was also used as the basis of Hoffman's (1961:85-97) account of Tonpa Shenrab's life.

<sup>7</sup> Snellgrove (1967) has translated and edited the relevant sections (chs. 7,8,9,10,12,13,14,15, and 16) dealing with the nine ways of Bön.

According to Bönpo accounts there were six great translators<sup>8</sup> who were responsible for translating and spreading the doctrines of Bön in the surrounding countries. The disciples of Mucho Demdrug of *Tazig* translated the teachings into the language of Zhang Zhung, and it was from here that the teachings were brought to Tibet during the reign of the legendary first King of Tibet, Nyatri Tsenpo<sup>9</sup>.

Zhang Zhung plays the same role for the Bön religion as India does for *Chö*. According to Bönpo sources, Zhang Zhung was a large kingdom stretching from Gilgit in the west and encompassing all of western Tibet. Its capital was *Khyunglung Ngulkhar*, which was situated in the region of Mt Ti-se (Kailash). Tradition maintains that the second king of Tibet, Mutri Tsenpo, invited 108 Bönpo scholars from Zhang Zhung to Tibet, and thirty-seven religious centres were established during his reign (Cech 1987). The Bönpo claim that most of their texts were originally written in the language of Zhang Zhung, and on the first page of many their texts the title has been left in this language, in a like manner to the way *chos-pa* texts have retained their original Sanskrit title.

The religion of Bön is said to have flourished in Tibet up to the reign of the eighth King of Tibet, Drigum Tsenpo, who persecuted the religion, and banished the Bönpo from the land. In response to this the Bönpo hid many of their texts for safety. For the Bönpo, this persecution marks the beginning of their tradition of rediscovered texts (*terma*). This state of affairs was resolved when his son re-established Bön as the state religion. In the seventh century, during the reign of Songtsen Gampo (accession 634 AD), through the influence of his Chinese and Nepalese wives, *Chö* (i.e. Buddhism from India and China) was brought to Tibet. However, Bönpos maintain that their religion remained the state religion of Tibet until the time of king *Trisong Detsen* (accession 755AD) during whose reign the Indian Tantric saint Padmasamhava was invited to Tibet, and *Samé*, the first Tibetan monastery was established. In this period, the Bönpo were again persecuted and banished from Tibet, and for the second time they were compelled to hide their texts for safekeeping. According to Bönpo historical sources, it was also during Trisong

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<sup>8</sup> These translators are *Mutsha Trahé* of *Tazig*, *Trithog Patsha* of Zhang-zhung, *Hulu Palé* of Sum-pa, *Lhadag Ngagdro* of India, *Legtang Mangpo* of China, and *Serthog Chéjam* of *Throm* (Karmay 1972:16)

<sup>9</sup> Sec Haahr (1969) for an account of the early kings of the Yarlung dynasty.

Detsen's reign that Zhang Zhung was annexed to Tibet, after the assassination of its king, *Ligmigya*.

There is a wealth of information in Tibetan historical texts concerning the history of Tibet prior to the reign of Songtsen Gampo, but as very few of these texts date from before the tenth century, they cannot be taken as reliable sources. Tibetan history based on reliable sources - inscriptions, accounts of Tibet by historians of neighbouring countries, and the literature of later Tibetan historians - begins from the reign of King Songtsen Gampo. The earliest Tibetan manuscripts date from the late ninth century to the early tenth century. These were sealed in a chamber of a cave at Dunhuang in north west China, around 1035AD, and discovered at the beginning of the twentieth century (Bacot et al: 1940, Thomas 1935-63, Lalou 1939-61). Based mainly on material found in the Dunhuang manuscripts, some recent western scholars have given an account of the Bön religion in the early period that differs from that found in Bön texts.

As we have seen, according to Bön and Buddhist historical sources, the Bön religion existed in Tibet prior to the introduction of Buddhism in the seventh century. Despite the lack of references to it in the stone inscriptions, Karmay (1983) concludes from his reading of Dunhuang manuscripts that an organised religion known as Bön did exist in Tibet at this time. But the extent to which it was organised, the nature of its doctrines and practices, and the way in which it relates to the organised religion called Yungdrung Bön that emerged in the eleventh century, is not clear. The Dunhuang manuscripts speak of a class of priests in Tibet known as Bönpos or sometimes *shen*. These priests performed funerary rites and rituals connected with the king. Snellgrove (1967:1) points out that the word Bön is the Tibetan equivalent of the Zhang Zhung term *gyer*, meaning 'to chant'; he therefore translates the term 'Bön' as 'priests who invoke' (1967:21). From his reading of the early Tibetan manuscripts, the Bön were just one amongst several types of priests. Karmay has also noted that the word *gshen-rab* appears several times in the Dunhuang manuscripts as a type of priest.

After the collapse of the Royal dynasty in 842, for a period of around 150 years, very little is known about Tibetan cultural life. It appears that the Bön and *Chö*

traditions were maintained through hereditary lineages of religious practitioners<sup>10</sup>. Tibet emerged from this ‘dark age’ in the eleventh century when the Bön and *Chö* religions entered a major period of revitalisation known as the ‘Later Propagation’ (*Chi dar*). For the *Chöpa* this period involved re-establishing the connection with Indian Buddhist teachers, and a new wave of translations of Indian Buddhist texts. This activity began with a scion of the old Royal Dynasty sponsoring a group of young Tibetans to go to study in Kashmir. The most notable of these was the famous translator Rinchen Sangpo. The Tantric cycles that were introduced at this time led to the formation in Tibet of the *Sakya* and *Kagyü* Buddhist religious sects.

The later propagation of Bön, which was the third dissemination of Bön teachings in Tibet, was founded, as it was for the *nyingmapa*, the oldest sect of Tibetan Buddhism, on rediscovered texts (*terma*). The first Bön texts to be rediscovered were found by three monks from Nepal in Samé monastery in 913 AD, but the later propagation of the Bönpo doctrine did not really get underway until 1017 AD, when Shenchen Luga rediscovered a larger number of texts, which eventually went to form a major part of the Bönpo canon. He entrusted the knowledge contained in these texts to three of his main disciples (Karmay 1975:119), each of whom went on to establish religious centres. One of these centres was the famous monastery of *Yeru Wensakha*, in central Tibet.

Traditionally, the doctrines and practices of Bön have been classified according to two main systems: the Four Doors and the Treasury as the Fifth (*Go zhi dzö nga*)<sup>11</sup>, and the Nine Ways (*thegpa gu*). There are three versions of the Nine Ways: the ‘northern treasure’ (*chang ter*), the southern treasure (*lho gter*), and the central treasure (*ü ter*). The nine ways are explained in the *Ziji*, ‘The Glorious’, the long biography of Tönpa Shenrab; the relevant sections have been studied by Snellgrove (1967)<sup>12</sup>. In brief the Nine Ways are<sup>13</sup>:

1. The ‘Way of the Shen of the Cha’ (*cha shen thegpa*): covers the four activities of: divination (*mo*), astrology (*rtsis*), ritual (*gto*), and medical diagnosis (*dpyad*).

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<sup>10</sup> According to the Bön tradition there are six main Bönpo family lineages: gShen, Bru, sPa, rMe'u, Zhu, and Khyung. On the subject of these families see Cech (1987) and Karmay (1975).

<sup>11</sup> On this classification see Karmay (1975) and Norbu (1995: 37).

<sup>12</sup> His study represents only the southern treasure; the other two versions have not yet been studied by western scholars.

<sup>13</sup> I have followed the English translation of the titles of the nine ways given in Norbu (1995)

2. The 'Way of the Shen of the Phenomenal Universe' (*nang shen thegpa*): deals with classes of malevolent spirits and local deities, and rituals associated with them, rites of exorcism, and ransom rites.
3. The 'Way of the Shen of Magic Power' (*trul shen thegpa*): explains how to carry out rituals of destruction against harmful beings.
4. The 'Way of the Shen of Existence' (*sri shen thegpa*): comprises of funerary rites.
5. The 'Way of the Virtuous Ones' (*genyen thegpa*): covers the rules of behaviour for the lay practitioner.
6. The 'Way of the Ascetics' (*drang song thegpa*): deals with the rules of monastic discipline.
7. The 'Way of the White A' (*a kar thegpa*): covers Tantric theory and practice.
8. The 'Way of the Primordial Shen' (*yeshen thegpa*): gives further details on Tantric practice.
9. The 'Supreme Way' (*yangtse la mé thegpa*): the teachings of the great perfection (*dzogchen*).

The Nine Ways are divided into two groups. The first four are collectively referred to as the 'Bön of Cause' (*gyu-i bön*) and involve knowledge and practices that are of practical benefit for worldly ends. This group of practices is sometimes further subdivided into 'twelve lores of Bön', which according to Tibetan historical sources were prevalent during the reign of the first king of Tibet, Nyatri Tsenpo, who reigned around 126BC (Norbu 1995:xv). The last five ways are referred to as the 'Bön of Fruit' (*drebu-i bön*); these include the teachings found in the Bönpo Tantras and *Dzogchen* texts, which deal with the methods of liberation from this world. As Snellgrove (1967:12) points out this classification covers the whole range of Tibetan religious culture. The only thing that is missing is the pattern of learning that occurs in Buddhist and Bönpo dialectic schools; this is because this form of study developed after the compiling of the nine-fold classification.

In the present day, the Bönpo religion is still practised by a sizeable minority of Tibetans both in Tibet and in refugee communities. The largest Bönpo communities in Tibet are found in the regions of Kham and Amdo, but there are also smaller communities in the regions of *Chadur*, *Tewa* and *Dromo* in the Chumbi valley. Bönpo influence also stretched beyond Tibet into Nepal and Sikkim, and into the Yunnan province of China where it is found in the religious practices of the Na-khi people (Jackson 1978, 1979; Rock 1952). Though there may be many points of similarity between *Chö* and Bön in doctrine and practice, the two religious groups consider themselves to be followers of separate religions. As Kvaerne (1995:10) has suggested, this sense of a separate identity, is founded not on metaphysical doctrine

or religious practices, but on different notions of history, legitimation and religious authority.

## Appendix B – The Contents of the *Gyu Shi*

Chapters	Tibetan Name	English Name
<b>The Root Tantra (<i>rtsa rgyud</i>)</b>		
1	<i>gling-gzhi</i>	Introduction
2	<i>gling-glong</i>	Enumeration of Topics
3	<i>gzhi</i>	The Condition of the Body
4	<i>ngos 'dzin</i>	Diagnosis and Symptoms
5	<i>gso-thabs</i>	Treatment
6	<i>rtsis</i>	Summary of Chapters 3,4 and 5
<b>The Explanatory Tantra (<i>bshad rgyud</i>)</b>		
1	<i>bshad-pa'i sdom</i>	Summary of Explanatory Tantra
2	<i>chags-tsul</i>	Embryology
3	<i>'dra-dpe</i>	Similes of the Body
4	<i>gnas-lugs</i>	Anatomy
5	<i>mtsan-nyid</i>	Physiology
6	<i>dbye-ba</i>	Types of Body
7	<i>'jig-ltas</i>	Signs of Death
8	<i>rgyu</i>	Causes of Disease
9	<i>nad kyi rkyen</i>	Immediate Causes of Disease
10	<i>zhugs-tsul</i>	Mode of Entry of Disease
11	<i>mtsan-nyid</i>	The Symptoms of Disease
12	<i>dbye-ba</i>	Classifications of Disease
13	<i>rgyun-spyod</i>	Regular Behaviour
14	<i>dus-spyod</i>	Seasonal Behaviour
15	<i>gnas-skabs-spyod</i>	Incidental Behaviour
16	<i>zas-tsul</i>	Diet
17	<i>zas-bsdam</i>	Dietary Restrictions
18	<i>zas-tsod ran-pa</i>	Correct Amount of Food
19	<i>sman gyi ro</i>	Tastes of Medicines
20	<i>sman gyi nus-pa</i>	Potency of Medicines
21	<i>sman gyi sbyar-thabs</i>	Compounding of Medicines
22	<i>cha-byad</i>	Medical Instruments
23	<i>me-na-gnas</i>	Maintaining Health
24	<i>nyes-pa dngos-ston</i>	Diagnosis
25	<i>ngan-gyo skyon-brtag</i>	Examination by subterfuge
26	<i>spang-blang mu-bzhir</i>	Four Diagnostic Methods to Verify Whether a Patient Should Be Accepted or Not
27	<i>gso-tsul spyi</i>	General Therapeutics
28	<i>khyad-par gso-thabs</i>	Specific Therapeutics
29	<i>gso-thabs gnyis</i>	Two forms of Treatment
30	<i>gso-thabs dngos</i>	Direct Therapeutics

31	<i>sman-pa'i le'u</i>	The Qualities of the Doctor
<b>The Instruction Tantra (<i>man ngag rgyud</i>)</b>		
1	<i>man ngag rgyud zhus pa</i>	Requesting the Teachings
<b>Section 1 – Humoural Diseases</b>		
2	<i>rlung gi nad</i>	Wind Diseases
3	<i>mkhris p'i nad</i>	Bile Diseases
4	<i>bad kan gyi nad</i>	Phlegm Diseases
5	<i>'dus nad bad kan smug po</i>	Disorders Involving Combinations of the Three Humours
<b>Section 2 – Chronic Internal Disorders</b>		
6	<i>gong nad thams cad kyi rgyu ma zhu ba</i>	Digestive Disorders
7	<i>gcong chen skran nad</i>	Tumours
8	<i>skya rbab</i>	First Stage Oedema
9	<i>'or nad</i>	Second Stage Oedema
10	<i>gcong chen dmu chu</i>	Third Stage Oedema
11	<i>Gcong chen zad byed</i>	Consumption
<b>Section 3 – Fever Conditions</b>		
12	<i>tsha ba spyi</i>	General Fever
13	<i>'grul gzhi gsal ba tsha drang gal mdo</i>	Distinguishing Hot and Cold Disorders
14	<i>tsha b'i ri thang mtshams bstan pa</i>	Condition Where Wind Manifests fever, but Treatment is for Wind
15	<i>tsha ba ma smin pa</i>	Unripened Fever
16	<i>rgyas p'i tsha ba</i>	High Fever
17	<i>stongs p'i tsha ba</i>	Empty Fever
18	<i>gab p'i tsha ba</i>	Hidden Fever
19	<i>tsha ba rnyings pa</i>	Chronic Fever
20	<i>tsha ba rnyogs pa</i>	Turbid Fever
21	<i>'grams kyi tsha ba</i>	Spreading Fever
22	<i>'grugs kyi tsha ba</i>	Disturbed Fever
23	<i>rims kyi tsha ba bal nad</i>	Infectious Fever
24	<i>'brum p'i rims</i>	Pox Diseases
25	<i>rgyu gzer gyi rims</i>	Infectious Disease of the Intestine (Colic)
26	<i>gag lhog</i>	Fever Associated with Infectious Disease of the Throat
27	<i>cham rims</i>	Common cold and Flu

<b>Section 4 – Disease of the Upper Body</b>		
28	<i>mgo nad</i>	Head Disorders
29	<i>mig nad</i>	Eye Disorders
30	<i>rna b'i nad</i>	Ear Disorders
31	<i>sna nad</i>	Nasal Disorders
32	<i>ga nad</i>	Mouth Disorders
33	<i>lba ba</i>	Goiter
<b>Section 5 – Diseases of the Internal Organs</b>		
34	<i>snying nad</i>	Heart Disorders
35	<i>glo nad</i>	Disorders of the Lungs
36	<i>mchin nad</i>	Liver Disorders
37	<i>mcher nad</i>	Spleen Disorders
38	<i>mkhal nad</i>	Kidney Disorders
39	<i>po b'i nad</i>	Stomach Disorders
40	<i>rgyu m'i nad</i>	Disorders of the Small Intestine
41	<i>long nad</i>	Disorders of the Colon
<b>Section 6 – Genital Disorders</b>		
42	<i>pho mtshan gyi nad</i>	Male Genital Disorders
43	<i>Mo mtshan gyi na</i>	Female Genital Disorders
<b>Section 7 – Miscellaneous Diseases</b>		
44	<i>skad 'gags</i>	Voice Disorders
45	<i>yi ga 'chus pa</i>	Loss of Appetite (Including Anorexia)
46	<i>skom nad gso ba</i>	Thirst
47	<i>skyigs b'u nad</i>	Hiccups
48	<i>dbugs mi bde ba</i>	Respiratory Disorders (Including Asthma)
49	<i>glang thabs bcos pa</i>	Sharp Pains in Stomach
50	<i>srin nad bcos pa</i>	Parasites
51	<i>skyugs p'i nad</i>	Vomiting
52	<i>'khru p'i nad</i>	Diarrhoea
53	<i>dri ma 'gags pa</i>	Constipation
54	<i>chu 'gags</i>	Urinary Retention
55	<i>gchin snyi b'i nad</i>	Polyuria
56	<i>tshad p'i 'gu ba</i>	Fever with Diarrhoea (Dysentery)
57	<i>drig nad gso ba</i>	Gout
58	<i>grum bu'i</i>	Rheumatoid Arthritis
59	<i>chu ser gyi nad</i>	Disorders of the Serous Fluid
60	<i>rtsa dkar gyi nad</i>	Neurological Disorders
61	<i>lpags p'i nad</i>	Skin Disorders

62	<i>Phran bu 'i nad</i>	Miscellaneous minor Disorders
<b>Section 8 – Sores</b>		
63	<i>'bras nad</i>	Cysts and abscesses
64	<i>gzhang 'brum</i>	Haemorrhoids
65	<i>me dbal</i>	Skin Disease (Erysipelas, Eczema)
66	<i>sur y'i nad</i>	Blood Disorder Causing Sores/Tumours on Internal Organs
67	<i>rman bu bcos pa</i>	Disease of the Glands
68	<i>rlig rlogs</i>	Hydrocele
69	<i>rkang bam gyi nad</i>	Disease Causing Swelling of Legs (elephantiasis)
70	<i>mtshan bar rdol ba</i>	Anal Fistula
<b>Section 9 – Pediatrics</b>		
71	<i>byis pa nyer spyod</i>	Caring for the Foetus
72	<i>byis p'i nad</i>	Children's Disorders
73	<i>byis p'i gdon</i>	Children's Disorders Caused by Spirits
<b>Section 10 - Gynaecology</b>		
74	<i>mo nad kco bo spyi</i>	General Gynaecology
75	<i>mo nad bye brag</i>	Specific Gynaecology
76	<i>mo nad phal pa</i>	Common Gynaecological Disorders
<b>Section 11 – Diseases Caused by Spirits</b>		
77	<i>'byung p'o gdon</i>	Diseases Caused by Spirits related to the Elements
78	<i>smyo byed kyi gdon</i>	Madness Caused by Spirits
79	<i>Brjed byed kyi nad</i>	Spirit Caused Amnesia
80	<i>gza'i gdon nad</i>	Diseases Caused by Planetary Spirit <i>Rahu</i> (skt.) (Apoplexy, Epilepsy)
81	<i>gdug pa klu'i gdon nad</i>	Diseases caused by the <i>lu</i> spirits
<b>Section 12 – Wounds and Lesions</b>		
82	<i>rma spyi'i gso thabs bstan pa</i>	General Wounds
83	<i>mgo bo'i rma gso ba</i>	Head Wounds
84	<i>ske'i rma gso ba</i>	Neck Wounds
85	<i>byang khog stad smad gso ba</i>	Abdominal Wounds

86	<i>Yan lag gi rma</i>	Limb Wounds
<b>Section 13 – Poisons</b>		
87	<i>sbyar p'i dug</i>	Compounded Poisons
88	<i>gyur p'i dug</i>	Food Poisoning
89	<i>rgyu ba dang ma rgyu b'i dug</i>	Natural Poisons
<b>Section 14 - Geriatry</b>		
90	<i>rgas pa gso ba bcu len</i>	Rejuvenation Treatment
<b>Section 15 – Virility and fertility</b>		
91	<i>ro tsa bar bya ba</i>	Aphrodisiacs and Virility Treatments
92	<i>bu med pa btsal ba</i>	Fertility Treatment for Women
<b>The Final Tantra (<i>phyi ma rgyud</i>)</b>		
<b>Section 1 – Pulse and Urine Diagnosis</b>		
1	<i>rtsa</i>	Pulse Diagnosis
2	<i>chu</i>	Urine Diagnosis
<b>Section 2 – Calming Medicines</b>		
3	<i>thang</i>	Decoctions
4	<i>phye-ma</i>	Powders
5	<i>ril-bu</i>	Pills
6	<i>lde gu</i>	Pastes
7	<i>sman mar</i>	Butters
8	<i>thal sman</i>	Ashes
9	<i>khan da</i>	Concentrates
10	<i>sman chang</i>	Medicinal Brew
11	<i>rin-po-che</i>	Precious Medicines
12	<i>sngo sbyor</i>	Herbal Compounds
<b>Section 3 – Cleansing Medicines</b>		
13	<i>snum 'cos</i>	Medicinal Oils
14	<i>bshal</i>	Purgatives
15	<i>skyugs</i>	Emetics
16	<i>sna sman</i>	Nasal Medicines
17	<i>'jam rtsi</i>	Mild Suppository
18	<i>ni-ru-ha</i>	Strong Suppository
19	<i>Rtsa sbyong</i>	Channel Cleansing

<b>Section 4 – External Treatments</b>		
20	<i>gtar</i>	Bloodletting
21	<i>me btsa'</i>	moxibustion
22	<i>dugs</i>	Hot and Cold Compresses
23	<i>lums</i>	Steam Baths
24	<i>byugs-pa</i>	Massage/Ointments
25	<i>Thur-dpyad</i>	Minor Surgery

## Glossary Of Tibetan Words

(This glossary contains the spelling of Tibetan words used in the thesis using the Wylie method of transliteration)

- |  |   |
|--|---|
| <i>a kar thegpa</i> – a dkar theg pa                     | <i>chang ter</i> - byang gter                                     |
| <i>Amdo</i> - a-mdo                                      | <i>Changpa Namgyal Dragzang</i> - byang pa rnam rgyal grags bzang |
| <i>arura</i> - a ru ra                                   | <i>ché</i> - dpyad  |
| <i>bab</i> - 'bab  | <i>Che Bum Trawo</i> – dpyad 'bum khra bo                         |
| <i>bagchag</i> - bag chags                               | <i>chenresi</i> - spyen ras gzigs (skt. Avalokiteśvara)           |
| <i>bar tren</i> - bar skran                              | <i>chetsa khorwa</i> – lce tsha mkhor ba                          |
| <i>bardo</i> – bar do                                    | <i>chewa</i> – dbye ba  |
| <i>barura</i> - ba ru ra                                 | <i>chi dar</i> – phyi dar   |
| <i>bom</i> – sbom  | <i>chi dö</i> - 'chi 'dod   |
| <i>bom</i> – sbom  | <i>chi kyen</i> – phyi rkyen                                      |
| <i>Bön</i> – bon   | <i>chi lu</i> - 'chi bslu   |
| <i>Bön kyong</i> - bon skyong                            | <i>Chi Ma Gyu</i> – phyi ma rgyud                                 |
| <i>bong nga nagpo</i> – bong nga nag po                  | <i>chi pi né so wa</i> - byi p'i nad gso ba                       |
| <i>Bönpo</i> - bon po                                    | <i>chi tren</i> - phyi skran                                      |
| <i>bu tsé</i> - bu btsas                                 | <i>chin</i> – byin  |
| <i>bu tsha</i> – bu tsha                                 | <i>chin né</i> - mchin nad  |
| <i>bul</i> – bul   | <i>chin tri</i> - mchin khri                                      |
| <i>bul</i> – bul   | ching - bying   |
| <i>bum</i> - 'bum  | <i>chinpi tra tren</i> - mchin pi' khrag skran                    |
| <i>Bumshi</i> – 'bum bzhi                                | <i>chiwa</i> - lci ba   |
| <i>bur</i> - 'bur  | <i>Chö</i> – chos   |
| <i>buram karmo</i> - bu ram dkar po                      | <i>Chö khang</i> - chos khang                                     |
| <i>Butön</i> – Bu ston                                   | <i>Chö kyong</i> - chos skyong                                    |
| <i>Butsho Sipai Gyalpo</i> – bu mtsho srid pa'i rgyal po | <i>Chö thab</i> - bcos thabs                                      |
| <i>cha</i> - phywa (sometimes spelt <i>phya</i> )        | <i>chokha</i> - cho kha   |
| <i>cha deb</i> – phyang deb                              | <i>chong chen de nga</i> - gchong chen sde lnga                   |
| <i>cha khug yang khug</i> - phya khugs gyang khugs       | <i>chongzhi</i> - chong zhi                                       |
| <i>cha shen thegpa</i> - phywa gshen theg pa             | <i>chongzhi dragtül</i> - cong zhi drag btul                      |
| <i>Chadur</i> - bya dur                                  | <i>Chöpa</i> – Chos pa  |
| <i>chag</i> – chag                                       | <i>chorten</i> - mchod rten                                       |
| <i>chag kar</i> - lcags dkar                             | <i>chotsé</i> – chog tse  |
| <i>chagpé tsa</i> – chag pa'i rtsa                       | <i>chu gang</i> - cu gang   |
| <i>chalag chogyé</i> - cha lag bco brgyad                | <i>chu ser</i> – chu ser  |
| <i>cham rim</i> – cham rims                              | <i>chu tö</i> – chu stod  |
| <i>cham sing</i> - lcam sring                            | <i>chu tren</i> - chu skran                                       |
| <i>chamdrel</i> - lcam dral                              | <i>chuchig</i> - bcu gcig   |
| <i>champa</i> - chams pa                                 | <i>chudak nagpo</i> – chu dag nag po                              |
| <i>chang</i> – chang                                     | <i>chugang</i> - chu gang   |
| <i>chang pa</i> – byang pa                               | <i>chugpa</i> – dbyug pa  |
|  | <i>chulam</i> – chu lam   |
|  | <i>chulo</i> - chu lo   |
|  | <i>chungwa</i> – 'byung ba  |
|  | <i>chuser</i> - Chu ser   |

*da li* – da li  
*dadar* – mda' dar  
*dagzin* – bdag 'dzin  
*dal* – dal  
*dam bca' pa* – dam cha pa  
*dam cha* - dam bca'  
*dam tshig* - dam tshig  
*damtsig* - dam tshig  
*dang* - mdangs  
*dangma* - dangs ma  
*dangma mazhu* – dangs ma ma  
 zhu  
*dangmé dangma* - dangs m'i  
 dangs ma  
*deb* - deb  
*del* – dal  
*delé* - bde-legs  
*Der she tso zhi* - bder gshegs gtso  
 bzhi  
*digpa* - sdig pa  
*dö* - mdos  
*Do* – mdo  
*do ngag sem sum* - mdo sngags  
 sems gsum  
*do tren* – rdo' skran  
*do yi men* - rdo yi sman  
*döchag* – 'dod chags  
*döchag* – 'dod chags  
*Dodü* – mdo 'dus  
*dog* – ldog  
*döl bon* – brdol bon  
*domtri* - dom mkhris  
*dön* - gdon  
*dön nga* - don lnga  
*dong rö* - ldong ros  
*drag she gye* - drag gshed brgyad  
*dragkya hawo* - brag skya ha bo  
*dragpa* - drag pa  
*dragzhun* - brag zhun  
*dralha* - dgra lha  
*dram* - 'grams  
*dram* – gram  
*dram tshé* - 'gram tshad  
*drang song thegpa* - drang srong  
 thegpa  
*drangsong* - drang srong  
 drangwa - grang ba  
*Drapa Ngön Shé* – grva pa mngon  
 shes  
*dre* - 'dre  
*dre mé* - 'dre me  
*drébo* - 'dre bo

*drebu sum* - 'bras bu gsum  
*drebu-i bön* - 'bras bu'i bon  
*drémo* - 'dre mo  
*drenpa* - dran pa  
*Drenpa Namkha* - dran pa nam mkha  
*dri* - 'bri  
*drib* - sgrib  
*Drigum Tsenpo* - gri gum bstan  
*dril* - 'gril  
*drilwa* - 'dril ba  
*drim* - grims  
*drima* - spris ma  
 Drimé Shelgong Sheltreng – dri med shel  
 gong shel phreng  
*drimpa* - grims pa  
*driwa* - 'dril ba  
*dro zhun* – gro zhun  
*Dromo* - gro mo  
*drön bu* - 'gron bu  
*drön thal* - 'gron thal  
*dru* - bru  
*drumbo* - grum bo  
*dü* - bdud  
*dug sum* – dug gsum  
*dumo nyung* - dug mo nyung  
*dur* – dur  
*durji* - dur byid  
*dza ti* – dza ti  
*Dzambuling* - dzam bu gling  
*dzéné* – mdze nad  
*dzépa chunyi* – mdzad pa bcu gnyis  
*dzerpa* - mdzer pa  
*dzö* – mdzod  
*dzogchen* – rdzogs chen  
*dzogphug* - mdzog phug  
*gab tshé* - gab tshad  
*gagpa* – gag pa  
*gapur nyernga* - ga phur nyar lnga  
*gelong* – dge slong  
*gelug* – dge lugs  
*genyen thegpa* – dge bsnyen theg pa  
*geshe* – dge bshes  
*go* – mgo  
*go zhi dzö nga* - sgo bzhi mdzod lnga  
*gonpo* - mgon po  
*gotur* - dgo-btur  
*gowé lha* - 'go ba'i lha  
*gü* – gud  
*guling* - rgud ling  
*gur gum* - gur gum  
 gur gyam do ngé drag gyé ling – gur gyam  
 mdo sngas grags rgyas gling

*gurkum* - gur kum  
*gyal* – rgyal  
*Gyalchen Dragpa Sengé* - rgyal  
 chen grags pa seng ge  
*gyalpo* - rgyal po  
*Gyalpo Sheltrab* - rgyal po shel  
 'khrab  
*gyam tsha* - rgyam tsha  
*gyangbu* - rgyang bu  
*gyé* - rgyas  
*gyen gyu lung* – gyen rgyu rlung  
*gyépa* - rgyas pa  
*Gyimtsha Machung* – gyim tsha  
 rma chung  
*gyog* – mgyogs  
*gyogpa* - mgyogs pa  
*gyu* – rgyu (primary cause)  
*gyu* – rgyud (tantra, connection)  
*gyu né* - rgyu nad  
*gyu pa* – brgyud pa  
*gyu rim* – rgyud rim  
*gyu-i bön* – rgyu'i bon  
*gyur bon* – gyur bon  
*gyurpa* - bsgyur-pa  
*gyurtshül* – 'gyur tshul  
*Gyushi* – rgyud bzhi  
*Gyuzhi karu drub pa* - rgyud-bzhi  
 bka'-ru bsgrub-pa  
*hong len* - hong lan  
*Hulu Palé* – hu lu spa legs  
*jam* - 'jam  
*jam* - 'jam  
*jampa* - 'jam pa  
*jampel* – 'jam dpal  
*jangmen* - byang sman  
*jigten lé depé lha* - 'jig rten las  
 'das pa'i lha  
*jigten lé depé srung ma* - 'jig rten  
 las 'das pa'i srung ma  
*jigten pé lha* - 'jig rten pa'i lha  
*jigten pé srung ma* - 'jig rten pa'i  
 srung ma  
*juthig* – ju thig  
*ka* – bka'  
*ka ko la* - ka ko la#  
*kadrub* - bka'-bsgrub  
*kagyu* – bka' brgyud  
*kal né* - mkhal nad  
*kampa* - skam pa  
*kang* - rkang  
*kanjur* - bka'-'gyur  
*kara* -- ka ra

*karchag* - dkar chag  
*karma* - skar ma (weight measurement)  
*Kashag* – bka' shag  
*ken* – kan  
*Kha lang* - kha lang  
*khadroma* – mkha 'gro ma  
*Kham* – khams  
*khang* – khang  
*khata* - kha btags  
*Khogbub* – khog 'bubs  
*khu chug* – khu byug  
*Khutsa Da-ö* – khu tsha zla 'od  
*Khyaba Lagring* – khyab pa lag ring  
*khyabché lung* – khyab byed rlung  
*khyar bon* - 'khyar bon  
*khyoga drongpi kyeman* - khyo ga grongs  
 pa'i skye dman  
*khyung* – khyung  
*khyung* – khyung  
*khyung nga* – khyung lnga  
*Khyung Pé Drimé Shel Gyi Melong* -  
 'khyungs dpe dri med shel gyi me long  
*khyung trug* – khyung 'phrug  
*Khyunglung Ngulkhar* – Khyung lung  
 dngul mkhar  
*Khyungtrul Men Pe* - khyung sprul sman  
 dpe  
*Khyuntrul Jigmé Dorje* – khyung sprul  
 'jigs med nam mkha'i rdo rje  
*ki ki so so lha gyal lo* - ki ki bswo bswo  
 lha rgyal lo  
*kon chog sum* - dkon mchog gsum  
*Kongrong Menlha Dundrub* – kong rong  
 sman bla don grub  
*Kongtrul Yonten Gyatsho* - kong sprul yon  
 tan rgya tso  
*kordag* - dkor bdag  
*korlo* – 'khor lo  
*Kunzang Gyalwa Gyatso* - kun bzang  
 rgyal ba rgya mtsho  
*kuwa* – khu ba  
*kuya* - ku ya  
*kyabab* - skya rbab  
*kyangma* - rgyang ma  
*kyel* – rkyal  
*kyen* – rkyen  
*kyerpa* – skyer pa  
*kyu ru ra* - skyu ru ra  
*la* - bla  
*la lü* - bla bslu  
*la lü* - bla glud  
*la ri* bla ri

*la shing* – bla shing  
*la tsho* - bla mtsho  
*la yu* – bla g.yu  
*la zug* - bla gzugs  
*lam rim* – lam rim  
*Lam Rim Chen Mo* – lam rim  
 chen mo  
*lané* - bla gnas  
*lang thab* – glang thabs  
*latsi* – gla rtsi  
*lawa* - sla ba  
*lé* - las  
*legtang mangpo* – legs tang  
 rmang po  
*lha* - lha  
*lha mo* – lha mo  
*lha pa* – lha pa  
*lha sin degyé* - lha sin de gyed  
*Lhadag Ngagdro* – lha bdag  
 sngags dro  
*lhakhang* - lha khang  
*lhatho* - lha tho  
*lhen* – lhen  
*lho ter* - lho gter  
*lhöd* – lhod  
*Lhogpa* – lhog pa  
*lhung* – lhung  
*li shi* – li shi  
*Liglug* - rlig rlugs  
*Ligmigya* – lig myi rhya  
*long chö* - longs spyod  
*Lonka natsha* - long ka na tsha  
*Lopon* - slob dpon  
*lüt* - glud (ransom rites)  
*lu* - klu  
*lüt* - lus (body)  
*Lu* – klu  
*lüt zung düin* – lus zungs bdun  
*lung* - rlung  
*lung* – lung (oral transmission)  
*lung* – rlung (wind)  
*lungta* - rlung lta  
*lungtse* - rlung tshad  
*Lutsen* – klu btsan  
*ma rigpa* – ma rig pa  
*ma zhu* – ma zhu  
*ma zhu wa* - ma zhu ba  
*mamo* – ma mo  
*Mani Kabum* - ma ni bka' 'bum  
*mani khorlo* - ma ni 'khor lo  
*mani lag khor* - ma ni lag 'khor  
*manupatra* - ma nu pa tra

*Mawé Sengé* - smra ba'i seng ge  
*me nyam lung* – me mnyam rlung  
*mé tsa dregpa* - me btsas bsreg pa  
*médörö* - me drod  
*men* - sman  
*men chen* – sman chen  
*Men Jor Tongtsa* – sman sbyor sdong rtsa  
*Men Nag Gyu* - man ngag rgyud  
*men tsi khang* - sman rtsis khang  
*Menbu* - rman bu  
*menché chenmo* - sman dpyad chen mo  
*menpa* – sman pa  
*menri* - sman-ri  
*meü* - rme'u  
*méwal* - me dbal  
*mi* – mi  
*Midü* - mi bdud  
*mindrug* – smin drug  
*ming gyur* - ming gyur  
*mo* - mo  
*mo dong* - mo-sdong  
*molha* - mo lha  
*mu* - dmü  
*mu chu* - dmü chu  
*Mucho Demdrug* – mu cho ldem drug  
*muchu* - dmü chu  
*mugpö tra tren* - smug po'i khrag skran  
*Mutri Tsenpo* – mu khri btsan po  
*Mutsha Trahé* – dmü tsha tra he  
*nag pa* – nag pa (constellation)  
*nag tren* - rnag skran  
*nam mé* - nam smad  
*Namgyal Men Bum Karpo* - rnam rgyal  
 sman 'bum dkar po  
*namkha* - nam mkha  
*namshé* - rnam shes  
*Namthar Kagyachen* – rnam thar bka' rgya  
 cen  
*namthö sré* - rnam thos sras  
*nang shen thegpa* – snang gshen theg pa  
*nang tren* - nang skran  
*nangpa* – nang pa  
*né* - nad  
*né mé* - nad med  
*né tag* - nad rtags  
*né tra* - nad khrag  
*nechung* - gnas chung  
*népa* – gnas pa  
*ngagpa* – sngags pa (class of religious  
 practioner)  
*ngar mi* - ngar mi  
*ngo men* - sngo sman

*ngö shé* - mngon shes  
*ngön* - mngon  
*ngön par dzö* - mngon par mdzod  
*ngöndro* - sngon 'gro  
*nö druk* - snod drug  
*nöcha kham* - gnod bya khams  
*nöcha nyepa* - gnod bya nyes pa  
*nodjin* - gnod sbyin  
*nöjin* - gnod sbyin  
*nön* - snron  
*nöpa* - gnod pa  
*nor dzin ling* - nor 'dzin gling  
*nor gyi dzamla lha* - nor gyi  
 'dzam bla lha  
*norlha* - nor lha  
*nowa* - rno ba  
*num* - snum  
*nüpa* - nus pa  
*Nyamé Sherab Gyaltzen* - mnya  
 med shes rab rgyal mtshan  
*Nyatri Tsenpo* - gnya' khri btsan  
 po  
*nyen* - gnyen (relatives)  
*nyen* - gnyan  
*nyen* - mnyen (pliant, supple)  
*nyen bur* - gnyen 'bur  
*nyen gyu* - snyan brgyud  
*nyené* - gnyan nad  
*nyenser* - gnyan gzer  
*nyensin* - gnyan srin  
*nyépa* - nyes pa  
*nyigma mazhu* - snyig ma ma zhu  
*Nyima Tenzin* - nyi ma bstan  
 'dzin  
*nying tshé* - rnying tshad  
*nyingma* - rnying ma  
*nyipangse* - nyi pang sad  
*nyurpa* - myur pa  
*Olmolungring* - 'ol mo lung ring  
*or né* - 'or nad  
*Orgyenpa Rinchenpal* - Orgyan  
 pa Rin chen dpal  
*pa* - spa  
*Palden Lhamo* - spal ldan lha mo  
*pawo* - dpa' bo  
*pé lung* - bad rlung  
*pé tri* - bad mhris  
*pé tshé* - bad tshad  
*pecha* - dpe cha  
*pehar* - pe har  
*peken* - bad kan

*peken jorché* - bad kan 'byor byed  
*peken mugpo* - bad kan smug po  
*peken tenché* - bad kan rten byed  
*peken tsimché* - bad kan tshim byed  
*peken yéché* - bad kan myad byed  
*peken yongché* - bad kan myong byed  
*pha ma* - pha ma  
*phar phyin* - phar chin  
*phel* - 'phel  
*pho dong* - pho sdong  
*pho long né su mug pé tra tren* - pho long  
 gnas su smug pa'i khrag skran  
*phungpo* - phung po  
*pi pi ling* - pi pi ling  
*po né* - pho nad  
*polha* - pho lha  
*pönlob* - dpon slob  
*ragpa* - rags pa  
*rang* - rang  
*rangzhin né* - rang bzhin gnas  
*rangzhin né* - rang bzhin nad  
*rig* - rigs  
*rig lam pa* - rig glam pa  
*rigné* - rig gnas  
*rigpa* - rig pa  
*Rigpé Yeshe* - rig-pa'i ye-shes  
*rim* - rims  
*rim mi zepa* - rims mi zad pa  
*rim tshé* - rims tshad  
*rinchen rilbu* - rin chen ril bu  
*rinchen sangpo* - rin chen bzang po  
*rinchen terdzö* - rin chen gter mdzod  
*ring* - ring  
*rinpoché yi men* - rin po che yi sman  
*roma* - ro ma  
*ru* - rus  
*ruta* - ru rta  
*sa* - gza'  
*sa drib* - gza' grib  
*sa yi men* - sa yi sman  
*sadag* - sa bdag  
*saga* - saga  
*sakya* - sa skya  
*samé* - bsam yas  
*sang* - bsangs (incense ritual)  
*sang* - bzang (auspicious)  
*Sangpo Bumtri* - sangs po 'bum khri  
*sangyé* - sangs rgyas  
*Sangye Gyamtsö* - sangs rgyas rgya mtsho  
*Satrig Ersang* - sa trig er sangs  
*sem* - sems  
*senmo* - bsen mo

*serji metog* - gser gyi me tog  
*serthog chéjam* - gser-thog lce  
 'byams  
*sha* - sha  
*sha ra* – sha ra  
*sha tra* - sha bkra  
*shabten* - zhabs brtan  
*Shardza Tashi Gyaltzen* – shar  
 rdza bkra shis rgyal mtshan  
*Shari U-chen* – sha ri dbu chen  
*Shé Gyu* – bshad rgyud  
*shen* - gshen  
*Shenchen Luga* – gshen chen klu  
 dga'  
*Shenlha Okar* - gshen lha 'od  
 dkar  
*shenrab* – gshen rab  
*Shenrab Miwo* - gshen rab mi bo  
*Sherab Jamma* - shes rab byam  
 ma  
*shindre* - shi 'dre  
*shing* - zhing  
*shing men* - shing sman  
*shinjé* - gshin rje  
*shinjé shé* - gshin rje gshed  
*sho mo* - sho mo  
*si pa* - srid pa  
*sil sum* - bsil gsum  
*silwa* - bsil ba  
*sin* – srin  
*sin né* - srin nad  
*sin thor* - srin 'thor  
*sinbu* – srin 'bu  
*sinbu né* - srin 'bu'i nad  
*sinmo* - srin mo  
*Sipa Yesang* – srid pa ye sangs  
*Sipai Gyalmo* - srid pa'i rgyal mo  
*sipé khorlo* - srid pa'i 'khor lo  
*sipé tsa* - srid pa'i rtsa  
*Situ Choki Jungne* - si tu chos kyi  
 chung nge  
*So Ché Né Bum Nagpo* – gso byed  
 nad 'bum nag po  
*so né* - so nad  
*so rig bum shi* – gso rig 'bum bzhi  
*sog* - srog (life force)  
*sog* – gsog (empty)  
*sog chag men* - srogs chags sman  
*sog lü* - srog glud  
*sogdzin lung* – srog `dzin rlung  
*soglha* - srog lha  
*sogmar* - sog dmar

*sogtsa nagpo* – srog rtsa nag po  
*sonam* - bsod nams  
*songdre* - gson 'dre  
*Songtsen Gampo* – srong btsan sgam po  
*sowa rigpa* – gso ba rig pa  
*sri shen thegpa* – srid gshen theg pa  
*srung dud* - srung mdud  
*srung khor* - srung 'khor  
*srung ma* - srung ma  
*srung wa* - bsrung ba  
*sub* - srubs  
*sug mel* - sug smel  
*Sugmel chupa* - sug mel bcu pa  
*Sumtön Teshezung* – sum ston te shes  
 gzung  
*ta chog* - rta chog  
*tagpa* – rtags pa  
*Takla Mebar* - stag la me 'bar  
*tamdrin* - rta mgrin  
*tanjur* – bstan 'gyur  
*tapa* - rta pa  
*tar* – gtar  
*tarbu* - star bu  
*tashi* - bkra shis  
*Tashi Gyegay Thartenling* – bkra shis dge  
 rgyas mtha' brtan gling  
*Tazig* – stag gzig  
*ten* - 'then  
*ten* – rten  
*ten rim* - bstan rim  
*tenpa* - brtan pa  
*terma* – gter ma  
*terton* – gter ston  
*Tewa* - kre wa  
*thang men* - thang sman  
*thangka* – thang ka  
*thegpa gu* - theg pa dgu  
*thenpa* - 'then pa  
*thilpa* – mthil pa  
*thingril* – mthing ril  
*thrangpa* - mkhrangs pa  
*Throm* – phrom  
*thrug* - `khrugs  
*thugpa* – thug pa  
*thung* – thung  
*thur sel lung* – thur sel rlung  
*tigta* - tig ta  
*tigta* – tig ta  
*tigta chuchig* - tig ta bcu gcig  
*tigta gyépa* - tigta brgyad pa  
*timug* – gti mug  
*to* - gto

*tong* – stong  
*Tongyung Thuchen* – sdon rgyung  
 mthu chen  
*tönpa* - sTon pa  
*torma* – gtor ma  
*tra* - khrag (blood)  
*tra* - phra (thin)  
*tra lung* - khrag rlung  
*tra né* - khrag nad  
*trangpa* - mkhrangs pa  
*trawa* - spra ba  
*tren* - skran  
*trenng mo* - 'phreng mo  
*tri* – khrid  
*Tribu Trishi* – dpyad bu khri shis  
*tridzin* – khri 'dzin  
*tripa* – mkhris pa  
*tripa dangyur* - mkhris pa mdang  
 sgyur  
*tripa dogsal* - mkhris pa mdog  
 gsal  
*tripa drubché* - mkhris pa sgrub  
 byed  
*tripa juché* - mkhris pa 'ju byed  
*tripa thongché* - mkhris pa  
 mthong byed  
*Trisong Detsen* – khri srong lde  
 btsan  
*Trithog Patsha* – khri thog spa  
 tsha  
*trug* - 'khrugs  
*trul shen thegpa* – 'phrul gshen  
 theg pa  
*trum tö* – khrum stod  
*tsa* – rtsa  
*Tsa Gyu* - rtsa rgyud  
*tsa karmo* - rtsa dkarpo  
*tsalung* – rtsa rlung  
*tsampa* – tsam pa  
*tsang* – gtsang  
*Tsawa Thug Bum Kha Ngön* – rtsa  
 ba thugs 'bum mkha' sngon  
*tsen* - btsan  
*Tsewang Rigzin* - tse dbang rig  
 'dzin  
*tsha* – tsha (sharp pain)  
*tsha la* - tsha la  
*tsha la* – tsha la  
*tsha lé jong* - tsha las sbyong  
*tsha nang tren* - tsha nang skran  
*tshab* - tshab

*tshang pa karmo* - Tshang pa dkarpo  
*tshawa* - tsha ba  
*tshe da* - tshe mda'  
*tshe dü* - tshe bdud  
*tshé ma* - tshad ma  
*tshe yi tsa* - tshe yi rtsa  
*tshe yi yungdrung* - tshe yi g.yung drung  
*tshen nyi* - mtshan nyid  
*tshen nyi* - mtshan nyid  
*tshen nyi la tag pa* - mtshan nyid la brtag  
 pa  
*tshering* - tshe ring  
*tshethar* – tshe thar  
*tshig kang* - tshig rkang  
*tshil* - tshil  
*tshön* – mtshon (index finger)  
*tshön* – tshon  
*tsi* - rtsis  
*tsi men* - rtsi sman  
*tsö* - btsod  
*tsö ba* - rtsod ba  
*tsod yig* – rtsod yig  
*tsowo* – gtso bo  
*tsub* – rtsub  
*tsub pa* - rtsub pa  
*tül* – rtul  
*tulku* – sprul sku  
*u mé* – dbu med  
*ü ter* - dbus gter  
*u-ma* - bdu ma  
*Ü-pa Dardrag* – dbus pa dar grags  
*usu* - 'u su  
*U-Tsang* - dbu-gtsang  
*Vaidurya ngönpo* - Vaidurya sngon-po  
*walchen gekhö* - dbal chen ge khod  
*wang* - dbang  
*wangthang* - dbang-thang  
*wo* – dbo  
*yamshü* - yam shud  
*yang* - g.yang  
*yangtse la mé thegpa* – yang rtse bla med  
 theg pa  
*yangwa* - yang ba  
*Yeru Wensakha* - g.yas ru dben sa kha  
*Yeshe Walmo* – ye shes dbal mo  
*yeshen thegpa* – ye gshen theg pa  
*yi* - yid  
*yi kyi damtshig* - yid kyi dam tshig  
*yidam* - yi dam  
*Yilé kye* - yid las skyes  
*yizang wa* - yid bzang ba  
*yowa* - g.yo ba

*yug sa ma* - yugs sa ma  
*yulha* - yul lha  
*yungdrung bon* - g.yung drung  
bon  
*Yuthog Yontan Gonpo* - g.yu thog  
yon tan mgon po  
*za* - gza'  
*zang drug* - bzang drug  
*zé* - zad  
*zé ché* - zad byed  
*Zermig* – gzer mig  
*zhang drum* - gzhang 'brum

*zhedang* – zhe sdang  
zhen – zhan  
*zhenpa* – zhen pa  
*zhi* – zhi  
*zho* - zho  
*zhu* - zhu  
*zhujé* - zhu rjes  
*Ziji* – gzi brjid  
*zur lug* – zur lugs  
*Zurkharwa Nyamnyi Dorje* - zur mkhar ba  
mnyam nyid rdo rje

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